Measurement of Healthcare Quality and Efficiency Resources for Healthcare Professionals

Inventory of Programs and Organizations

In Alphabetical Order

2010

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Introduction

Healthcare quality and efficiency play an important role for both the overall economy and healthcare consumers. Affordable healthcare is crucial to the financial stability of many workers and retirees making quality and efficiency of programs particularly relevant during periods of economic challenges. Moreover, quality and efficiency are likely to occupy a prominent position in any future healthcare system reform efforts. This is particularly true, given the fundamental characteristics of the United States healthcare system, such as the decentralized nature of the healthcare system, often poorly-aligned payment structures and the complexity of roles assumed by service providers.

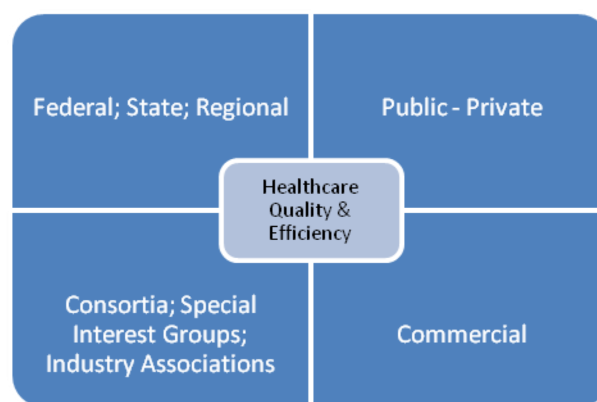
In light of the current overlap of political, economic, and other environmental factors, the healthcare industry is changing rapidly. As a result, the Society of Actuaries Health Section and Solucia Consulting have co-sponsored this effort to review and inventory the wide range of quality and efficiency measures currently available.

The research objectives were to survey internet-based resources, and to review and inventory the range of quality and efficiency measures available. The goal was to outline key areas of quality and efficiency measurement and identify future opportunities for actuaries. This Inventory of Programs and Organizations contains the results of that research, and accompanies the project report - *Measurement of Healthcare Quality and Efficiency. Resources for Healthcare Professionals.*

Ready access to web-based quality and performance data has supported an explosion of activity in the use of quality information to improve care and a multitude of organizations have become actively involved in developing ways of determining healthcare quality or quality improvement. Exhibit 1 illustrates the range of organizations focusing on healthcare quality.

Most of the Information in this Inventory was sourced from publicly available information from organizations websites between November 2008 and March 2009. Twenty three entries were revised through September 2010 if the authors knew of major updates. Revised entries include the phrase [entry updated 2010]. The material was lightly edited for readability. The authors of this report have not checked or verified the statements on the websites and the statements in the Inventory do not reflect the opinions of the authors. Links are provided for all materials to enable the reader to update information of interest.

Exhibit 1. Organizations Focusing on Healthcare Quality & Efficiency



The list of organizations is by no means exhaustive. The search focused upon canvassing a wide range of organizations active in the field of healthcare quality and then to inventory a cross section.

Inclusion in the inventory was driven by the primary focus of the measure or activity, thus the authors were particularly interested in identifying examples of physician quality, physician efficiency, hospital quality and hospital efficiency. Rather than listing every State and insurance carrier, the authors have pulled a few examples from States that illustrate particularly interesting approaches or innovations and a few illustrative programs from various insurance carrier or Blue organizations.

The web-search results varied considerably with some websites offering a comprehensive outline of measures, products or services with downloadable documentation such as technical specifications, white papers and peer reviewed papers. Other

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websites offered primarily marketing or publicity materials which were short on both descriptive and technical detail. Some websites restricted access to members such as health plans or employer sites. In a few cases where there was a dearth of information, Internet searches were performed to augment the materials.

The range and focus of materials identified in the research was highly diverse and several different ways of categorizing information were developed to bring a degree of clarity to the information.

The data has been organized as follows:

Summary Background and descriptive information of the organization or measure.

Methodology Particular procedure or set of procedures used by the organization or product in data collection and/or analysis, technical specifications, methodological constraints, target population and so on that might assist the reader form an opinion about validity and relevance to their particular areas of interest.

Results Any evidence that the organization or product had achieved its objectives, undertaken any formal or informal evaluations as regards results and so on.

Publications Peer reviewed materials, white papers and other formal analyses. In many cases only marketing materials were accessible via the website.

Two further classifications were used based upon the focus or the intent of the program or measure.

PQ = measures that focus upon physician quality

PE = measures that focus upon physician efficiency

HQ = measures that focus upon hospital quality

HE = measures that focus upon hospital efficiency

The following categories are defined in the Appendix.

1. Accreditation, Certification
2. Analytics, Decision Support, Healthcare Data Technology
3. Incentives, Rewards Programs
4. Performance Ratings, Reports, Scorecards, Benchmarking (report actual performance)
5. Standards Setting, Industry Organizations
6. Summary for Public, Consumer, Infomediaries
7. Payment Reform

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Organization	Quality Products or Measures	Category	PQ PE HQ HE
1. 3M Health Information Systems	3M ClinTrac Quality Manager Software	Proprietary/Analytics/Decision Support/Healthcare Data Technology	PQ
2. 3M Health Information Systems	Benchmarking with Analytics 3M Various DRGs	Proprietary/ Analytics/Decision Support/Healthcare Data Technology	HQ HE
3. 3M Health Information Systems	Clinical Risk Grouping (CRG)	Proprietary /Analytics/Decision Support/Healthcare Data Technology	Risk
4. Active Health	Care Engine System Care Considerations Performance Measures	Proprietary/Analytics/Decision Support/Healthcare Data Technology	PE
5. AETNA	Various including networks such as Aexcel and Physician Efficiency Evaluation	Performance Ratings/Reports/Scorecards/Data bases/Benchmarking	PQ PE
6. AHRQ – Agency for Healthcare Research and Quality	CAHPS. Consumer Assessment of Healthcare Providers and Systems Family of Surveys	Performance Ratings/Reports/Scorecards/Data bases/Benchmarking	PQ HQ
7. AHRQ – Agency for Healthcare Research and Quality	Evidence-Based Practice Centers (EPC)	Standards Setting, Industry Organizations	Other
8. AHRQ – Agency for Healthcare Research and Quality	Health Care Report Card Compendium Talkingquality.gov website	Standards Setting, Industry Organizations	Other
9. AHRQ – Agency for Healthcare Research and Quality	National Healthcare Quality Report (NHQR)	Performance Ratings/Reports/Scorecards/Data bases/Benchmarking	HQ
10. AHRQ – Agency for Healthcare Research and Quality	Quality Indicators	Standards Setting, Industry Organizations	HQ
11. American Health Quality Association (AQHA)	American Health Care Quality Association and Bridges To Excellence Tool Kit	Performance Ratings/Reports/Scorecards/Data bases/Benchmarking	PQ
12. American Medical Association (AMA)	Physician Consortium for Performance Improvement (PCPI)	Performance Ratings/Reports/Scorecards/Data bases/Benchmarking	PQ
13. American Medical Group Association (affiliate)	Council of Accountable Physician Practices (CAPP)	Performance Ratings/Reports/Scorecards/Data bases/Benchmarking	PQ
14. Anthem	Various including networks, and the programs listed below Physician Performance Program - Q-P3	Incentive/Reward Programs	PQ HQ
15. Anthem	Primary Care Quality Incentive Program (PCQIP)	Incentive/Reward Programs	PQ

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16.	Anthem	The Quality Hospital Incentive Program (Q-HIP)	Incentive/Reward Programs	HQ
17.	AQA Alliance	Physician Practice Measures	Standards Setting, Industry Organizations	PQ
18.	ASC Quality Collaboration	ASC Quality Measures ASC Quality Report	Standards Setting, Industry Organizations	HQ
19.	Asparity Decision Solutions	Online Decision Support Tools	Standards Setting, Industry Organizations	Other
20.	Avivia	Health Management Suite and Analytics	Proprietary/Analytics/Decision Support/Healthcare Data Technology	Other
21.	BlueCross Blue Shield Association (BCBSA)	Blue Plan Innovations	Performance Ratings/Reports/Scorecards/Data bases/Benchmarking	Other
22.	BlueCross Blue Shield Association (BCBSA)	Blue Distinction Hospital Measurement and Improvement Program	Performance Ratings/Reports/Scorecards/Data bases/Benchmarking	PQ PE HQ HE
23.	BlueCross Blue Shield of Michigan	Value Partnership Initiatives	Performance Ratings/Reports/Scorecards/Data bases/Benchmarking	PQ HQ
24.	Brookings Dartmouth ACO Learning Network	Accountable Care Organization Learning Network	Payment Reform	Other
25.	Brookings Institution – Engelberg Center for Health Reform	Quality Alliance Steering Committee High-Value Health Care Project (HVHC)	Standards Setting, Industry Organizations	Other
26.	Buyers Health Care Action Group Minnesota	Multiple programs	Standards Setting, Industry Organizations	PQ PE HQ HE
27.	Californian Association of Physician Groups (CAPG)	Standards of Excellence (SOE) Program	Performance Ratings/Reports/Scorecards/Data bases/Benchmarking	PQ
28.	California Healthcare Foundation	Various including California Hospital Assessment and Reporting Taskforce – CHART CalHospitalCompare	State focus; Performance Ratings/Reports/Scorecards/Data bases/Benchmarking	HQ
29.	Care Focused Purchasing, Inc. (support by Mercer)	Care Focused Purchasing	Performance Ratings/Reports/Scorecards/Data bases/Benchmarking	PQ PE HQ HE
30.	Cave Consulting Group	Cave Grouper: Marketbasket System	Performance Ratings/Reports/Scorecards/Data bases/Benchmarking	PE
31.	CIGNA	Various including networks, quality management initiatives	Performance Ratings/Reports/Scorecards/Data bases/Benchmarking	HQ HE
32.	CMS Medicare & Medicaid	Better Quality Information to Improve Care for Medicare Beneficiaries (BQI) Project	Standards Setting, Industry Organizations	PQ
33.	CMS Medicare & Medicaid	Chartered Value Exchanges	Standards Setting, Industry Organizations	PQ PE
34.	CMS Medicare & Medicaid	Electronic Health Record Demonstration Project	Incentive/Reward Programs	PQ

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35.	CMS Medicare & Medicaid	Hospital Quality Initiative (HQI) - Hospital Compare	Performance Ratings/Reports/Scorecards/Data bases/Benchmarking	HQ
36.	CMS Medicare & Medicaid	Measures Management System (MMS)	Standards Setting, Industry Organizations	PQ PE HQ
37.	CMS Medicare & Medicaid -	Medicare Hospital Value-Based Purchasing (VBP) Plan	Standards Setting, Industry Organizations	HQ HE
38.	CMS Medicare & Medicaid	Medicare Quality Improvement Organization (QIO) Program.	Incentive/Reward Programs	HQ
39.	CMS Medicare & Medicaid	Patient Protection and Affordable Care Act (2010) – provisions on measurement	Payment Reform	Other
40.	CMS Medicare & Medicaid	Physician Group Practice Demonstration project	Incentive/Reward Programs	PQ
41.	CMS Medicare & Medicaid	Physician Quality Reporting Initiative (PQRI)	Incentive/Reward Programs	PQ
42.	The Commonwealth Fund	WhyNotthe Best.org	Performance Ratings/Reports/Scorecards/Data bases/Benchmarking	HQ
43.	The Commonwealth Fund Commission on a High Performance Health System	National Scorecard on U.S. Health System Performance	Performance Ratings/Reports/Scorecards/Data bases/Benchmarking	Other
44.	Consumer Purchaser Disclosure Project	Patient Charter for Physician Performance Measurement, Reporting and Tiering Programs.	Summary for Public; Consumer; Infomediary	PQ HQ
45.	D2Hawkeye (refer also Verisk Health entry)	D2Explorer D2ReportManager D2Analyzer	Proprietary/Analytics/Decision Support/Healthcare Data Technology	PQ
46.	Dartmouth Atlas Project	Dartmouth Atlas Project	Performance Ratings/Reports/Scorecards/Data bases/Benchmarking	HQ HE
47.	Deloitte Center for Health Solutions	Episode and Payment Reform Papers; Comparative Effectiveness	Payment Reform	Other
48.	Dr Foster Intelligence. United Kingdom	Dr Foster Intelligence Good Hospital Guide	International	HQ
49.	The Fraser Institute. Canada.	Hospital Report Card: British Columbia 2008. Hospital Report Card: Ontario 2008.	International, Performance ratings, Reports, Scorecards, Databases, Benchmarking	HQ
50.	Geisinger Health System	Proven Care Model	Performance Ratings/Reports/Scorecards/Data bases/Benchmarking	PQ PE HQ HE
51.	HCI^3 - Bridges to Excellence	Physician Incentive and Reward Program Endorsement	Incentive/Reward Programs	PQ
52.	HCI^3 - Bridges to Excellence	Prometheus Payment System	Payment Reform	PQ

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	Organization	Program	Category	Type
53.	The Healthcare Commission/ Care Quality Commission, UK	Annual Health Check Care Quality Commission	International	HQ
54.	HealthGrades	Hospital Quality in America	Performance Ratings/Reports/Scorecards/Data bases/Benchmarking	HQ
55.	HealthGrades	Strategic Quality Initiative (SQI) Strategic Quality Partnership (SQP)	Performance Ratings/Reports/Scorecards/Data bases/Benchmarking	PQ HQ
56.	HealthGrades	HealthGrades Five-Star Doctors HealthGrades Recognized Doctors	Performance Ratings/Reports/Scorecards/Data bases/Benchmarking	PQ
57.	HealthInsight	National Rankings for Hospitals	State focus; Performance Ratings/Reports/Scorecards/Data bases/Benchmarking	HQ
58.	Healthnet	Various including networks, medical group profiling, Decision Power	Performance Ratings/Reports/Scorecards/Data bases/Benchmarking	PQ PE HQ
59.	HealthPartners	Quality Improvement Program - Partners in Excellence Program (PIE) and Clinical Indicators	Performance Ratings/Reports/Scorecards/Data bases/Benchmarking	PQ PE HQHE
60.	Health Benchmarks Inc	HBI Physician Clinical Quality Indicators HBI Cost of Care Measures HBI Health Value Index Performance Benchmarking	Proprietary/Analytics/Decision Support/Healthcare Data Technology	PQ PE
61.	Health Dialog	Provider Performance Measurement System	Proprietary/Analytics/Decision Support/Healthcare Data Technology	PQ PE
62.	The Health System Performance Research Network (HSPRN) Canada	The Hospital Report Series	International	HQ
63.	The Hearst Corporation	Healthguides Map of Medicine	International, Standards Setting, Industry Organizations; Summary for Public, Consumer	PQ
64.	Highmark	QualityBLUE	Payment Reform	HQ
65.	The Hospital Quality Alliance (HQA)	Hospital Compare	Standards Setting, Industry Organizations	HQ
66.	Humana	Humana Provider Quality Rewards Programs	Incentive/Reward Programs	PQ PE HQ
67.	IHA	Episode of Care Payment Project	Payment Reform	HQ
68.	Ingenix	Hospital Benchmarks Hospital Insights	Proprietary/Analytics/Decision Support/Healthcare Data Technology	HQ
69.	Ingenix	Hospital Quality	Proprietary/Analytics/Decision Support/Healthcare Data Technology	HQ
70.	Ingenix	Symmetry EBM Connect	Proprietary/Analytics/Decision Support/Healthcare Data Technology	PQ

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71.	Ingenix	Symmetry Episode Risk Groups Symmetry Pharmacy Risk Groups	Proprietary/Analytics/Decision Support/Healthcare Data Technology	Risk
72.	Ingenix	Symmetry Episode Treatment Groups Symmetry Procedure Episode Groups	Proprietary/Analytics/Decision Support/Healthcare Data Technology	PE
73.	Institute for Healthcare Improvement (IHI)	The Improvement Map	Accreditation/Certification	HQ
74.	Institute of Medicine	The IOM Health Care Quality Initiative	Standards Setting, Industry Organizations	Other
75.	Integrated Healthcare Association (IHA)	California Pay for Performance Collaboration	Incentive/Reward Programs	PQ PE
76.	The Johns Hopkins University	Adjusted Clinical Groups Case-Mix System	Proprietary/Analytics/Decision Support/Healthcare Data Technology	PQ PE
77.	The Joint Commission (JHACO)	Improving America's Hospitals: The Joint Commission's Annual Report on Quality and Safety	Performance Ratings/Reports/Scorecards/Data bases/Benchmarking	HQ
78.	The Joint Commission (JHACO)	National Hospital Quality Measures	Accreditation/Certification	HQ
79.	The Joint Commission (JHACO)	ORYX Initiative Quality Check	Accreditation/Certification	HQ
80.	The Joint Commission (JHACO)	Strategic Surveillance System (S3)	Accreditation/Certification	HQ
81.	Leapfrog Group	Leapfrog Hospital Quality and Safety Survey Top Hospitals Survey Highest Value Hospitals Award	Performance Ratings/Reports/Scorecards/Data bases/Benchmarking	HQ
82.	Leapfrog Group	Leapfrog Hospital Rewards Program	Incentive/Reward Programs	HQ
83.	Maine Health Management Coalition	Pathways To Excellence project	Performance Ratings/Reports/Scorecards/Data bases/Benchmarking	PQ HQ
84.	Massachusetts Group Insurance Commission (GIC)	Clinical Performance Improvement (CPI) Initiative	Incentive/Reward Programs	PQ PE
85.	Massachusetts Health Care Quality and Cost Council (HCQCC)	Myhealthcareoptions	Summary for Public; Consumer; Infomediary	PQ HQ
86.	Massachusetts Health Quality Partners (MHQP)	Quality Reports	State focus; Performance Ratings/Reports/Scorecards/Data bases/Benchmarking	PQ
87.	Med-Vantage	P4P Program Design, Measurement, Surveys HealthSmart Enhanced Provider Directory HealthSmart Exchange Physician Suite HealthSmart Designer Suite	Proprietary/Analytics/Decision Support/Healthcare Data Technology	PQ PE
88.	Milliman	Milliman Care Guidelines	Proprietary/Analytics/Decision	PQ PE HQ HE

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	Milliman Hospital Efficiency Index	Support/Healthcare Data Technology	
89. Minnesota Hospital Quality Partnership	Minnesota Hospital Quality Report	State focus; Performance Ratings/Reports/Scorecards/Data bases/Benchmarking	HQ
90. National Business Group on Health (NBGH)	NGBH Toolkits	Standards Setting, Industry Organizations	HQ
91. National Cardiovascular Data Registry (NCDR)	CathPCI™ Registry ACTION Registry®-GWTG™ CARE Registry™ IMPACT Registry™ IC3	Performance Ratings/Reports/Scorecards/Databases/Benchmarking	PQ
92. National Committee for Quality Assurance (NCQA)	HEDIS - Healthcare Effectiveness Data and Information Set	Accreditation/Certification	PQ
93. National Committee for Quality Assurance (NCQA)	Patient Centered Medical Home	Payment Reform	PQ
94. National Committee for Quality Assurance (NCQA)	Physician and Hospital Quality (PHQ) certification program	Accreditation/Certification	PQ HQ
95. National Committee for Quality Assurance (NCQA)	Physician Recognition Program	Performance Ratings/Reports/Scorecards/Data bases/Benchmarking	PQ
96. National Committee for Quality Assurance (NCQA)	Relative Resource Use (RRU)	Accreditation/Certification	Other
97. National Institute of Health and Clinical Excellence NICE, UK	Evidence-based clinical guidelines, Technical guidelines	International	PQ
98. NQF – National Quality Forum	Efficiency of Care Framework NQF Care Coordination Framework	Standards Setting, Industry Organizations	PQ HQ
99. NQF – National Quality Forum	National Voluntary Consensus Standards for Hospital Care National Voluntary Consensus Standards for Hospital Care – Outcomes and Efficiency Pay for Performance Safe Practices for Better Healthcare Serious Reportable Events	Standards Setting, Industry Organizations	PQ HQ
100. New York State Department of Health	Cardiac Surgery Reporting System (CSRS)	State focus; Performance Ratings/Reports/Scorecards/Data bases/Benchmarking	PQ HQ
101. New York State Department of Health	New York State Hospital Quality Ratings	State focus; Performance Ratings/Reports/Scorecards/Data bases/Benchmarking	HQ
102. New York State Health Accountability Foundation	Regional Health Care Report Cards	State focus; Performance Ratings/Reports/Scorecards/Data bases/Benchmarking	HQ HE

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103. New Zealand Ministry of Health	District Health Board (DHB) Hospital Benchmark Information Reports	International	HQ HE
104. Organization for Economic Cooperation and Development (OECD)	Health Care Quality Indicator (HCQI) Project	International	Other
105. Pacific Business Group on Health/California Cooperative Healthcare Reporting Initiative	California Physician Performance Initiative (CPPI)	Performance Ratings/Reports/Scorecards/Data bases/Benchmarking	PQ
106. Patient Centered Primary Care Collaborative (PCPCC)	Medical Home	Payment Reform	PQ
107. Patient Choice Healthcare Inc (Medica)	Patient Choice	State focus; Performance Ratings/Reports/Scorecards/Data bases/Benchmarking; Consumer	PQ PE
108. Premera Blue Cross	Quality Score Card	State; Performance Ratings/Reports/Scorecards/Data bases/Benchmarking	PQ PE
109. Premier Healthcare	Hospital Quality Incentive Demonstration (HQID)	Standards Setting, Industry Organizations	HQ
110. Premier Healthcare	QUEST: High Performing Hospitals	Standards Setting, Industry Organizations	HQ
111. Prometheus Payment System	Prometheus Payment System	Standards Setting, Industry Organizations	PQ PE
112. Puget Sound Health Alliance	Community CheckUp	State focus; Performance Ratings/Reports/Scorecards/Data bases/Benchmarking	PQ PE HQ HE
113. RAND Corporation	Rand Health	Standards Setting, Industry Organizations	Various
114. Resolution Health	Physician Quality Profiler	Proprietary/Analytics/Decision Support/Healthcare Data Technology	PQ
115. Robert Wood Johnson Foundation Rewarding Results Demonstration Projects	P4P	Incentive/Reward Programs	PQ HQ
116. Robert Wood Johnson Foundation	Grantmaking Foundation	Standards Setting, Industry Organizations	Other
117. Subimo	Health & Benefits Manager	Proprietary/Analytics/Decision Support/Healthcare Data Technology	Other
118. TalkingQuality.gov	TalkingQuality website	Summary for Public; Consumer; Infomediary	PQ HQ
119. Thomson Reuters Healthcare	100 Top Hospitals Benchmarks for Success Program	Performance Ratings/Reports/Scorecards/Data bases/Benchmarking	HQ
120. Thomson Reuters Healthcare	Care Discovery Performance Improvement System	Proprietary/Analytics/Decision Support/Healthcare Data Technology	PE

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121. Thomson Reuters Healthcare	Medstat - Medical Episode Groups	Proprietary/Analytics/Decision Support/Healthcare Data Technology	PE
122. Thomson Reuters Healthcare	Physician Performance Assessment	Proprietary/Analytics/Decision Support/Healthcare Data Technology	PQ PE
123. UnitedHealthcare	Various including networks, UnitedHealthcare Practice Rewards	Incentive/Reward Programs	HQ HE
124. UnitedHealthcare	UnitedHealthcare Premium Physician Designation Program	Performance Ratings/Reports/Scorecards/Data bases/Benchmarking	PQ
125. UnitedHealthcare (PacifiCare Health Systems subsidiary)	Various including networks, and the programs below Quality Incentive Program (QIP) Quality Index Profile of Hospitals Quality Index Profile of Medical Groups	State focus; Performance Ratings/Reports/Scorecards/Data bases/Benchmarking; Incentive/Reward Programs	PQ PE HQ HE
126. U.S. News & World Report	America's Best Hospitals	Performance Ratings/Reports/Scorecards/Data bases/Benchmarking	HQ HE
127. Verisk HealthCare	Verisk DxCG Risk Solutions (refer also D2 and Verisk DxCG entries)	Proprietary/Analytics/Decision Support/Healthcare Data Technology	PE PQ HQ HE
128. Verisk HealthCare DxCG	DxCG Diagnostic Cost Groups and RxGroups RiskSmart	Proprietary/Analytics/Decision Support/Healthcare Data Technology	Risk
129. Vermont Health Care Reform	Blueprint for Health Accountable Care Organization Pilot	Standards Setting, Industry Organizations Payment Reform	PQ
130. Virginia Mason Hospital & Medical Center	Virginia Mason Production System (VMPS)	Performance Ratings/Reports/Scorecards/Data bases/Benchmarking	HE
131. WebMD Health Group	WebMD Quality Care Select Quality Care - Consumer Select Quality Care - Professional	Proprietary/Analytics/Decision Support/Healthcare Data Technology Summary for Public; Consumer; Infomediary	PE PQ HQ HE
132. Wisconsin Collaborative for Healthcare Quality (WCHQ)	Performance and Progress Report	State focus; Performance Ratings/Reports/Scorecards/Data bases/Benchmarking	PQ HQ
133. Zynx Health	ZynxEvidence and ZynxOrder	Proprietary/Analytics/Decision Support/Healthcare Data Technology	PQ

APPENDIX - Definitions of Secondary Classification Categories 260

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Organization	**3M Health Information Systems**
Category	Proprietary/Analytics/Decision Support/Healthcare Data Technology
Source	www.3Mhis.com
Measure	**3M ClinTrac Quality Manager Software** http://solutions.3m.com/wps/portal/3M/en_US/3M_Health_Information_Systems/HIS/Products/ClinTrac_Quality_Manager/

Summary

3M Health Information Systems delivers comprehensive software and consulting services to help organizations worldwide improve documentation, quality, and financial performance across the healthcare continuum. 3M offers integrated solutions for transcription, speech recognition, clinical documentation improvement, documentation management, computer-assisted coding, quality, and revenue cycle management.

3M ClinTrac Quality Manager Software - Ability to precisely design reviews and studies, monitor their progress and document the results. Integrates key quality, clinical and case management data to support performance improvement.

Methodology

Capability to trigger specific review screens during chart abstracting based on any number of parameters such as diagnosis code, patient type, and others. Supports comprehensive root cause analysis processes via in-depth analysis, peer review processes, assessment and documentation of patient care issues or sentinel events. Ability to design quality reviews by patient, non-patient, provider or facility and ability to assist in the implementation and documentation of regulatory corrections

Results

Enables compliance with The Joint Commission, Centers for Medicare and Medicaid Services, and state-mandated quality reviews.

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Organization	3M Health Information Systems
Category	Proprietary/Analytics/Decision Support/Healthcare Data Technology Benchmarking
Source	www.3Mhis.com
Measure	**Benchmarking with Analytics - 3M APR-DRG** http://solutions.3m.com/wps/portal/3M/en_US/3M_Health_Information_Systems/HIS/Products/Benchmarking_with_Analytics/

Summary

3M Health Information Systems delivers comprehensive software and consulting services to help organizations worldwide improve documentation, quality, and financial performance across the healthcare continuum. 3M offers integrated solutions for transcription, speech recognition, clinical documentation improvement, documentation management, computer-assisted coding, quality, and revenue cycle management.

Benchmarking with Analytics - 3M APR-DRG - Flexible health benchmarking database. Focus is on risk adjustment methodologies and selected hospital norms to meet quality and performance improvement goals. Uses 3M APR DRG Classification System to classify patients according to severity of illness and risk of mortality. Compares the severity-adjusted patient population to severity-adjusted normative group averages to assess outcomes and quality. Claims to provide the most-requested health services industry benchmarking functions to help organizations meet quality and performance improvement goals; and to meet potential regulatory and reimbursement changes.

Methodology

The 3M™ APR DRGs offer:

- Updated clinical logic that reflects recent changes in healthcare practice
- The addition of relative weights allowing for comparisons across the 3M APR DRG classifications
- The ability to calculate a severity-adjusted casemix index
- Identification of secondary diagnoses that impact severity of illness, risk of mortality, or both.

Internal or external comparative profiles, expected values, and relative variance can be created for:

- Mortality rates
- Length of stay
- Charges
- Trend analysis

Results

Provides accurate performance data to reflect the clinical complexity of patient population. Severity-adjusted benchmarking tool improves performance by:

- Delivering enhanced quality of care

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- Reducing costs and LOS
- Comparing actual outcomes to expected outcomes
- Generates LOS reports with a *Potential Savings* column which calculates the cost savings of eliminating the last day of a patient stay which is a more accurate approach than using the average cost per day of a patient stay, as hospital charges are typically front-loaded.

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Organization	**3M Health Information Systems**
Category	Proprietary/Analytics/Decision Support/Healthcare Data Technology
Source	www.3Mhis.com
Measure	**Clinical Risk Grouping (CRG)** http://solutions.3m.com/wps/portal/3M/en_US/3M_Health_Information_Systems/HIS/Products/CRG/

Summary

3M Health Information Systems delivers comprehensive software and consulting services to help organizations worldwide improve documentation, quality, and financial performance across the healthcare continuum. 3M offers integrated solutions for transcription, speech recognition, clinical documentation improvement, documentation management, computer-assisted coding, quality, and revenue cycle management.

Clinically precise tool for longitudinal disease management

- Provider profiling, quality measurement, and outcomes improvement
- Aligns payment incentives with clinical goals
- Essential basis for effective chronic disease risk adjustment using diagnosis and procedure codes
- Classify patients into severity-adjusted clinically homogeneous groups

The CRG classification system can be used prospectively and retrospectively for both inpatient and ambulatory encounters. Uses demographic data, diagnostic codes and procedural codes to assign each individual to a single mutually exclusive risk group that relates the historical clinical and demographic characteristics of the individual to the amount and type of health care resources that individual will consume in the future.

3M Clinical Risk Grouping Software can:

- Determine and track chronic disease prevalence and progress over time
- Analyze clinical efficacy of treatment patterns
- Determine costs associated with medical services and assess the level of risk for particular groups of individuals
- Track quality of care
- Profile utilization patterns and the appropriateness of capitation rates
- Address both chronic and multiple medical conditions and the level of severity

Methodology

Population based. Uses administrative claims data, diagnosis codes and procedure codes. 3M™ Clinical Risk Groups are a categorical clinical model that uses standard claims data to assign each patient to a single mutually exclusive risk category. Each 3M CRG is clinically meaningful and can predict prospective and retrospective healthcare utilization and costs.

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Results

3M CRGs quantify the total resources used in relation to a specific individual in the future, or in the past, over an extended period of time. 3M CRGs help to:

- Provide increased incentives for health plans to treat those patients at high risk
- Promote financial and clinical efficiency in healthcare delivery
- Provide a methodology to group patients for retrospective analysis such as benchmarking, rate setting, epidemiological analysis and population risk profiling, especially for chronic care where patients may have multiple hospital and doctor visits over a long span of time
- Minimize financial incentives for adverse patient selection

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Organization	**Active Health** Company acquired by Aetna in May 2005
Category	Proprietary/Analytics/Decision Support/Healthcare Data Technology
Source	http://www.activehealthmanagement.com/activehealth-careengine.php
Measure	**Care Engine System** **Care Considerations** **Performance Measures**

Summary

ActiveHealth Management is a leading provider of health management services, including disease management, clinical decision support and personal health records. Solutions, powered by CareEngine System, help to improve care for 18 million people nationwide and help health plans and employers lower costs.

1. **CareEngine System** gathers and absorbs any and all available data (e.g. member claims, pharmacy, lab data, patient-derived, physician-derived, HRA/PHR, EMR) and analyzes this information against up-to-date evidence-based medical standards. Identifies specific opportunities to improve the care of individual members.

2. Once an issue is identified, the CareEngine System generates a clinical alert, called a **Care Consideration**, which describes the opportunity to improve care. Care Considerations usually suggest the addition of a treatment, the stopping of a treatment, or a procedure that hasn't been conducted. Care Considerations may be sent to physicians or patients. A distinguishing feature of the CareEngine is its ability to review data and issue care considerations in real time (less than a few seconds) thus being embeddable in PHRs, DM software, EMRs etc

3. **Performance Measures** - A quantitative assessment
   - of quality of care across networks and physicians compared to evidence-based standards
   - to improve the standard of healthcare and supports pay-for-performance tiered network
   - focused upon coordination of individual care management

Methodology

Using CareEngine technology, organization constantly analyzes an entire population, to identify specific, evidence-based opportunities to improve care for individual members. The **Clinical Development Center's** team of full-time, board-certified physicians, pharmacists and registered nurses develop and maintain evidence-based rules, algorithms and matrices. Evidence-based sources are reviewed daily to develop, test, and implement clinical rules arising from their literature review. Rules are designed to reflect the evidence-based medical literature as closely as possible and to also incorporate exclusionary logic to maximize specificity and thereby decrease the incidence of "false positive" alerts. All programs and clinical guidelines are formally reviewed annually.

Performance measures are nearing completion of a major overhaul and encompass measures at both the population and physician level. To the extent reasonable, the performance measures mirror the Care Considerations. Some adjustments must be made for the fact that performance measures are issued on a static basis periodically (12 monthly) whilst Care Considerations can be issued almost in a continuous stream as new data becomes available.

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In November 2008, American Well™ and ActiveHealth Management announced a strategic collaboration to offer an innovative real-time technology that combines ActiveHealth's CareEngine analytics, with American Well's Online Care System. A web based physician alert/online care system. When CareEngine identifies a medical issue (or gap in care) for a patient, the physician will receive an alert when they are actively consulting with the patient in an Online Care session. The physician can consider such information as well as the corresponding literature reference while offering guidance to the patient or suggesting a course of treatment. Alert is issued when opportunities for better care or potential medical errors are identified. American Well's Online Care enables live communication between physicians and patients. By leveraging CareEngine, physicians providing Online Care are made aware of individualized, specific opportunities to enhance or improve care. In addition, patients who receive a CareEngine alert through their health plan portal, PHR or other online platform will have the opportunity to address the issue immediately by connecting to an Online Care session with an appropriate physician. The CareEngine continuously gathers the medical, pharmacy and laboratory claims data for members and compares it against the latest findings in evidence-based literature.

Refer also entry to American Well.

Results

Clinical alerts based on evidence-based medical guidelines have been found to be effective - were followed at a greater rate (a 12.7% increase- Am J Managed Care 2008 below) when they were sent to both patients and their physicians, compared to when they were sent to physicians alone.

Publications

Javitt, et al. "Using a Claims Data-based, Sentinel System to Improve Compliance with Clinical Guidelines: Results of a Randomized Prospective Study," American Journal of Managed Care Feb. 2005; 11:93-102

Juster, I. "Technology-Driven Interactive Care Management Identifies and Resolves More Clinical Issues than a Claims-Based Alerting System," Disease Management June 2005; 8:188-197

Rosenberg SN, Shnaiden TL, Wegh AA, Juster IA. Supporting The Patient's Role In Guideline Compliance: A Controlled Study. American Journal of Managed Care. 14(11):737-44, 2008 Nov.

Javitt JC, Rebitzer JB, Reisman L. Information Technology and Medical Missteps: Evidence From a Randomized Trial. Journal of Health Economics. 27(3):585-602, 2008 May.

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Organization	**AETNA**
Category	Performance Ratings/Reports/Scorecards/Databases/Benchmarking
Source	www.aetna.com
Measure	**Aexcel Performance Network** **Physician Clinical Performance Evaluation** http://www.aetna.com/plansandproducts/health/medical/Aexcel_Physician_Clinical_Performance_Evaluation.pdf http://www.aetna.com/plansandproducts/health/medical/understandingaexcel.pdf http://www.aetna.com/plansandproducts/health/medical/Aexcelmethodology.pdf

Summary

Aetna is one of the nation's leading diversified health care benefits companies, serving members with information and resources to help them make better informed decisions about their health care. Aetna offers a broad range of traditional and consumer-directed health insurance products and related services, including medical, pharmacy, dental, behavioral health, group life, long-term care and disability plans and medical management capabilities.

Aexcel Performance Network - Specialist network option introduced in 2003. A network option to encourage members to select specialists with demonstrated effectiveness in clinical performance and cost efficiency. It can be offered by employers on a stand-alone basis or alongside Aetna's traditional networks. Aexcel-designated specialists are the centerpiece of Aetna's Performance Network, a network of specialty physicians that also includes Aetna participating primary care providers, hospitals and physicians in non-Aexcel specialties. Aetna applies Aexcel designation to certain specialists who, in addition to being part of Aetna's network, meet certain thresholds for clinical performance and cost efficiency. Physicians who meet the criteria are designated with a blue star on the online directory.

Focus is on case volume, clinical performance, efficiency and network adequacy.

Methodology

Chose to focus on physician specialty care in developing this program for several reasons.

1. Specialty care is more episodic than primary care.
2. Specialty care drives most of the advances in treatment, procedures, pharmaceuticals and diagnostic imaging, as well as the cost increases that accompany these advances.
3. The specialty categories chosen as part of Aexcel represent approximately 70 percent of specialty costs and approximately 50 percent of Aetna's total medical costs.

Doctors within 12 specialties (cardiology, cardiothoracic surgery, gastroenterology, general surgery, neurology, neurosurgery, obstetrics & gynecology, orthopedics, otolaryngology/ENT, plastic surgery, urology, vascular surgery) are evaluated using measures of clinical performance and efficiency in their use of health care resources. Physician measures are based on national guidelines including

- National Quality Forum (NQF)
- National Committee for Quality Assurance (NCQA)
- AQA Alliance
- American Medical Association

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- American Board of Medical Specialties
- American Osteopathic Association
- American Heart Association
- American College of Obstetricians and Gynecologists (ACOG)
- Agency for Health Research and Quality (AHRQ)
- Centers for Medicare & Medicaid Services (CMS)
- The Joint Commission (JCAHO)

For specialists who meet the case volume and clinical performance standards for Aexcel network designation, a measure of the efficiency of their care is developed and compared to their peers. Aetna uses Symmetry Episode Treatment Groups. Each specialty has a limited number of ETGs used in the evaluation process, and they are limited to the ETGs most frequently assigned to that particular specialty. Aexcel evaluation is performed at the physician group or tax identification number (TIN) level rather than at the individual physician level to provide more robust data for evaluation.

Eligibility: Doctors and groups within the Aetna network of health care providers must have managed at least 20 Aetna member episodes (use Symmetry's Episodes of Care) in their specialties over the past three years. Physicians are ordered according to an overall index score. Index metrics are based on established evidence-based measures of clinical performance.

Metrics include:

Clinical performance

- 30-day hospital readmission rate
- Adverse event rate
- Specialty-specific measures in Cardiology and Breast Cancer. Each metric is case-mix adjusted and must have at least 10 eligible cases to be scored. Only scored metrics are included in the index score; metrics are weighted according to the number of eligible cases.

Efficiency

- the cost for services
- the number and type of services performed

All available costs are considered when evaluating efficiency — including doctor visits, inpatient, outpatient, diagnostic, laboratory and pharmacy claims. Risk adjustment used to account for differences in the use of health care resources by different types of people. Including:

- age
- gender
- chronic disease risk
- insurance product type
- year the services were paid for

Data limitations:

- The clinical quality and efficiency information is based on Aetna member data only.
- The claim data used to evaluate specialty doctors does not include all procedures, or lab or pharmacy services. It includes only those for which Aetna has claims data.

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Physician Evaluation

Step 1 **Episodes of care.** Aetna claims are divided into episodes of care using Ingenix's Symmetry Episode Grouper Software.

Step 2 **Outliers.** The highest and lowest cost episodes of care (outliers) are removed

Step 3 **Attribution.** Patient episodes are attributed to physicians. Surgical episodes are attributed to the surgeon with the highest allowed charges. If the episode is non-surgical, the physician with the highest number of visits receives the attribution of the case

Step 4 **Expected cost per episode (case-mix adjusted).** The episodes of care for individual patients are severity adjusted for age, co-morbidities and complications. Additional variables are added to the case mix (benefit product, year of service, pharmacy rider, gender), in the efficiency measurement. A case-mix adjusted expected cost per episode for each specialty, market, and commonly managed type of episode is calculated based on actual observed costs in that market. The expected amount is then assigned to each episode of care in the same specialty, market and episode type.

Step 5 **Physician total episode cost.** Each physician's total episode cost is calculated

Step 6 **Physician expected episode cost.** Each physician's total expected episode is calculated

Step 7 **Physician composite index.** The physician's cost for each episode and the expected cost for each episode are used to create a composite index. The composite index represents the individual physician's severity-adjusted comparison of costs to same-specialty, same-geographic area peers treating the same or similar condition.

Step 8 **Efficiency and statistical Significance.** Each physician's composite index is compared to the peer average. A statistical analysis for confidence intervals is applied to the composite index to determine if the physician's composite index is significantly different from the peer average.

New Clinical performance standards to be introduced 2009 and already active in New York-The Aexcel designation process includes four key criteria:

- Volume
- Clinical performance
- Efficiency
- Network adequacy

A physician or physician group must meet at least one of the clinical performance criteria outlined below in order to be further evaluated for Aexcel on the basis of efficiency.

1. **Certification by external entity**
   At least 75 percent of specialists in the group are recognized by either Bridges to Excellence or the National Committee for Quality Assurance through their recognition programs in the areas of diabetes, cardiac/stroke or low back/spine.
2. **Board certification or re-certification**
   At least 75 percent of specialists in the group maintain current, active board certification by an ABMS or AOA recognized board in their Aexcel specialty.

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3. **Use of technology**
   The physician or group has earned the physician Office Link designation or, upon reconsideration, informs us of the use of health information technology, which applies National Quality Forum-endorsed measures.
4. **Alignment with Aetna Institutes of Quality (IOQ)**
   The physician maintains an active medical staff appointment at an Aetna IOQ facility and his/her primary specialty is the specialty for which the facility is recognized for IOQ.
5. **Claims-based measures**
   A claims-data evaluation of certain clinical performance standards established by respected professional organizations.

Results

Aexcel is targeted in markets where:

- There is a significant plan sponsor commitment and willingness to partner.
- The existing Aetna network is sufficiently robust to maintain network adequacy with the establishment of a specialist performance network.
- Variation in efficiency across specialists is distinguishable; establishing a performance network results in benefits to customers.
- There is sufficient claims experience to enable credible analysis of specialists

Publications

Aexcel® Specialist Designation in Aetna Performance Network Methodology Guide
http://www.aetna.com/plansandproducts/health/medical/Aexcelmethodology.pdf

Understanding Aexcel® What the Blue Star means for you
http://www.aetna.com/plansandproducts/health/medical/understandingaexcel.pdf

Summary of Physicians, Practice Sites and Medical Groups Evaluated for 2009 Aexcel
http://www.aetna.com/plansandproducts/health/medical/Number_Percent_Grid_2009_v2.pdf

A physician's guide to Aexcel. http://www.aetna.com/plansandproducts/health/medical/PhysicianguideAexcel.pdf

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Organization	**AHRQ - Agency for Healthcare Research and Quality**
Category	Performance Ratings/Reports/Scorecards/Databases/Benchmarking
Source	https://www.cahps.ahrq.gov/content/cahpsOverview/07-P016.pdf https://www.cahps.ahrq.gov/content/NCBD/NCBD_Intro.asp.
Measure	**CAHPS - Consumer Assessment of Healthcare Providers and Systems Family of Surveys** **Ambulatory Care Surveys** • **Health Plan Survey** • **Clinician & Group Survey** (CG-CAHPS) • Other surveys include (not discussed below)- ECHO (mental health services), Dental, American Indian, Home Health Care, Children with Chronic Conditions, People with Mobility Impairments, Health Literacy, Health Information Technology **Facility Care Surveys** • **Hospital Survey** (H-CAHPS or Hospital CAHPS) • Other surveys include (not discussed below) – In-Center Hemodialysis, Nursing Homes. **National CAHPS Benchmarking Database** (CAHPS Database) Health Plan Survey https://www.cahps.ahrq.gov/content/NCBD/HP/NCBD_HP_HPProductsAndServices.asp. https://www.cahps.ahrq.gov/content/NCBD/HP/NCBD_HP_Intro.asp. Hospital Survey www.hcahpsonline.org. https://www.cahps.ahrq.gov/content/ncbd/hosp/NCBD_HOSP_ProductsAndServices.asp. https://www.cahps.ahrq.gov/content/ncbd/hosp/NCBD_HOSP_Intro.asp. Clinician & Group Survey https://www.cahps.ahrq.gov/content/ncbd/cg/ncbd_cg_intro.asp Benchmarking Database https://www.cahps.ahrq.gov/content/ncbd/ncbd_Intro.asp?p=105&s=5

Summary

Initiated in 1995, the Consumer Assessment of Healthcare Providers and Systems (CAHPS) family of surveys is used by many public and private purchasers to

- Assess the patient-centeredness of care;
- Compare and report on performance; and
- Improve quality of care.

A comprehensive and evolving family of standardized surveys that ask consumers and patients to report on and evaluate their experiences with ambulatory and facility-level care health care. These surveys cover topics that are important to consumers, such as the communication skills of providers and the accessibility of services. CAHPS originally stood for the Consumer Assessment of Health Plans Study and was initially focused on developing measures of health plan performance. This evolved to

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cover the full spectrum of health care services. Considered to be the ‘gold standard’ of patient information and experience regarding quality of hospitals and health plans. The Centers for Medicare & Medicaid Services (CMS) partnered with the Agency for Healthcare Research and Quality (AHRQ) to develop HCAHPS. In May 2005, the HCAHPS survey was endorsed by the National Quality Forum (NQF) and in 2007 the Clinician and Group Survey was endorsed by the NQF.

The CAHPS program is funded and administered by the U.S. Agency for Healthcare Research and Quality (AHRQ), which works closely with a consortium of public and private organizations All CAHPS instruments are in the public domain.

- **Health Plan Survey:** The industry standard for obtaining consumers’ assessments of their health plans. The CAHPS Health Plan Survey is used by commercial, Medicaid, State Children’s Health Insurance Program (SCHIP), and Medicare plans representing more than 120 million enrollees. Results of these surveys are used for public reporting, accreditation, quality monitoring at the Federal and State levels, and quality improvement at the plan level. The National Committee for Quality Assurance (NCQA) incorporates CAHPS results into its health plan performance reports as well as its accreditation process for health plans. A version of the survey is also used by CMS, which surveys Medicare beneficiaries enrolled in managed care plans as well as in the traditional Medicare program, and reports the scores in a public Web site surveys that assess the experiences of health care consumers in various ambulatory settings, including physician offices, managed behavioral healthcare organizations, dental plans, and tribal clinics.

- **Hospital Survey:** Patients’ perspectives on the care delivered in health care facilities, such as hospitals, nursing homes, and dialysis centers. Focuses on the experiences of adult inpatients with hospital care and services. Hospitals voluntarily report data to the CMS. Other facility based surveys include CAHPS In-Center Hemodialysis Survey and the CAHPS Nursing Home Surveys for long-term residents, recently discharged short-stay residents, and the families of residents.
- **Clinician & Group Survey:** Asks patients to report on and rate the quality of care received in physicians’ offices. Available in both English and Spanish, it consists of 41 core items, which ensure standardization across survey sponsors, as well as over 50 supplemental items that sponsors may choose to add to the survey instrument to meet their specific needs. For patients who are commercially insured, the visit must have occurred in the last 12 months; for patients who are covered by Medicaid or Medicare, the visit must have occurred in the last 6 months. Covers adult primary and specialty care and child primary care. A visit-specific version of the Adult Primary Care Questionnaire is currently under development.
- **National CAHPS Benchmarking Database:** National repository for data from the CAHPS family of surveys. Created in 1998 as a resource for survey sponsors, researchers, and others interested in using comparative CAHPS survey results and detailed benchmark data. Contains respondent-level survey data, characteristics of entities surveyed (e.g., health plans and hospitals), and other information related to survey administration. Database has two major components - CAHPS Health Plan Survey CAHPS Hospital Survey. A third database component is under development for the CAHPS Clinician & Group Survey.

Methodology

Standardized survey instrument and data collection methodology for measuring patients' perspectives of hospital care. CAHPS surveys ask consumers for both overall ratings and reports about specific aspects of care, providers, and systems. Patients also are asked to report whether, or how often, specific events or behaviors that are indicators of health care quality occurred. Reports about events and behaviors are more specific, actionable, understandable, and objective than general ratings. CAHPS questions about specific aspects of care allow users to identify areas of care that are strong and those that need improvement. CHAPS collects data on communication with staff, cleanliness, pain management, discharge information and attentiveness.

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Health Plan Survey - a core set of questions covering enrollment/coverage, access, global ratings, utilization, communication, plan administration, health status, chronic conditions, demographics,

Hospital Survey – a core set of questions that can be combined with customized, hospital-specific items to produce information that complements the data hospitals currently collect to support internal customer service and quality-related activities. Composed of 18 patient rating and patient perspectives on care items that encompass seven key topics: communication with doctors, communication with nurses, responsiveness of hospital staff, cleanliness and quietness of hospital environment, pain management, communication about medicines, and discharge information. It also includes four screener questions and five demographic items, some of which may be used for adjusting the mix of patients across hospitals and for analytical purposes. The survey is 27 questions in length.

Clinician & Group Survey - consists of four instruments:

- Adult Primary Care Questionnaire 1.0 – 18 topic areas including wait time, health improvement, communication, knowledge of specialist care, cost, doctor thoroughness
- Adult Specialty Care Questionnaire 1.0 – 6 topic areas including care received, shared decision making, cost, procedures
- Child Primary Care Questionnaire 1.0 – 7 topics including scheduling, health improvement, knowledge of specialist care, shared decision making
- Child Primary Care Questionnaire 2.0 (beta) – 9 topic areas including after hours care, chronic conditions, communication, thoroughness, shared decision making.

Results

Beginning in July 2007, hospitals subject to IPPS payment provisions ("subsection (d) hospitals") must collect and submit HCAHPS data in order to receive their full IPPS annual payment update (APU) for fiscal year 2008. IPPS hospitals that fail to report the required quality measures, which include the HCAHPS survey, may receive an APU that is reduced by 2.0 percentage points. Non-IPPS hospitals, such as Critical Access Hospitals, can voluntarily participate in HCAHPS.

Publications

HCAPS Fact Sheet - http://www.cms.hhs.gov/HospitalQualityInits/Downloads/HospitalHCAHPSFactSheet200807.pdf

Costs and Benefits of HCAHPS. *Final Report 2005*
http://www.cms.hhs.gov/HospitalQualityInits/downloads/HCAHPSCostsBenefits200512.pdf

HCAHPS Three-State Pilot Study Analysis Results December 22, 2003
http://www.cms.hhs.gov/HospitalQualityInits/downloads/Hospital3State_Pilot_Analysis_Final200512.pdf

CAHPS Health Plan Survey Chartbook. What Consumers Say About Their Experiences With Their Health Plans and Medical Care October 2008. Agency for Healthcare Research and Quality.
http://www.cahps.ahrq.gov/content/NCBD/Chartbook/2008_CAHPS_HealthPlanChartbook.pdf

Literature Review: Using Quality Information for Health Care Decisions and Quality Improvement. *Final Report. May 6, 2005*
Mathematica Policy Research, Inc
https://www.cahps.ahrq.gov/content/cahpsOverview/qualityinfo.pdf

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Organization	**Agency for Healthcare Research and Quality (AHRQ)**
Category	Standards Setting, Industry Organizations
Source	http://www.ahrq.gov/
Measure	**Evidence-Based Practice Centers (EPC)** http://www.ahrq.gov/clinic/epc/

Summary

Launched in 1997 - 5-year contracts to institutions in the US and Canada to serve as EPCs. The EPCs review all relevant scientific literature on clinical, behavioral, economic and organization and financing topics to produce evidence reports and technology assessments - particularly interested in issues that are common, expensive, and/or significant for the Medicare and Medicaid populations. EPC reports and assessments emphasize explicit and detailed documentation of methods, rationale, and assumptions. These scientific syntheses may include meta-analyses and cost analyses. All EPCs collaborate with other medical and research organizations so that a broad range of experts is included in the development process. The resulting evidence reports and technology assessments are used by Federal and State agencies, private sector professional societies, health delivery systems, providers, payers, and others committed to evidence-based health care.

These reports are used for informing and developing coverage decisions, quality measures, educational materials and tools, guidelines, and research agendas. Topics are nominated by non-federal partners such as professional societies, health plans, insurers, employers, and patient groups. Initially 12 EPCs were funded.

The third award of 5-year contracts was announced in October 2007 with 14 Evidence-based Practice Centers. Five of the EPCs specialize in conducting technology assessments for the CMS. One EPC concentrates on supporting the work of the U.S. Preventive Services Task Force (USPSTF).

The current EPCs are located at:

- Blue Cross and Blue Shield Association, Technology Evaluation Center. .
- Duke University
- ECRI Institute.
- Johns Hopkins University.
- McMaster University.
- Minnesota Evidence-based Practice Center.
- Oregon Evidence-based Practice Center.
- RTI International—University of North Carolina.
- Southern California.
- Tufts—New England Medical Center
- University of Alberta. University of Connecticut.
- University of Ottawa.
- Vanderbilt University.

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Organization	**Agency for Healthcare Research and Quality (AHRQ)**
Category	Performance Ratings/Reports/Scorecards/Databases/Benchmarking
Source	http://www.talkingquality.gov/compendium
Measure	**Health Care Report Card Compendium** **Talkingquality.gov website** (refer separate entry for consumer oriented healthcare information) http://www.talkingquality.gov/compendium/index.html

Summary

A web tool demonstrating a variety of approaches for health quality report cards. A searchable directory of over 200 samples of report cards produced by a variety of organizations. The AHRQ Report Card Compendium aims to inform and support the various organizations that develop health care quality reports, and to provide easy access to examples of different approaches to content and presentation. Information on related Web sites and sample pages is provided where available.

AHRQ makes no judgment concerning the effectiveness or value of reports in the compendium but offers them to users for their consideration. Inclusion of a report in the compendium does not constitute an endorsement of the report in its entirety, or of any element in the report, by AHRQ.

For the purposes of the Compendium, the term "report cards" refers broadly to a wide variety of information sources and tools that enable consumers to compare the quality and, in some cases, other characteristics of health plans or providers. The developers of the Compendium appreciate that some sponsors and developers of this kind of information do not approve of this term, but decided to use it because it is concise and universally understood.

The Compendium itself does not include the actual quantitative data found in any given report. Moreover, all examples accessible through the Compendium are meant for illustrative purposes only. Following a link to a Web-based report or a sample page, enables the user to see the comparative data provided in that report. The report card's sponsor granted permission to either link to their site or provide a sample page. The only exceptions were report cards whose sponsors no longer exist. Because the Compendium includes reports from the last 10 years, some of the information contained in the reports is no longer current.

Criterion for inclusion in the Compendium includes:

1. Designed for consumers, defined as enrollees, employees, beneficiaries of Medicare or Medicaid, or the public at large.
2. Available to consumers. However, they do not have to be available to all consumers or available for free.
3. Includes comparative data on quality for more than one health care organization.
4. Provide information about one of the following types of health care providers:
    - Health plans.
    - Hospitals (inpatient and outpatient care).
    - Medical groups/clinics.
    - Individual physicians.
    - Managed behavioral health organizations.
    - Nursing homes.
    - Home health agencies.
    - Dialysis facilities.

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5. Publication date is not a criterion. The reports are meant to be illustrative

Each entry includes information on:

- Types of measures included in the report (e.g. patient experience measures, process measures, volume measures); and
- Presentation strategies used in the report (e.g. bar graphs, trending information, symbols).
- A profile of each report card provides a comprehensive description, including the geographic coverage, the availability of educational information or a decision-support tool, comments on the measures and presentation strategies, and other details. In most cases, links to Web-based reports are also provided.

Methodology

The Report Card Compendium groups quality measures into three categories: clinical quality, patient experience, and other quality measures.

1. **Clinical Quality Measures -** whether or not providers are delivering appropriate clinical services in a competent, safe, and timely manner. This category includes measures of process, outcomes, utilization (or volume), and structure.
2. **Measures of Process -** indicate how many patients receive a treatment or service recommended by professional organizations.
3. **Measures of Outcomes -** reflect the health state of a patient as a result of health care.
4. **Measures of Utilization or Volume -** These measures represent the number of times that a procedure is conducted. Because a provider's degree of experience with a procedure is often (but not always) associated with safer care and better outcomes, a higher volume of procedures is regarded as a proxy for higher quality of care. Volume is most commonly reported in the context of patient safety.
5. **Measures of Structure -** These measures assess the capacity of a health care organization or clinician to provide health care services.
6. **Patient Experience Measures -** Patient experience of care measures reflect quality from the perspective of enrollees and patients. These measures are typically based on surveys, but may also be drawn from administrative information collected by plans or providers. This category encompasses various indicators of patient-centered care, including access (whether patients are obtaining appropriate care in a timely manner), communication skills, customer service, helpfulness of office staff, and information resources. Three types of patient experience measures, based on the source of the information:
    i. **CAHPS Survey**. These standardized instruments are most commonly used for health plan enrollees.
    ii. **Survey Other Than CAHPS**. Some patient experience measures are derived from a survey designed by private companies or research organizations that gather enough data from their clients to generate benchmarks and comparative information.
    iii. **Data Source Other Than Survey**. Occasionally, measures of patient experience come from information that a health care organization has gathered.
7. **Other Quality Measures** This category covers any measures of quality that do not fall neatly into either of the above categories. Examples include complaint ratios, member retention rates, and results of physician surveys.
8. **Risk Adjustment for Clinical Measures -** If a report includes clinical quality measures, the Compendium indicates whether those measures have been calculated using a methodology that adjusts for the risks associated with the patients. Examples of patient risk factors include age, prior use of health care services, and comorbid conditions (e.g., diabetes, hypertension, and asthma). The use of a risk-adjustment methodology ensures that no organization is penalized for serving a sicker or otherwise high-risk population, which helps to make performance comparisons fair and more acceptable to all participating organizations.

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Organization	**Agency for Healthcare Research and Quality (AHRQ)**
Category	Performance Ratings/Reports/Scorecards/Databases/Benchmarking
Source	http://www.ahrq.gov/qual/nhqr07/nhqr07.pdf http://www.ahrq.gov/qual/qrdr07.htm
Measure	**National Healthcare Quality Report (NHQR)**

Summary

The National Healthcare Quality Report (NHQR) is the first comprehensive national effort to measure the quality of health care in America. It includes a broad set of performance measures that can serve as baseline views of the quality of health care and presents data on services for seven clinical conditions. Commenced in 2003. Sought to develop a set of indicators appropriate for profiling health care quality for the nation, including trends over time. Examine differences at the sub-national level and variations by socioeconomic status. Developed with technical and substantive input of nine federal agencies and organizational units within the Department of Health and Human Services & a range of state public partners and private sector organizations.

In 5th year (2007 report), NHQR offers a consensus-based set of health care quality measures across four dimensions of quality — effectiveness, safety, timeliness, and patient centeredness. Examines effectiveness of care across nine clinical condition areas—cancer, diabetes, end-stage renal disease, heart disease, HIV/AIDS, maternal and child health, mental health, respiratory diseases, and nursing home and home health care.

Methodology

NHQR is built on 218 measures categorized across four dimensions of quality—effectiveness, patient safety, timeliness, and patient centeredness. Measure specifications included in national quality measures, clearinghouse development of condition-specific and state-specific reports. Group of 41 core report measures that represent the most important and scientifically credible measures of quality for the Nation, as selected by the HHS Interagency Work Group. Effectiveness of care is presented under nine clinical condition/care setting areas: cancer; diabetes; end stage renal disease (ESRD); heart disease; HIV and AIDS; maternal and child health; mental health and substance abuse; respiratory diseases; and nursing home, home health, and hospice care.

Results

The NHQR was legislatively mandated as an annual report on trends in health care quality. Purpose is to summarize the current state of health care quality in terms that are understandable and relevant to a broad audience including providers, consumers, researchers, and policymakers. Report focus is systematic reporting on (i) trends and change over time, (ii) differences at the sub-national level by state, and (iii) variations by selected socio-demographic characteristics.
Major findings in 2007

- Health care quality continues to improve, but the rate of improvement has slowed.
- Variation in quality of health care across the Nation is decreasing, but not for all measures.
- The safety of health care has improved since 2000, but more needs to be done

Publications

National Healthcare Quality Report http://www.ahrq.gov/qual/nhqr07/nhqr07.pdf

National Healthcare Disparities Report http://www.ahrq.gov/qual/nhdr07/nhdr07.pdf

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Organization	**Agency for Healthcare Research and Quality (AHRQ)**
Category	Standards Setting, Industry Organizations
Source	http://www.ahrq.gov/
Measure	**Quality Indicators** http://qualityindicators.ahrq.gov/

Summary

Recommended performance measures to help hospitals identify a range of areas for improvement in the form of software and user guides for quality indicators covering four modules. Available free of charge to assist users in applying the quality indicators to their own data. The Quality Indicators (QIs) are measures of health care quality that use available hospital inpatient administrative data. This data measures quality associated with processes of care that occurred in an outpatient or an inpatient setting & highlights potential quality concerns, identifies areas that need further study and investigation, and track changes over time.

First introduced in 2001. Developed by investigators at Stanford University and the University of California under a contract with AHRQ.

The **four modules of indicators** are: Prevention Quality, Inpatient Quality, Patient Safety, and Pediatric Quality.

Prevention Quality Indicators

14 ambulatory care sensitive conditions in adult populations. Identify hospital admissions that evidence suggests could have been avoided, at least in part, through high-quality outpatient care. Are population based and adjusted for age and sex.

Inpatient Quality Care Indicators

reflect quality of care inside hospitals and include:

- Inpatient mortality for medical conditions & surgical procedures.
- Utilization of procedures for which there are questions of overuse, underuse, or misuse
- Volume of procedures for which there is evidence that a higher volume of procedures maybe associated with lower mortality
- Reflect the rate of hospitalization in the area for specific procedures
- Mortality Rates for Medical Conditions (7 Indicators), Mortality Rates for Surgical Procedures (8 Indicators), Area-level Utilization Rates (4 Indicators), Volume of Procedures (6 Indicators)

Patient Safety Indicators

Reflect quality of care inside hospitals, but focus on potentially avoidable complications and iatrogenic events. Identify adverse events that patients experience as a result of exposure to the health care system Hospital-level. Patient Safety Indicators (20 Indicators), Area-level Patient Safety Indicators (7 Indicators).

Pediatric Quality Indicators

Reflect quality of care inside hospitals and identify potentially avoidable hospitalizations among children. Screen for problems that pediatric patients experience as a result of exposure to the healthcare system and that may be amenable to prevention by changes at the system or provider level. Four factors—differential epidemiology of child healthcare

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relative to adult healthcare, dependency, demographics, and development—are considered. Provider-level Pediatric Quality Indicators (13 Indicators), Area-level Pediatric Quality) Indicators (5 Indicators)

Methodology

Indicators developed after a comprehensive literature review, analysis of ICD-9-CM codes, review by a clinician panel, risk adjustment and empirical analyses. Measures developed and regularly updated by a consensus process.

Results

Indicators provide a comprehensive picture of the level and variation of quality within four components of health care quality—effectiveness, safety, timeliness, and patient centeredness.

The AHRQ Quality Indicators are now being used for applications beyond quality improvement. Some organizations have used the AHRQ Quality Indicators to produce web based, comparative reports on hospital quality, such as the Texas Heath Care Information Council and the Niagara Coalition. Other organizations have incorporated selected AHRQ QIs into pay for performance demonstration projects.

Publications

Romano PS, Geppert JJ, Davies SM, Miller MR, Elixhauser A, McDonald KM. "A National Profile of Patient Safety in US Hospitals Based on Administrative Data," *Health Affairs* 22, no. 2: 154-166 (March/April 2003).

Prevention Quality Indicators Fact Sheet (2006) - http://qualityindicators.ahrq.gov/downloads/pqi/2006-Feb-PreventionQualityIndicators.pdf

Guide to Prevention Quality Indicators (2007)- http://qualityindicators.ahrq.gov/downloads/pqi/pqi_guide_v31.pdf

Prevention Quality Indicators Technical Specifications (2008) - http://qualityindicators.ahrq.gov/downloads/pqi/pqi_technical_specs_v32.pdf

Inpatient Quality Indicators Fact Sheet (2006) - http://qualityindicators.ahrq.gov/downloads/iqi/2006-Feb-InpatientQualityIndicators.pdf

Guide to Inpatient Quality Indicators (2007)- http://qualityindicators.ahrq.gov/downloads/iqi/iqi_guide_v31.pdf

Inpatient Quality Indicators Technical Specifications (2008)- http://qualityindicators.ahrq.gov/downloads/iqi/iqi_technical_specs_v32a.pdf

Patient Safety Quality Indicators Fact Sheet (2006) - http://qualityindicators.ahrq.gov/downloads/psi/2006-Feb-PatientSafetyIndicators.pdf

Guide to Patient Safety Quality Indicators (2007)- http://qualityindicators.ahrq.gov/downloads/psi/psi_guide_v31.pdf

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Patient Safety Quality Indicators Technical Specifications (2008) - http://qualityindicators.ahrq.gov/downloads/psi/psi_technical_specs_v32.pdf

Pediatric Quality Indicators Fact Sheet (2006) - http://qualityindicators.ahrq.gov/downloads/pdi/2006-Feb-PediatricQualityIndicators.pdf

Measures of Pediatric Quality – the Pediatric Quality Indicators (2007)- http://qualityindicators.ahrq.gov/downloads/pdi/pdi_measures_v31.pdf

Pediatric Quality Indicators Technical Specifications (2008) - http://qualityindicators.ahrq.gov/downloads/pdi/pdi_measures_v31.pdf

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Organization	**American Health Quality Association (AHQA)**
Category	Performance Ratings/Reports/Scorecards/Databases/Benchmarking
Source	http://www.ahqa.org
Measure	**American Health Care Quality Association and Bridges To Excellence Tool Kit** http://www.bridgestoexcellence.org/Content/ContentDisplay.aspx?ContentID=66

Summary

American Health Quality Association (AQHA) is an educational, not-for-profit national membership association dedicated to promoting and facilitating fundamental change that improves the quality of health care in America. AQHA represents Quality Improvement Organizations (QIOs) and professionals working to improve the quality of health care. QIOs share information about best practices with physicians, hospitals, nursing homes, home health agencies, and others. AHQA maintains close working relationships with the Centers for Medicare & Medicaid Services at the Department of Health and Human Services, the National Quality Forum, major professional medical and health care associations, and the Medicare Payment Advisory Commission.

Methodology

AHQA members:

- Develop and manage projects in health care quality improvement and evaluation for Medicare, Medicaid, private payers, and purchasers.
- Provide expertise in clinical care, quality improvement, health information management and technology, statistical analysis, and communications to health care purchasers and providers.
- Collaborate with medical practices, hospitals, health plans, long-term care facilities, home health agencies, and employers to evaluate systems of health care delivery and share best practices.
- Work to improve care in rural settings as well as urban areas, and to improve care for disadvantaged groups and ethnic minorities

Key areas of activity include

- Patient Safety - Helping hospitals and physicians improve systems to reduce medical errors.
- Improving Quality of Clinical Care – continuous quality improvement process.
- Medicare - Improving care and protecting beneficiary rights.
- Nursing Home Care - national QIO initiative to assist nursing homes
- Community-Based Care Improving care in local settings in collaboration with community-based groups
- Measuring Quality - Reporting to the public on health care provider quality performance.
- Medicaid Services - Quality review, utilization management, and technical assistance
- Technical Services - Educational, consulting, and support services for government agencies, health plans and health care providers.
- AHQA/Bridges to Excellence Toolkit - QIOs assess physician practices for rewards under BTE's Physician Office Link program.

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AHQA/Bridges to Excellence Toolkit

Bridges to Excellence, in collaboration with the American Health Quality Association, has developed a toolkit for Quality Improvement Organizations (QIO), which provides a detailed and easy to follow outline of both the BTE program and the roles that QIOs can play in their respective states. This toolkit guides the QIO through the physician/practice performance assessment process, how to effectively convene all the necessary stakeholders, and how to enable practices in the process of practice re-engineering. Communication is a fundamental part of BTE, and this toolkit offers insight based on experience in engaging physicians in BTE and the importance of participating in a performance improvement program.

Prior to implementing the steps outlined in the toolkit, the QIO needs to be approved by and sign an agreement with BTE.

A set of surveys and other tools that Quality Improvement Organizations (QIOs) can use to assess physician practices as they re-engineer their systems of care. Physician practices determined to meet the specific criteria will be eligible for financial rewards and public recognition. The toolkit enables QIOs to assess eligible practices using a common set of metrics.

The assessment will determine the extent to which each practice meets certain standards related to the

1. adoption and use of health IT and
2. are management programs,
3. active participation in clinical performance measurement, and
4. tracking of patients over time.

Practices that achieve a certain performance threshold will be reported to BTE as meeting criteria of its Physician Office Link program and can become eligible to receive financial rewards and public recognition.

Publications

Change in the Quality of Care Delivered to Medicare Beneficiaries, 1998-1999 to 2000-2001 Stephen F. Jencks, Edwin D. Huff, Timothy Cuerdon. JAMA, January 15, 2003. http://www.ahqa.org/pub/media/159_989_4077.CFM

Medicare Quality Improvement, Bad Apples or Bad Systems? David C. Hsia. JAMA Editorial, January 15, 2003. http://www.ahqa.org/pub/media/159_989_4078.CFM

Contracting for Quality: Medicare's Quality Improvement Organizations. Lisa Sprague. http://www.ahqa.org/pub/uploads/NHPF_Backgrndr_020606.pdf

A Measure Of Quality. Improving Performance In American Health Care. American Health Quality Association. October 2000. http://www.ahqa.org/pub/uploads/measure_quality.pdf

Statement of David G. Schulke Executive Vice President, American Health Quality Association Submitted March 18, 2004, to the Subcommittee on Health, House Committee on Ways and Means Hearing on New Frontiers in Quality Initiatives http://www.ahqa.org/pub/uploads/WMQualityHearingFinalTestimony040318.pdf

QIO Participation Toolkit. http://www.bridgestoexcellence.org/Documents/QIO%20Participation%20Toolkit%20Final%2012-27-07.pdf

Bridges To Excellence Assessment Survey. Office Assessment Tool. http://www.bridgestoexcellence.org/Content/Content/66/Documents/OPAtool.pdf

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Organization	**American Medical Association (AMA)**
Category	Performance Ratings/Reports/Scorecards/Databases/Benchmarking
Source	www.ama-assn.org
Measure	**Physician Consortium for Performance Improvement (PCPI)** www.ama-assn.org/ama/pub/physician-resources/clinical-practice-improvement/clinical-quality/physician-consortium-performance-improvement.shtml

Summary

The AMA convenes the Physician Consortium for Performance Improvement (PCIP) which focuses on clinical quality improvement and patient safety. This physician-led Consortium is composed of national clinical and methodological experts who develop tools and programs designed to help physicians improve care for specific, measurable areas of their practice. The PCPI comprised of over 100 national medical specialty and state medical societies; the Council of Medical Specialty Societies; American Board of Medical Specialties and its member-boards; experts in methodology and data collection; the Agency for Healthcare Research and Quality; and Centers for Medicare & Medicaid Services taking the lead in the development, testing, and maintenance of evidence-based clinical performance measures and measurement resources for physicians. PCPI activities are carried out through cross-specialty work groups established to develop performance measures for physicians from evidence-based clinical guidelines for select clinical conditions

Members of the Consortium have created 14 evidence-based performance measurement sets, to assist physicians analyze their performance and improve the quality of treatment their patients receive. The Consortium supports building quality improvement tools into electronic health records, which make medical care more efficient and safe, as physicians, nurses, pharmacists, and other health professionals have constant access to patient data.

Methodology

The Measures are intended to assist physicians in enhancing quality of care. Measures are designed for use by any physician who manages the care of a patient for a specific condition or for prevention. These performance Measures are not clinical guidelines and do not establish a standard of medical care.

Currently there are 266 PCPI measures. Descriptions and specifications for PCPI performance measures are available for 42 clinical topics or conditions. Measures with descriptions and specifications have been developed by an expert committee, approved by PCIP and published. Format includes a statement of the purpose of the measure, accountability measures, specification of intended audience and patient population, measure specifications (process and outcomes), data capture and measure calculation.

Publications

Physician Consortium for Performance Improvement (PCPI) Performance Measure Status Report.
http://www.ama-assn.org/ama1/pub/upload/mm/370/measures.pdf

Technical Specifications for AMA Physician Consortium for Performance Improvement measures endorsed by the National Quality Forum
http://www.ama-assn.org/ama1/pub/upload/mm/370/nqf_hb.pdf

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http://www.ama-assn.org/ama1/pub/upload/mm/370/exec_summ_efficiency.pdf

Physician Consortium for Performance Improvement Position Statement. The Linkage of Quality of Care Assessment to Cost of Care Assessment
http://www.ama-assn.org/ama1/pub/upload/mm/370/linkagequalitycost.pdf
Physician Consortium for Performance Improvement Work Group on Efficiency and Cost of Care. A Framework for Measuring Healthcare Efficiency and Value
http://www.ama-assn.org/ama1/pub/upload/mm/370/framewk_meas_efficiency.pdf

Physician Consortium for Performance Improvement Work Group on Efficiency and Cost of Care. Empirical Applications for Assessing the Efficiency and Value of Healthcare Using the Physician Consortium for Performance Improvement Physician Performance Measures
http://www.ama-assn.org/ama1/pub/upload/mm/370/empirical_applications.pdf

Publications About PCPI Measures. http://www.ama-assn.org/ama1/pub/upload/mm/370/pubs.pdf

Measure Testing Protocol for Physician Consortium for Performance Improvement Performance Measures
http://www.ama-assn.org/ama1/pub/upload/mm/370/pcpitestingprotocol.pdf

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Organization	**American Medical Group Association (affiliate)**
Category	Performance Ratings/Reports/Scorecards/Databases/Benchmarking
Source	www.amga.org
Measure	**Council of Accountable Physician Practices (CAPP)** http://www.amga-capp.org

Summary

A current research project that seeks to demonstrate that accountable physician practices deliver effective, efficient health care that improves clinical outcomes, enhances quality of life, and satisfies patients.

Methodology

1. Group Practice Performance Study - test the feasibility of linking three data sources:

1. Data from CAPP multispecialty group practices identifying physicians within their groups
2. Medicare claims data from Dartmouth's Medicare fee-for-service claims database; and
3. National Survey of Physician Organizations (NSPO) - NSPO1 and NSPO2 data on organizational attributes and care management processes at these organizations.

Data will be analyzed to provide insight into differences in performance across these organizations and the association between better performance and the presence of specific organizational attributes and specific care management processes.

2. Degree of Integration and Care Management Processes - Collect best practices in

1. Use of IT and the EMR in the care of chronic conditions,
2. Capabilities to provide feedback and guidance on the overall performance of a practice and its physicians,
3. Capabilities to provide patient-centered care.

The study will summarize the current capabilities across the CAPP groups and examine the relationship between the degree of integration and use of care management processes.

Results

Aim is more efficient care through:

- Shared costs
- Better coordinated care
- Shared information and communications system = use of electronic medical records and implement best practices
- Multispecialty medical groups also practice preventive medicine

Publications

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Council of Accountable Physician Practices Brochure - http://www.amga-capp.org/pdf/CAPPbroFINAL2a.pdf

Delivery Systems Matter – A Summary of Research http://www.amga-capp.org/pdf/delivery_systems_matter_research_summary.pdf

Shaping the Future of Healthcare - http://www.amga-capp.org/pdf/shapingthefuture.pdf

Health Care Reform Requires Accountable Care Systems. Stephen M. Shortell, PhD, MBA, MPH; Lawrence P. Casalino, MD, PhD

JAMA. 2008;300(1):95-97.

Reforming the Delivery System. Report to Congress. MedPac. June 2008. http://www.medpac.gov/documents/Jun08_EntireReport.pdf

Does Affiliation of Physician Groups with One Another Produce Higher Quality Primary Care? Mark W. Friedberg, Kathryn L. Coltin, Steven D. Pearson, Ken P. Kleinman, Jie Zheng, Janice A. Singer and Eric C. Schneider . J of General Internal Medicine, Volume 22, Number 10 / October, 2007 pp 1385-1392

Medicare Physician Group Practices: Innovations In Quality And Efficiency. Michael Trisolini, Gregory Pope, John Kautter, and Jyoti Aggar. Commonwealth Fund, December 2006 http://www.commonwealthfund.org/usr_doc/971_Trisolini_Medicare_physician_group_practices_i.pdf

Do Integrated Medical Groups Provide Higher-Quality Medical Care than Individual. Mehrotra et al. *Ann Intern Med.*2006; 145: 826-833

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Organization	**Anthem**
Category	Incentive/Reward Programs
Source	http://www.anthem.com/shared/noapplication/f5/s2/t0/pw_ad079718.pdf
Measure	**Physician Performance Program - Q-P3** www.ccactuaries.org/events/am2006/handouts/48-A.ppt www.qualityforum.org/2008_npc/presentations/PANEL%204%20Gilbert.ppt

Summary

Implemented in 2006. Complementary program to Q-HIP - Hospital Incentive Program. Designed to align incentives and performance-based reimbursement programs for Virginia hospitals, cardiologists and cardiac surgeons. Q-HIP and QP3 reward hospitals and physicians for practicing evidence-based medicine and implementing other nationally recognized best practices. By aligning hospital and physician goals, these programs foster collaborative efforts to improve care across the health care system.

Methodology

Q-P3 incorporates outcome, process and quality measures to reward evidence-based medicine and other best practices. Uses metrics based on all-payer, non-administrative data.

- Collaborated with the Virginia Chapter of the American College of Cardiology and the Virginia Cardiac Surgery Quality Initiative (VCSQI), a local consortium of hospitals and surgeons using data from the Society of Thoracic Surgeons National Database
- Researched published guidelines, medical society recommendations and evidence-based clinical indicators
- Indicators mirror those found on the Q-HIP scorecard

Results

Based on data provided by the first eight hospitals with participating physicians, results were encouraging – complication rates in 2004 for angioplasty and cardiac catheterization decreased 50 percent and 29 percent, respectively, from 2003 levels.

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Organization	Anthem
Category	Incentive/Reward Programs
Source	http://www.anthem.com
Measure	**Primary Care Quality Incentive Program (PCQIP)** http://www.anthem.com/shared/noapplication/f5/s2/t0/pw_ad079718.pdf

Summary

The Primary Care Quality Incentive Program rewards participating primary care physicians and providers throughout the Northeast region (Connecticut, Maine and New Hampshire) who meet or exceed identified performance metrics.

Metrics are based on industry standards of quality, clinical outcomes, patient safety and administrative processes that enhance patient care.

- Measurement components: outcomes, process, pharmacy, technology
- Providers: primary care physicians, nurse practitioners, physician assistants (designated as primary care providers)

The Primary Care Quality Incentive Program was launched in 2005. Program payouts began in July 2006. It is a continuous program with an annual measurement period.

Methodology

The measures used are a combination of chronic disease and prevention measures (process and outcomes) and measures focused on technology and pharmacy utilization. The process and outcome measures are similar to those used for The Health Plan Employer Data and Information Set (HEDIS) reporting, the standard for data collection and performance measurement of managed care organizations.

The 2006 **process measures** target diabetes, asthma, coronary artery disease, childhood immunizations, adolescent immunizations, adolescent and childhood well care visits and appropriate testing for pharyngitis.

The **pharmacy measure** encourages participating AQI physicians to prescribe prescriptions for generic drugs whenever appropriate

The **technology measure** - use any one or more of the following technologies: Electronic Medical Record (EMR) or Electronic Health Record (EHR); Electronic Prescription (e-Rx) and/or Electronic Disease/Patient Registry.

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Organization	**Anthem**
Category	Incentive/Reward Programs
Source	http://www.anthem.com/shared/noapplication/f5/s2/t0/pw_ad079718.pdf
Measure	**The Quality Hospital Incentive Program (Q-HIP)** www.qualityforum.org/2008_npc/presentations/PANEL%204%20Gilbert.ppt

Summary

Anthem Quality Insights are a suite of patient safety and quality incentive programs developed and progressively rolled out at Anthem Blue Cross and Blue Shield licensee's across the country. Focus is on evaluation and financial reward to health care institutions and providers when they achieve measures related to preventive care, quality of care, clinical outcomes, patient safety and patient satisfaction.

The *Quality Hospital Incentive Program* offers financial incentives to participating hospitals that meet goals for improving patient safety, patient health outcomes and patient satisfaction. The specific performance objectives are based on safety and care processes developed by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO), the Leapfrog Group and other authorities. Based upon program launched in Virginia in 2003 (Anthem Blue Cross and Blue Shield of Virginia, subsidiary of WellPoint Inc., Richmond, Virginia). The program is designed to collect data from network hospitals and provide feedback on key quality and safety metrics and to align financial incentives to improve patient safety, health outcomes, and hospital experience.

Promote system changes and evidence-based medicine

- Measure performance with valid data
- Financially reward high quality performers
- Consistently applies nationally vetted and recognized evidence based indicators
- Aligns reimbursement with the practice of high quality and safe health care
- Is transparent with PSO validation and auditing of data

Methodology

Voluntary system. Hospitals enter into a written agreement with BCBS in order to participate in the program. Indicators are drawn from national standard setting organizations such as the Joint Commission on the Accreditation of Healthcare Organizations (JCAHO), the Leapfrog Group, National Quality Forum (NQF).

Weighting:

- Patient Safety Section - 25% of total Q-HIP Score
- Member Satisfaction Section - 15% of Total Q-HIP Score
- Patient Health Outcomes Section - 60% of total Q-HIP Score
- Uses aggregated hospital-wide performance data to overcome problems with small numbers and difficulties with attributions.

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Rewards are based on shared performance. The program is intended to create incentives for competing physician groups to work together with hospital administration in a cooperative manner to achieve continuous quality improvement.

Results

Developing and implementing reimbursement and recognition strategies that encourage sustainable quality improvements in how health care is delivered to members. The programs were developed to foster positive, collaborative relationships between participating physicians, providers and hospitals.

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Organization	**AQA Alliance**
Category	Standards Setting, Industry Organizations
Source	http://www.aqaalliance.org/
Measure	**Physician Practice Measures**

Summary

The AQA alliance, founded in 2004, is a broad-based national coalition of more than 125 organizations working together on a strategy to measure, report on and improve physician performance. In the past two years, the alliance has adopted 144 NQF-endorsed measures in 22 areas of medical practice, becoming a major force behind the concepts of measurement, public reporting and evidence-based medicine, and advancing these concepts into practice.

Formed in 2004, between the American Academy of Family Physicians (AAFP), the American College of Physicians (ACP), America's Health Insurance Plans (AHIP), and the Agency for Healthcare Research and Quality (AHRQ) with the aim of improving patient safety, health care quality and value in all settings. Objectives include

- Developing a set of measures for physician performance that stakeholders can use in private health insurance plan contracts and with government purchasers;
- A multi-year strategy to roll-out additional measurement sets and implement measures into the marketplace;
- A model (including framework and governing structure) for aggregating, sharing and stewarding data; and
- Critical steps needed for reporting useful information to providers, consumers and purchasers

The three workgroups

- Performance Measurement,
- Data Aggregation and Reporting,
- Reporting

Publications

Building a Foundation for High Quality, Affordable Health Care: Linking Performance Measurement to Health Reform. *http://www.aqaalliance.or/files/Building_a_FoundationFebruary112009.pdf*

AQA Parameters for Selecting Measures for Physician Performance. 2008 www.aqaalliance.org/files/AQAParametersforSelectingAmbulatoryCare.doc

AQA Principles of "Efficiency" Measures. 2006. www.aqaalliance.org/files/PrinciplesofEfficiencyMeasurementApril2006.doc

AQA Compendium of Approved Performance Measures. 2008 www.aqaalliance.org/files/CompendiumofApprovedMeasures.doc

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Organization	ASC Quality Collaboration
Category	Standards Setting, Industry Organizations
Source	http://www.ascquality.org/
Measure	**ASC Quality Measures** http://www.ascquality.org/resources.html **ASC Quality Report** http://www.ascquality.org/qualityreport.html

Summary

In 2006, leaders from the ambulatory surgery center (ASC) industry joined with accrediting bodies and associations representing physicians and nurses to form the ASC Quality Collaboration. The ASC Quality Collaboration was formed to develop, support and promote specific measures for quality appropriate to ASCs. This leadership group envisioned a set of quality measures that could become the standard across outpatient surgery settings with potential for use in discussions on pay-for-performance, responding to state data collection initiatives, collaborating with payors and others in providing consumer information, and benchmarking for quality improvement in individual ASCs.

The Ambulatory Surgery Center measures are focused around patient safety. The measures are outcome and process focused. They include public interest concerns such as medication administration and correct site surgery and address areas of potential operative and post operative complications such as hospital transfers/admissions and patient burns.

The NQF has endorsed six facility-level ASC measures submitted by the ASC Quality Collaboration:

- Patient Burn
- Prophylactic Intravenous Antibiotic Timing
- Patient Fall within the ASC
- Wrong Site, Wrong Side, Wrong Patient, Wrong Procedure, Wrong Implant
- Hospital Transfer/Admission Methodology
- Appropriate Surgical Site Hair Removal

Methodology

Measures were developed through consultation with a wide range of stakeholders. This includes ASC clinical and administrative leaders, health policy researchers, CMS and other key federal and state governmental agency representatives. Existing measures including those in use, required, or under development by industry organizations were reviewed. After review of commonalities between the current measure sources as well as use of these measures across organizations, nine initial measures were identified for standardization of definitions and measurement criteria.

Results

Quality Report - Public report of ambulatory surgical center (ASC) quality data (2009). Based upon voluntary submission of clinical quality data reflecting patient admissions from January 1, 2009 through March 31, 2009. Results reported on the website. Presents aggregated performance data for six ASC facility-level quality measures developed by the ASC Quality Collaboration.

Publications

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ASC Quality Measures: Implementation Guide. Version 1.3 2008
http://www.ascquality.org/documents/ASCQualityCollaborationImplementationGuide.pdf

ASC Quality Collaboration Endorsed Quality Measures
http://www.ascquality.org/documents/Summary6ASCmeasuresendorsedbyNQF.xls

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Organization	**Asparity Decision Solutions**
Category	Standards Setting, Industry Organizations
Source	http://www.asparity.com/
Measure	**Online Decision Support Tools**

Summary

Asparity Decision Solutions, Inc. is a privately held corporation headquartered in Durham, North Carolina. Initial funding for the company was provided in 1996/97, when the Agency for Health Care Policy & Research/Small Business Innovation Research granted the company, formerly known as PlanSmartChoice, almost $2 million to develop software that would help federal employees and retirees choose a health plan. In 1999, the company incorporated and changed its name to Asparity Decision Solutions. The company owns patented technology in conjoint analysis that it customizes for and licenses to private and public sector companies. Asparity private labels its software applications to outsourcing organizations. Work with large employers, government programs, and health plans to provide decision support tools and consumer behavior data that control costs and drive strategy.

Employer solutions

Online decision support tools help employees and retirees better understand their benefit options, make more informed choices about their medical, dental, and vision plans, and take advantage of tax savings. Asparity's data solutions help employers, federal employee's and health plans quantify their health care consumerism initiatives. Focus is on large employers, benefit consultants, HR managers. Decision support tools focus on various types of plans, data solutions such as cost saving, enrollment patterns and modeling tools.

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Organization	**Avivia**
Category	Proprietary/Analytics/Decision Support/Healthcare Data Technology
Source	http://aviviahealth.com/
Measure	**Health Management Suite and Analytics** http://aviviahealth.com/?page_id=25

Summary

Avivia Health from Kaiser Permanente is a disease management and wellness provider that offers a comprehensive suite of health, wellness, and productivity optimization tools that help control health care costs. Avivia Health serves medium to large-sized employers, community health plans, government entities, and labor and trust organizations. Services are available in all 50 states and can be customized to fit into any self-funded or fully-funded health insurance plan

Five key products

- **Avivia Health Management** - Core solution addresses an organization's entire health spectrum, coaching those with chronic conditions, preference sensitive conditions, and lifestyle and behavioral needs to reduce direct health care costs using a unique Whole Person approach. Avivia Health Management uncovers new, evidence-based ways to keep healthy members healthy, to manage chronic conditions more effectively, and to provide informed support for preference sensitive decision-making, by leveraging over 60 years of Kaiser Permanente medicine and clinical experience.
- **Avivia Health and Productivity Optimization** - _Avivia HPO reduces indirect health care costs by taking a deeper look at productivity issues. Identify and address absenteeism and presenteeism challenges in organization's population through strategic outreach targeted towards conditions that erode productivity. Uses medical claims data and self-reported information to determine the prevalence of conditions such as depression, chronic pain, migraines, back pain, allergies, obesity, and gastrointestinal conditions that sap employee productivity. Once identified, Avivia HPO uses targeted outreach programs to encourage engagement with a health coach.
- **Aviva Wellness** - Designed to help organizations develop a culture of health. The Wellness program uses a variety of innovative tools and health coaching for both clients and their members to support positive lifestyle choices and behavioral changes.
- **Avivia MD** - Avivia MD brings Whole Person health full-circle, focused on enhancing physicians' effectiveness by supporting participants on their path to a healthier life and ultimately a healthier bottom line for client organization. Avivia MD provides patient panel reports that track care gaps, pocket guides containing the latest evidence-based treatment algorithms for common conditions, educational materials for the waiting room, and NCQA-compliant notification letters within 45 days of a member engaging with a health coach.
- **Avivia Rx** - Helps to manage overall health care costs by designing pharmacy strategies that focus on improving net costs vs. a siloed view of benefits. Address what is good for the organization as a whole *and* the member by building a cost-effective formulary, helping ensure the safest, highest-quality of drug therapy and engaging members so they stay more compliant with their medication regimen.

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Methodology

Avivia works with national employer groups and regional health plans to identify members who stand to benefit the most from health coaching approaches based on data analysis, predictive modeling and risk-stratification strategies. Clinical programs and outreach interventions are designed around engaging populations to live well with a chronic condition and/or get on the path to healthier living for those at risk. These practices are then embedded into Avivia's health coaching delivery system and patient education materials.

Avivia's client companies, which typically have populations of at least 10,000 lives and can leverage economies of scale, would rather not deal with multiple providers - each one specializing in its own area such as case management, disease management, benefits, health and wellness, eldercare, hospitalization oversight, patient incentives and employee assistance programs.

The company tailors its proprietary approach, including serving as a "master integrator" of multiple health services. In this role, Avivia seamlessly helps its plan members choose programs that encourage appropriate use of health care services, find the right doctor, support wellness activities, facilitate education and care management program utilization, and live well with a chronic condition.

Cost-savings analysis

Avivia has partnered with a strategic disease and wellness vendor, Health Dialog, which offers sophisticated analysis alongside predictive algorithms to segment patient populations into risk groups. These are based upon historical claims information, unwarranted care variation tied to geography and clinical care gaps. Proprietary analytic engines use patient profiles with up to 1,500 data points to assess an employer's health care challenges and craft appropriate treatment solutions.

Results

Cost savings claimed include - a client's disease management program typically produces at least a 1:1 return on investment (ROI) in the first year and increases to more than a 2:1 ratio by the third year. However, ROI for wellness depends on numerous factors, including program utilization and population prevalence for certain conditions and behaviors, adding that ROI averages use population and prevalence norms based on Center for Disease Control reports and assume utilization without incentives.

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Organization	BlueCross Blue Shield Association (BCBSA)
Category	Performance Ratings/Reports/Scorecards/Databases/Benchmarking
Source	www.bcbs.com
Measure	**Blue Plan Innovations - Improving Quality and Value** http://www.blueadvocacy.org/plans

Summary

The Blue Cross and Blue Shield Association (BCBSA) is a national federation of 39 independent, community-based and locally operated Blue Cross and Blue Shield companies. Collectively, the Blue Cross and Blue Shield System provides healthcare coverage for 102 million people or one-in-three Americans. Blue Cross and Blue Shield companies offer a variety of insurance products to all segments of the population, including large employer groups, small businesses and individuals.

Improving Quality and Value Initiatives

BCBSA has a number of initiatives directed towards improving quality and value on a national level. Links to the policy documents are in the publications section below. These build upon the employer-based system and provide affordable options for those without employer-sponsored coverage.

1. **Encourage Research on What Works -** promote evidence-based medicine and informed healthcare decisions:
   - **Technology Evaluation Center:** evaluates drugs, medical devices, procedures and biological products. Produce evidence reports and technology assessments to inform coverage decisions, quality measures, educational materials and tools, guidelines, and research agendas.
   - **Blue Health Intelligence:** a multi-Plan database that will bring together the claims experience of 80 million Blue Cross and Blue Shield members nationwide. Houses de-identified data to be used as an analytical tool to assist in understanding healthcare trends & cost drivers related to the delivery of healthcare.

2. **Change Incentives to Promote Better Care**- Key steps include:
   - **Blue Distinction:** Assesses hospitals based on objective, evidence-based criteria. Through Blue Distinction Centers for Specialty Care, Blue members have national access to providers with Blue Distinction designations for transplants, bariatric surgery, cardiac care and, shortly, complex and rare cancers.
   - **Pay for Quality:** Most Blue Plans offer some kind of Quality-Based Incentive Program (QBIP), which modifies reimbursements to hospitals and physicians based on consensus quality standards designed by third party experts such as the National Quality Forum and the Hospital Quality Alliance.
   - **Access to Generic Drugs**: Blue Plans believe the best way to improve affordability of prescription drugs is to assure a competitive pharmaceutical market and take action to promote generic use.
   - **Patient Centered Medical Homes:** BCBSA and Blue Plans are working with key partners to pilot “patient centered medical homes”.
   - **Medicare Advantage:** Blue Medicare Advantage (MA) Plans identify and provide support to those who could benefit from more specialized care or who have not received recommended preventive care.

3. Empower Consumers and Providers - Key steps include:

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- **Transparency:** 17 Blue Cross and Blue Shield Plans launched a national transparency demonstration to identify the most effective ways to help consumers learn about the costs of medical services, including physician and hospital services.
- **Health IT Initiatives:** goal of widespread adoption of health information technology, including adopting electronic and personal health records (PHRs).
- **Personal Health Records:** To help spur adoption and ease of use, BCBSA and America's Health Insurance Plans are collaborating on an industry initiative to identify core elements of a PHR and portability standards so that a consumer's information will transfer from one PHR to another if he or she switches health plans.
- **Consumer-Directed Health Products:** Blue Plans are offering a variety of consumer-driven health plans (CDHPs) that include a financial account funded by the consumer, employer or both and are tied to a health insurance product that will cover large expenses.
- **Blue Healthcare Bank:** The Blue Healthcare Bank was created to serve the healthcare financial needs of a growing number of consumers choosing CDHPs offered by Blue Cross and Blue Shield Plans.

4. Promote Health and Wellness - Key steps include:

- **Engaging Consumers@Work:** to encourage healthier lifestyles and combat obesity and related diseases.
- **Prevention and Disease Management Programs:** Blue Plans are offering innovative prevention and disease management programs on a number of fronts.

5. Foster Public-Private Coverage Solutions - tailored coverage plans to capture the diversity of the uninsured population so that no one gets "squeezed out" by cost, "misses out" on available government assistance or "opts out" because they do not think they need coverage.

Summary of programs from various Blues across the country

Summaries and web links

The BCBSA evaluates and summaries various Blue Cross / Blue Shield programs across the country. These summaries are collected on the BCBSA website; often with links to the programs in each state. These are available under the Innovations and Blue advocacy links below. Direct links to some sample programs in key states are included below. This provides examples of a variety of programs from both large and small and large states.

Some programs with strong web material are summarized as separate entries in Appendix D. This includes the programs at Anthem, Michigan Blue Cross Blue Shield, Regence, and Highmark.

Other examples are:

Excellus - Quality Improvement Program

https://www.excellusbcbs.com/wps/portal/xl/mbr/searchdisplay?WCM_GLOBAL_CONTEXT=/wps/wcm/connect/default/excellus/member/contact+us/about+us/our+quality+program/exc-our+quality+program

Elements include:

- Monitor safety provided in the inpatient and outpatient settings

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- Adopt and distribute practice guidelines for preventive health, acute and chronic medical and/or behavioral health services.
- Implement interventions to reduce unwarranted variation within health care practice.
- Inform practitioners and hospitals on performance compared to standards and benchmarks.

Hawaii's Quality and Service Recognition Programs

http://www.hmsa.com/about/annualreport/qualityprograms.aspx

HMSA's efforts to ensure quality in Hawaii's health care system include the following programs and initiatives: HMSA's Practitioner Quality and Service Recognition (PQSR), HMSA's Hospital Quality and Service Recognition (HQSR), HMSA's HMO Quality and Performance (Q&P) for practitioners in HMSA's health maintenance organization plans, HMSA Initiative for Innovation and Quality (HI-IQ)46 program, provided financial assistance to help Hawaii hospitals and physicians implement technological solutions to make the state's health care system more effective and efficient.

Wellmark's Collaboration on Quality®

http://www.wellmark.com/Provider/HealthManagement/CollaborationonQuality.aspx

Wellmark's CoQ Primary Care Program is designed to promote the best possible health care for members while supporting the clinician/patient relationship. More than 1,500 (50% +) of all primary care physicians in Iowa and South Dakota participate in the program.

Publications

The Pathway to Covering America Blue Plan Innovations 2009
http://c0540862.cdn.cloudfiles.rackspacecloud.com/FINAL_Pathway_Plan_Profile_Book_060209.pdf
The Pathway to Covering America Ensuring Quality, Value and Access 2008
http://c0540862.cdn.cloudfiles.rackspacecloud.com/Pathway_to_Covering_America.pdf
http://www.blueadvocacy.org/plans
http://www.bcbs.com/innovations/
http://www.blueadvocacy.org/plans/search/category/encourage_research_on_what_works
http://www.blueadvocacy.org/plans/search/category/change_incentives_to_promote_better_care
http://www.blueadvocacy.org/plans/search/category/empower_consumers_and_providers
http://www.blueadvocacy.org/plans/search/category/promote_health_and_wellness
http://www.blueadvocacy.org/plans/search/category/foster_public_private_coverage_solutions
Blue Distinction Hospital Measurement and Improvement Program
http://www.bcbs.com/innovations/measurement/Provider-Measurement-and-Improvement-Overview-for-BCBS.pdf
Blue Distinction Selection Criteria overview -
http://www.bcbs.com/innovations/bluedistinction/bdcselectioncriteriaoverview.pdf
Blue Distinction Fact Sheet http://www.bcbs.com/innovations/bluedistinction/blue-distinction-fact-sheet.pdf

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Organization	BlueCross Blue Shield Association (BCBSA)
Category	Performance Ratings/Reports/Scorecards/Databases/Benchmarking
Source	www.bcbs.com http://www.bcbs.com/innovations/bluedistinction/
Measure	**Blue Distinction Hospital Measurement and Improvement Program** http://www.bcbs.com/innovations/measurement/hospitalmeasurementsummary_031008_nh.pdf http://www.bcbs.com/innovations/measurement/hospital-measurement-summary-08-24-07.doc

Summary

The Blue Cross and Blue Shield Association (BCBSA) is a national federation of 39 independent, community-based and locally operated Blue Cross and Blue Shield companies. Collectively, the Blue Cross and Blue Shield System provides healthcare coverage for 102 million people or one-in-three Americans. Blue Cross and Blue Shield companies offer a variety of insurance products to all segments of the population, including large employer groups, small businesses and individuals.

Provider Measurement and Improvement Program that integrates provider performance metrics into a national framework for improving healthcare quality. Aim is to encourage greater consistency in evidence-based medical approaches.

Launched in early 2005 and implemented a Web-based portal in 2006. Web-based reports integrating the 27 measures. Uses publicly available quality data as the basis for collaborations between participating Blue Cross and Blue Shield companies and hospitals around the country to improve inpatient hospital care. Additional steps will focus on recognizing physicians' efforts to enhance patient health and safety. A quality improvement tracking feature was added to the web-based report in the November 2006 quarterly release. Leapfrog information and JCAHO Accreditation status are also now available in the report

Blue Distinction designation is awarded by the Blue Cross and Blue Shield companies to medical facilities that have demonstrated expertise in delivering quality healthcare. Based on rigorous, evidence-based, objective selection criteria. Goal is to help consumers find quality specialty care on a consistent basis, while enabling and encouraging healthcare professionals to improve the overall quality and delivery of care nationwide.

At the core of the Blue Distinction program are the Blue Distinction Centers for Specialty Care, facilities that are recognized for distinguished clinical care and processes in the areas of bariatric surgery, cardiac care, complex and rare cancers and transplants.

Methodology

Program integrates 27 hospital performance criteria from two public sources: clinical measures focusing on heart attacks, heart failure, pneumonia and surgical infection prevention from the Centers for Medicare and Medicaid Services (CMS) and patient safety indicator measures from the Agency for Healthcare Research and Quality (AHRQ).

Contracted with WebMD Quality Services to develop a flexible and user-friendly Web application to address the information needs of participating Blue Plans, their hospitals and employers.

Measures used to determine whether a facility meets the quality thresholds of Blue Distinction include

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- **Patient Results (or Patient Outcomes)** such as complication rates, readmission rates, mortality rate
- **Treatment Expertise** such as physician credentials, dedicated team focused on providing the particular area of specialty care, length of time a facility has performed a procedure
- **Procedure Volume** such as number of times a particular procedure has been completed
- **Structure** such as type of services provided (ER, diagnostic testing abilities), supporting departments (radiology, nutrition, social services, rehabilitation, etc.), use of clinical registry data systems
- **Process** such as use of evidence-based care (e.g., use of beta blockers or aspirin for cardiac patients, which typically results in better outcomes), systematic follow-up of patient results after procedures, quality improvement processes

Results

All facilities must reapply for the designation on a regular basis (typically every 18 - 36 months) to help maintain consistent quality among facilities that have earned the Blue Distinction designation. These re-evaluation cycles provide an opportunity for BCBS to work with expert physicians and medical organizations to determine if any of our quality thresholds should be raised based on then current clinical practice, fostering ongoing opportunities for improving the overall quality of care.

Publications

Blue Distinction Hospital Measurement and Improvement Program
http://www.bcbs.com/innovations/measurement/Provider-Measurement-and-Improvement-Overview-for-BCBS.pdf
Blue Distinction Selection Criteria overview -
http://www.bcbs.com/innovations/bluedistinction/bdcselectioncriteriaoverview.pdf
Blue Distinction Fact Sheet
http://www.bcbs.com/innovations/bluedistinction/blue-distinction-fact-sheet.pdf

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Organization	**Blue Cross Blue Shield of Michigan**
Category	Performance Ratings/Reports/Scorecards/Databases/Benchmarking
Source	http://www.bcbsm.com/
Measure	**Value Partnership Initiatives** http://www.bcbs.com/news/bluetvradio/pathway-to-covering-america/blue-cross-blue-shield-of.html http://www.bcbsm.com/provider/value_partnerships/index.shtml http://www.valuepartnerships.com/

Summary

Blue Cross Blue Shield of Michigan was founded in 1939 and has over 7,000 employees; 4.3 million members and paid $19.8 billion in claims in 2009. The company aims to develop new approaches to the challenge of ensuring that all Michigan citizens have access to reasonably priced, quality health care.

Value Partnerships A collection of clinically oriented initiatives among Michigan physicians, hospitals and Blue Cross Blue Shield of Michigan that aims to significantly impact upon the quality of patient care across Michigan. Through collaboration and data sharing, the initiatives are improving clinical quality, decreasing complications, managing costs, eliminating errors and improving health outcomes. Improvement efforts rest on using sound clinical and scientific information, like evidence-based medicine, to identify best practices and quality improvements. Value Partnerships initiatives are made up of the:

- Physician Group Incentive Program,
- Hospital P4P Program;
- and Collaborative Quality Initiatives

Physician Group Incentive Program (PGIP) - PGIP connects physician organizations from across Michigan and encourages collaboration and information sharing through work on various PGIP initiatives. These PGIP initiatives aim to improve multiple aspects of the health care system for BCBSM members as well as all Michigan residents. Current initiatives are:

- Developing foundational capabilities for practice improvement, such as initiatives to develop data analytic capabilities or quality management staff
- Improving care for diseases or health conditions that present significant opportunities for standardizing treatment and improving health outcomes, such as oncology or diabetes
- Improving use in targeted service or procedure categories with wide variation in practice patterns, such as high tech radiology or emergency visits
- Enhancing core clinical processes and the associated clinical information technologies needed to support them, such as tracking of needed services, managing orders and prescriptions, managing referrals, and coordinating access and communications among members of a patient-centered medical home

Hospital Pay-for-Performance (P4P) program - The Blue Cross Blue Shield of Michigan Hospital Pay-for-Performance Program rewards short-term acute care hospitals that demonstrate achievement in three major categories:

- Quality
- Efficiency
- Participation in Collaborative Quality Initiatives

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Through this program, hospitals earn incentives that are based on a percentage of their inpatient and outpatient operating payments. Performance is measured and compared against the performance of other hospitals in Michigan as well as national benchmarks. Measures and components of the program were determined with input from hospitals, and include various quality and efficiency measures as well as participation in the Collaborative Quality Initiatives.

Collaborative Quality Initiatives - The Collaborative Quality Initiatives are programs that focus on common, costly procedures or treatments. Consortia of providers work together using comparative performance reports generated from data on all procedures to identify processes of care which are associated with optimal outcomes. This knowledge guides system improvements aimed at optimizing care and maximizing outcomes. The current CQIs are:

- Michigan Bariatric Surgery Collaborative
- Michigan Surgical Quality Collaborative
- BCBSM Cardiovascular Consortium/ CQI
- Thoracic and Cardiac Surgery CQI
- Michigan Breast Oncology Quality Initiative
- Peripheral Vascular Intervention Quality Initiative
- Cardiac Imaging CQI

Results

Patient-Centered Medical Home

- 22.9 % lower cost for ambulatory care sensitive conditions
- 23.4 % lower pediatric hospital readmission cost
- 7 % lower adult hospital readmission cost
- 51.5 % lower self referral rate for low-tech imaging by the primary care physician

Collaborative Quality Initiatives

- 30 % reduction in hospital deaths
- 38 % reduction in contrast induced nephropathy
- 31 % reduction in blood transfusions after angioplasty
- 19 % reduction in vascular complications
- 49 % reduction in emergency revascularization
- 10 % reduction in unplanned coronary artery bypass surgery
- 28 % reduction in gastrointestinal bleeding

Publications

Blue Cross Blue Shield of Michigan 2010 Partners in Health Care Report http://www.bcbsm.com/pdf/partners.pdf

2009 Hospital Pay-for-Performance Program. Overview
http://www.bcbsm.com/pdf/HPP_pg14_program_description.pdf

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Organization	**Brookings-Dartmouth ACO Learning Network**
Category	Payment Reform
Source	https://xteam.brookings.edu/bdacoln/Pages/home.aspx
Measure	**Accountable Care Organization (ACO) Learning Network**

Summary

The **Accountable Care Organization (ACO) Learning Network**, a joint initiative of the Engelberg Center for Health Care Reform at Brookings and the Dartmouth Institute for Health Policy and Clinical Practice, focuses on practical steps toward implementing more accountable health care and building greater value into the care delivery process through the use of ACOs. The Network offers practical guidance and a forum for interested and engaged parties to learn from one another throughout the process of planning and implementation.

Through the launch of the Learning Network and related activities, Brookings and Dartmouth are working to align feasible short-term delivery system policy reforms – including the "medical home" model, patient shared decision-making, and bundled payments – with the long-term goal of developing a high-quality, efficient, and sustainable system.

Overview of the ACO Model

ACOs have received significant attention in the current health reform debate as an especially promising model for reshaping care delivery. ACOs are provider organizations participating in a payment and performance measurement framework that encourages integration and accountability at the local level. This model presents a path for reform that builds on current provider referral patterns and offers shared savings payments to providers willing to be held accountable for quality and costs. The ACO framework offers a basic method of decoupling volume and intensity from revenue and profit and is thus the first step to achieving a sustainable health care delivery system.

The ACO model relies on three major principles:

1. **Local Accountability**: ACOs will be comprised of local delivery systems with patients empirically assigned to the organization. ACO spending benchmarks will be based on historical trends and adjusted for patient mix, making the local system accountable for cost, quality, and capacity.
2. **Shared Savings**: ACOs with expenditures below their benchmark will be eligible for shared savings payments. Savings can be shared among all stakeholders and allow for investments (e.g., in health IT) that can improve care and slow cost growth.
3. **Performance Measurement**: Measurement is essential to ensure that appropriate care is being delivered and that cost savings are not the result of limiting necessary care. ACOs will report patient experience data in addition to clinical process and outcome measures.

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Overview of the Learning Network

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The network is membership-based, with a modest membership fee to support the effort. The Network's activities include a series of webinars and conference calls to take place over a 12-month period, each of which will focus on a different aspect of the ACO implementation process. The material for the series will be guided by and inform the contents of an "ACO Toolkit" that the Brookings-Dartmouth team is in the process of completing in collaboration with several co-authors. Copies of the Toolkit will be made available upon its completion for those registered for the Network. Discussions will be guided by experts in payment reform and implementation and other members of the team from Dartmouth and Brookings that includes economists, actuaries, data analysts, researchers, and health policy experts.

Specific topics to be covered over the course of the series include:

- An overview of the ACO model and other approaches to payment reform
- Budgetary Issues (e.g., allocations of savings, claims projections, reconciliations, accounting concerns)
- Organizational Environments
- Contracts and Management Structures
- Payment Methodology
- Multi-Payer Dynamics
- Informational and Data Tools
- Analytic Resources
- Service Models (e.g., management, analytic and financial services)
- Enrollee Management
- Quality and Patient Experience Benchmarks
- Proven Concepts and Lessons Learned
- Legal Considerations (e.g., Stark, anti-trust implications, anti-kickback statute)

Publications

The Accountable Care Organization (ACO) Learning Network, June 25, 2009
https://xteam.brookings.edu/bdacoln/Documents/ACO_Learning_Network.pdf

Reforming Provider Payment Moving Toward Accountability for Quality and Value. Issue Brief. March 2009
https://xteam.brookings.edu/bdacoln/Documents/Issue%20Brief%20-%20ACO%20final_Background_Page.pdf

Next Steps for Implementation of ACO's. Mark McClellan, Elliott Fisher.
https://xteam.brookings.edu/bdacoln/Documents/Next%20Steps%20ACOs_Final%20(V2).pdf

Why Accountable Care? Core Principles Underlying ACOs. Elliott Fisher
https://xteam.brookings.edu/bdacoln/Documents/ACO%20Summit%20Fisher%20final%20(June%207%202010).pdf

Achieving Accountable Care. Mark McClellan
https://xteam.brookings.edu/bdacoln/Documents/ACO%20Summit%20McClellan%20final%20(June%207%202010).pdf

ACO Toolkit
https://xteam.brookings.edu/bdacoln/Documents/ACO%20Toolkit%20January%202011.pdf

Stephen M. Shortell, Lawrence P. Casalino, and Elliott S. Fisher. How The Center For Medicare And Medicaid Innovation Should Test Accountable Care Organizations Health Affairs 29, NO. 7 (2010): 1293–1298

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Fisher ES, McClellan M, Bertko J, Lieberman SM, Lee JJ, Lewis JL. Fostering accountable health care: moving forward in Medicare. Health Aff (Millwood). 2009;28(2): w219–31.

McClellan M, McKethan AN, Lewis JL, Roski J, Fisher ES. A national strategy to put accountable care into practice. Health Aff (Millwood). 2010;29(5):982–90.

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Organization	**Brookings Institution – Engelberg Center for Health Reform**
Category	Standards Setting, Industry Organizations
Source	http://www.brookings.edu/health.aspx
Measure	**Quality Alliance Steering Committee** http://www.brookings.edu/projects/qasc/effort.aspx **High-Value Health Care Project (HVHC)** http://www.brookings.edu/health/Projects/hvhc.aspx

Summary

The Brookings Institution is a nonprofit public policy organization based in Washington, DC. Our mission is to conduct high-quality, independent research and, based on that research, to provide innovative, practical recommendations that advance three broad goals:

- Strengthen American democracy;
- Foster the economic and social welfare, security and opportunity of all Americans and
- Secure a more open, safe, prosperous and cooperative international system.

Quality Alliance Steering Committee (QASC) was formed to advance high-quality, cost-effective, patient-centered health care by providing a national framework for implementing quality and cost measures to improve care around the country. QASC participants reflect a very broad range of health care stakeholders including provider groups, consumer groups, business alliances, payer groups, regional collaborations to improve quality and government agencies. QASC was established in 2006 by two established quality alliances – the AQA Alliance and the Hospital Quality Alliance, along with other stakeholders, to help develop an overall framework for the effective use of standard quality and cost measures in physician offices and hospitals nationwide.

The Robert Wood Johnson Foundation (RWJF) will provide nearly $16 million in grants to develop and test a single, national approach to bring consistency to efforts to measure and report information on the quality and cost of care that patients receive.

Grants disbursed to: the Engelberg Center for Health Care Reform at the Brookings Institution ($8.7 million) and America's Health Insurance Plans (AHIP) Foundation ($4.2 million). Grants totaling an additional $3 million will be made in conjunction with these activities for identifying feasible cost measures and conducting additional activities.

Expected completion in 2010.

High-Value Health Care Project (HVHC)

Major gaps exist between the health care that people *should* receive and the care they *actually* receive. Research also shows that health care quality and costs and patient outcomes differ significantly depending on where patients live, which doctors and hospitals provide their health care, and their racial/ethnic status. Consistent information is needed so that better decisions can be made. Such information about the performance of doctors, hospitals and other health care providers, and health care results can help individuals, providers, and payers better evaluate and choose where to get care, how to improve it, and how to pay for it.

The High-Value Health Care Project (HVHC) aims to make sure consistent information becomes widely available to consumers,

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providers, and public and private payers of health care. Partner support is critical to this effort. HVHC is funded by the Robert Wood Johnson Foundation, and the Center is also working with America's Health Insurance Plans' Foundation and the American Board of Medical Specialties in carrying out the work of the project.

Methodology

The project combines data from many different national health plans to provide a broader picture of physicians' care across their entire practices. It works with Medicare to aggregate data across the public sector and the private sector and uses quality measures endorsed by the National Quality Forum (NQF). It is collaborating in the development and implementation of new measures for comparing the cost of care.

1. **Aggregating Patient Data Nationally.** The project collects data from multiple health plans project and will implement a pilot set of standard performance measures by aggregating data from these health plans by physician and provider group.

2. **Identifying Cost Measures.** Measures of cost of care are an important – and largely missing – component in improving quality of care. Providers and the public need to understand how different physicians and hospitals use resources and how they compare to national cost measures. In collaboration with the NQF endorsement process and the AQA alliance, the project will initially work to identify measures of cost for 20 common conditions. The measure specifications will include:

    - Defining the process(es) or care being measured;
    - Defining which clinically appropriate services group to any given episode using common diagnostic and other codes;
    - Delineating condition-specific episode length and/or clean periods;
    - Conditioning specifications by required data types (e.g., pharmacy, outpatient, etc.); and
    - Data formats.

    This will result in a new set of measures that take into account appropriate use of resources and provide a broader picture of quality of care for these conditions and an approach that can be applied in other areas of cost measurement.

3. **Sharing Information in Communities.** The project will work with the Agency for Healthcare Research and Quality (AHRQ) to make the quality and cost measures available to communities to use in providing information to consumers, physicians, nurses, clinics and hospitals, and to gather data on how communities are using the information to improve care

4. **Using the Information to Address Health Disparities.** A critical aspect of the project will include identification and measurement of disparities in health and in the quality of care for many patients of different races and ethnicities and addressing these gaps in order to help providers develop specific interventions that attempt to minimize these differences. developing consensus-based strategies for:

    - Creating standard categories for race/ethnicity and language reporting;
    - Ensuring accurate collection of patient and enrollee data across health care sectors; and
    - Promoting appropriate use and dissemination of information on health system performance among various racial/ethnic groups.

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Selected Publications

National Effort to Measure and Report on Quality and Cost-Effectiveness of Health Care Unveiled. Oct 2007
http://www.brookings.edu/projects/qasc/~/media/Files/Projects/qasc/qasc_release.pdf

REAL HEALTH CARE REFORM IN 2009 Getting to Better Quality, Higher Value, and Sustainable Coverage. Nov 2008
http://www.brookings.edu/events/2008/~/media/Files/events/2008/1117_realhealthcare/1117_strategicreview.pdf

Fostering Accountable Health Care: Moving Forward In Medicare. Elliott S. Fisher, Mark B. McClellan, John Bertko, Steven M. Lieberman, Julie J. Lee, Julie L. Lewis and Jonathan S. Skinner *Health Affairs*, 28, no. 2 (2009): w219-w231

Reforming Provider Payment. Moving Toward Accountability for Quality and Value. ISSUE BRIEF. Accountable Care Organizations March 2009
http://www.brookings.edu/events/2009/~/media/Files/events/2009/0311_aco/issuebriefacofinal.pdf

Reforming Provider Payment *Moving Toward Accountability for Quality and Value.* Statement of Mark B. McClellan, MD, PhD Director, Engelberg Center for Health Care Reform. The Brookings Institution. Senate Finance Committee Roundtable on Health Care April 21, 2009
http://www.brookings.edu/~/media/Files/rc/testimonies/2009/0421_providerpayment_mcclellan/20090421_sfc.pdf

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Organization	**Buyers Health Care Action Group, Minnesota**
Category	State; Standards Setting, Industry Organizations
Source	www.bhcag.com
Measure	**Multiple Programs**

Summary

The Buyers Health Care Action Group (BHCAG) was founded in 1988 when several Minnesota business leaders met informally to discuss how they could control escalating health care prices that were rising nationally at double-digit levels. Today, BHCAG is one of the best-known employer health care coalitions in the country whose presence has spurred employers, health care providers, government leaders, insurers and consumers to think about and purchase health care services differently.

In 1997 BHCAG launched the market-leading health care plan **Choice Plus** (now Patient Choice offered by the Medica health plan), the first-in-the-nation direct contracting program between employers and physicians to foster greater consumer choice, increased provider competition and improved quality. Consumers were able to make better choices by using published consumer satisfaction survey results and "tiered" price information to help them evaluate the value and quality of health care services. The Choice Plus "tiering" concept and plan design features are now commonplace in the health plan market.

Minnesota health care systems are now encouraged to use clinical practice guidelines developed by the **Institute for Clinical Systems Improvement (ICSI),** an organization formed in direct response to BHCAG's stipulation that all care systems adopt continuous quality improvement. Although implementation of the ICSI practice guidelines is voluntary, virtually all of the care systems and Minnesota health plans now use these proven treatment guidelines.

BHCAG has an agenda to publish provider quality results and reward optimal health plan and provider performance. BHCAG is a founding member of the Leapfrog Group. BHCAG also provided seed funding to assist the Minnesota Department of Health in designing a reporting protocol for the **Adverse Health Events Reporting** Act http://www.health.state.mn.us/patientsafety/ae/index.html . The Act requires Minnesota hospitals to report annually to consumers on the frequency of 28 adverse events (medical mistakes) identified by the National Quality Forum (NQF) as medical events that should never happen (also referred to as "never events").

BHCAG highlights health plan performance through **eValue8™** http://www.evalue8.org/eValue8/ an annual national survey intended to guide health care purchasing and consumer health plan selection based on health plan performance. Through data collected annually, the national survey asks health plans to submit information about their clinical quality and administrative efficiency. BHCAG was one of eight organizations who joined together to develop the eValue8™ Request for Information tool - a set of common quality performance expectations for health plans that purchasers can use to evaluate plans based on real value, not just price.

BHCAG and a number of influential health care purchasers launched the **Smart Buy Alliance** http://www.smartbuyalliance.com/ in 2004. This collaboration of the State of Minnesota, business and labor groups brings together a wide variety of organizations who have agreed to pursue common market-based health care purchasing principles that include:

* Adopting uniform measures of quality and results
* Rewarding "best in class" providers
* Empowering consumers with easy access to information on provider quality

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* Requiring health care providers to use the latest information technology to improve patient safety and quality.

BHCAG recently introduced **Bridges to Excellence**, an employer directed pay-for-performance initiative that pays doctors cash bonuses for providing optimal care in diabetes. Other chronic health conditions will be added in the near future.

Additional BHCAG-developed programs include the **National Data Cooperative**, a cost-effective data warehousing tool to assist employers in evaluating the effectiveness of their health care spending and **HealthFront,** an organization aimed directly at engaging employees (and consumers in general) in health care initiatives that promote consumerism and quality improvement.

Publications

Adverse Health Care Events Reporting System: What have we learned? 5-year Review. January 2009. Minnesota Department of Health. http://www.health.state.mn.us/patientsafety/publications/09aheeval.pdf

eValue8 Community Forum on Hospital Patient Safety. February 2, 2009. Buyers Health Care Action Group http://www.bhcag.com/vertical/Sites/%7BBD3B87D8-C48B-45CD-8A8B-D9B1BE04BFE2%7D/uploads/%7B81B71D9E-CF12-4731-8C4F-9D3A72F41910%7D.PDF

Report on Hospital Patient Safety. January 2009. Buyers Health Care Action Group. http://www.bhcag.com/vertical/Sites/%7BBD3B87D8-C48B-45CD-8A8B-D9B1BE04BFE2%7D/uploads/%7B7FCAD1D0-94E8-4ED8-8272-B3F1F44FF41B%7D.PDF

eValue8 Minnesota Health Plan Evaluation. 2008. Buyers Health Care Action Group. http://www.bhcag.com/vertical/Sites/%7BBD3B87D8-C48B-45CD-8A8B-D9B1BE04BFE2%7D/uploads/%7BB2EAF617-D50A-4ED9-9E60-4D73FD0E9FE2%7D.PDF

The eValue8 Cornerstone Report. Measuring the Success of America’s Health Plans. National Business Coalition on Health http://www.nbch.org/eValue8/news/cornerstonereport.pdf

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Organization	**Californian Association of Physician Groups (CAPG)**
Category	State focus; Performance Ratings/Reports/Scorecards/Databases/Benchmarking
Source	www.capg.org
Measure	**Standards of Excellence (SOE) Program** http://www.capg.org/home/index.asp?page=229

Summary

CAPG is a professional association representing physician groups practicing in the managed care model and comprised of more than 150 of California's leading physician groups. These groups employ and/or contract with physicians who in turn provide health care services to approximately 13 million Californians. More than fifty percent of California's health care is delivered by physicians employed by or contracted with CAPG members.

Standards of Excellence (SOE) Program

Adopted in 2006. Annual survey of CAPG medical groups' "infrastructure" to deliver steadily improving access, clinical quality, and affordability to the consumer.

SOE reviews group capabilities for three domains:

1. **Care Management Practices**—systems to support patients and physicians needing coordination of complex care, hospital care, and chronic illnesses
2. **Health Information Technology**—use of modern systems to support medical decisions, deliver consistent services in chronic and preventive care, and foster rapid, complete communication between members of the care team
3. **Accountability and Transparency**—participation in formal performance measurement and public reporting, sharing constructive feedback with individual physicians, recognizing and rewarding exceptional efforts.

Methodology

The 2008 version includes clarifications and approximately 10% new measures. Focus is on inventory of the "tools" which groups offer to all patients. Survey is based upon executive attestation. Care management practices are referenced in the medical literature. It is not an external audit methodology.

Results

85 of CAPG's member groups, caring for 10.8 million (85%) of CAPG patients, participated in the inaugural survey. Designed to be complimentary to Integrated Healthcare Association's (IHA) annual, public performance assessment.

Publications

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Standards of Excellence Program, 2008 Scoring Instrument, July, 2008.
http://www.capg.org/docs/standards_of_excellence_2008_survey_7-1-08.pdf

Standards of Excellence FAQ http://www.capg.org/docs/faqs_9-07_soe_updated_7-08.pdf

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Organization	**California Healthcare Foundation**
Category	State focus; Performance Ratings/Reports/Scorecards/Databases/Benchmarking
Source	www.calhospitalcompare.org/
Measure	**California Hospital Assessment and Reporting Taskforce – CHART** http://www.chcf.org/topics/hospitals/index.cfm?itemID=111065&subsection=chart https://chart.ucsf.edu/# **CalHospitalCompare** http://www.calhospitalcompare.org/Resources-and-Tools/Choosing-a-Hospital/About-the-Ratings.aspx

Summary

The California HealthCare Foundation is an independent philanthropy committed to improving the way health care is delivered and financed in California. By promoting innovations in care and broader access to information, the goal is to ensure that all Californians can get the care they need, when they need it, at a price they can afford.

The Foundation offers many papers and funds many research projects on healthcare. One major program is the CHART initiative.

California Hospital Assessment and Reporting Taskforce (CHART) was established in 2004 to develop a statewide hospital performance reporting. The result of this collaboration between the California HealthCare Foundation, the University of California at San Francisco Philip R. Lee Institute for Health Policy Studies, and the California Hospitals Assessment and Reporting Taskforce (CHART) was a website - CalHospitalCompare.org. This site includes ratings for clinical care, patient safety, and patient experience for the 220 hospitals rated on the site account for 82% of hospital admissions in California. Participation is voluntary.

CalHospitalCompare.org is a report card of California hospital performance ratings that consolidates information from a number of sources into an easy-to-navigate website. Rates quality of care, patient experience, and safety measures for hospitals by local area. A free service, available in English and Spanish, allows consumers to search for hospitals by location, name, or medical condition. Hospitals are rated on 50 performance indicators.

Ratings cover the 5 most common reasons for being admitted to hospital:

- heart attack,
- heart failure,
- heart bypass surgery,
- pneumonia, and
- maternity.

Additional measures cover to patients admitted to the Intensive Care Unit, and all surgical patients or all medical patients (patients admitted to the hospital for an illness that is not treated with surgery).

Methodology

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Ratings cover quality and timeliness of care for several conditions, as well as patient experience with overall, medical, surgical, and maternity care, and adherence to recommended patient safety practices. Measures are both process and outcome measures in specific clinical areas. Includes 27 patient satisfaction measures reported by the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) as well as 9 additional measures of patient experience. All measures are aligned with national initiatives such as the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) and the National Quality Forum (NQF).

With the exception of some patient safety measures, hospitals are rated on a five point scale, based on their performance:

- **Superior** - Hospital performed well above average compared to other hospitals on this measure.
- **Above average** - Hospital performed better than average compared to other hospitals on this measure.
- **Average** - Hospital performed within the average range compared to other hospitals on this measure.
- **Below average** - Hospital performed worse than average compared to other hospitals on this measure.
- **Poor** - Hospital performed well below average compared to other hospitals on this measure.

Hospital performance is evaluated compared to benchmarks of high, middle, and low performance. The benchmarks used are specific to each condition, but in general, the top 10% of national performance on a measure was used as the high benchmark, and the national average on a measure was used as the middle benchmark. Performance 10% below the national average was used as the low benchmark.

Risk adjustment for patient characteristics and hospital volume includes using a "margin of error," An estimated range of hospital performance for each condition is calculated, with the range wider for hospitals with fewer patients and narrower for hospitals with many patients. The data for the specific condition are then checked to determine whether this range includes any of the performance benchmarks (low, middle, or high, where higher means better performance) and a performance score of superior, above average, average, below average, or poor is assigned. Five scores were assigned using the low end (L) of the range of each hospital's estimated performance and the high end (H) of the range and comparing them to the low, middle and high.

Areas rated include

- **Mortality.**
- **Timeliness of Care.**
- **Quality of Care –** based on best practice
- **Patient Safety.**
- **Patient Experience.**

Results

A 2008 study using CHART measures, analyzed the existence of any relationship between hospital characteristics and performance found that no major categories of hospital performance (including financial health) were determined as an individual driver of clinical performance or improvement. Findings suggested that all hospitals regardless of type can become high performers by implementing best practices. Of 30 hospital characteristics examined against 11 primary performance and improvement measures, only 4 were independent predictors of performance. These were

1. DSH status (significant proportion of indigent care and MediCal patients)

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2. Membership in a large (10+hospital) system
3. Percentage of gross revenues collected
4. Initial starting value (in the improvement analysis)

The study found that clinical performance improvement was driven by the reliable implementation of effective practices rather than by any structural attributes.

Publications

Do Hospital Characteristics Drive Clinical Performance? An Analysis of Standardized Measures. Dec 2008
http://www.chcf.org/documents/hospitals/AnalyzingHospitalPerformanceReport.pdf

Measure for Measure. Analyzing California Hospital Characteristics and Performance. Dec 2008 (summary report)
http://www.chcf.org/documents/hospitals/AnalyzingHospitalPerformanceIB.pdf

Hospital Report Card Comparisons http://www.chcf.org/documents/hospitals/CalHospitalCompareReportCardsGrid.pdf

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Organization	**Care Focused Purchasing, Inc.** (support by Mercer)
Category	Performance Ratings/Reports/Scorecards/Databases/Benchmarking
Source	http://www.mercer.com/summary.htm?siteLanguage=100&idContent=1239135 CFPGovernanceCommittee@mercer.com www.resolutionhealth.com.
Measure	**Care Focused Purchasing**

Summary

CFP is a group of over 50 employers that began meeting in 2003 and formally incorporated as a not-for-profit entity in mid-2005. Aim to create a transparent health care delivery market that steers care to better physicians, better hospitals and better treatment options with the ultimate goal of attaining sustainable improvements in quality and reduction in trend.

CFP has begun the aggregation of medical claims data from major insurance carriers and employers, which ultimately will allow consumers to access performance information on physicians and hospitals across the US. Resolution Health Inc., provider of health care data analysis and targeted member and physician messaging services, has been selected to assess the quality of care provided by individual physicians and physician groups in the largest private or public clinical performance measurement initiative in the nation, sponsored by Care Focused Purchasing, Inc. (CFP). RHI will enable CFP to achieve its goal of developing an assessment of the quality of care delivered by individual physicians and physician groups based on comparison of actual practice to evidence-based clinical practice guidelines

Methodology

CFP has agreements to partner with seven major health plans: Aetna, CIGNA, FiservHealth, Humana, Preferred Care, Regence BlueShield and WellPoint (Anthem BlueCross BlueShield). These Partnering Carriers will provide claims data on more than 18 million members which will be combined with more than 2 million self-insured lives from the CFP employers' claims data in a "data warehouse" – a repository of the results on which provider performance will be measured.

CFP's data aggregation initiative is the promotion of standard performance measures of provider quality and efficiency. CFP convened an expert panel of researchers and health plan medical directors to agree on a set of measures, drawing on work done by such groups as the National Quality Forum, Leapfrog and NCQA. Designed to measure physician and hospital performance, CFP Measures Version 1.0 was approved by the panel and will now be applied to the data in the CFP data warehouse.

Results

Aims to develop a robust consumer report card on physician and hospital performance in a uniform fashion.

No information available as to precise status of this project.

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Organization	Cave Consulting Group
Category	Performance Ratings/Reports/Scorecards/Databases/Benchmarking
Source	www.cavegroup.com
Measure	**Cave Grouper: Marketbasket System** http://www.ahrq.gov/qual/efficiency/hcemch3.htm

Summary

Cave Consulting Group is focused on improving the efficiency and quality in the healthcare delivery system. The Group recognizes the need to address all components of medical trend (not just service price discounts), if efficiency and quality are to be improved and trend is to be controlled.

Cave Consulting Group: Cave Grouper Marketbasket System

Compares physician efficiency and effectiveness to a specialty-specific peer group using a standardized set of prevalent medical condition episodes with the intent of minimizing the influence of patient case mix (or health status) differences and methodology statistical errors. The Cave Grouper groups over 14,000 unique ICD-9 diagnosis codes into 526 meaningful medical conditions. The CCGroup EfficiencyCare Module takes the output from the Cave Grouper and develops specialty-specific physician efficiency scores that compare individual physician efficiency (or physician group efficiency) against the efficiency of a peer group of interest.

Cave Consulting Group's efficiency and quality measurement system is designed to reduce the current errors in identifying inefficient practitioners. Focus is on measuring a practitioner's efficiency, to maximize savings and minimize the impact from practitioner-patient disruption.

This approach has gone through over a decade of research and development, and is widely published in academic and trade journals. Studies have addressed practitioner efficiency analyses, small area variation analyses, physician feedback evaluations, capitation health-risk adjustments, and practitioner process of care analyses. The approach has been used by many HMOs and insurance carriers to examine network efficiency and quality of care.

Methodology

The Marketbasket System examines variation in health status - Uses physician specialty-specific Marketbasket of medical conditions to control for variation in patient health status.

- **Variation in severity illness** - Uses only medical conditions with severity of illness categories 1 and 2 (of 3) in physician comparisons. Does not use presence of procedures to define severity-of-illness.
- **Variation in case-mix in each physician's panel of patients** Uses Marketbasket System and limited severity of illness classifications to control for case-mix variation
- **Variability in the number of episodes assigned to each physician and associated susceptibility to high outlier influences -** Marketbasket System uses indirect standardization to control for differences in coefficient of variation between physicians.

The system builds and examines condition-specific, longitudinal episodes of care. Marketbaskets of the most common medical conditions for each specialty type are then developed. Medical conditions are placed in a specialty-specific marketbasket if they

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are a prevalent part of the particular specialty type's practice. The medical conditions are selected for the marketbasket in work effort order--a function of the prevalence rate and average medical condition charges.

Examining only common conditions and easier-to-treat patient episodes results in a fair apples-to-apples comparison of each practitioner's practice patterns. Therefore, the variation in treatment patterns is more highly correlated to practitioner efficiency, and not to sicker or healthier patients.

The composition of medical conditions in each specialty-specific marketbasket does not change over time. This means that any trend increase reflected by the specialty-specific marketbasket is independent of changes in patient demographics and health status. Instead, the trend reflects price increases, volume increases, and intensity of service increases in the treatment of the static set of medical conditions.

Publications

Mentioned in Advancing Physician Performance Measurement Using Administrative Data to Assess Physician Quality and Efficiency September 2005 PBGH http://www.pbgh.org/programs/documents/PBGHP3Report_09-01-05final.pdf

Thomas, JW; Grazier, KL; Ward, K. A Comparative Evaluation of Risk-Adjustment Methodologies for Profiling Physician Practice Efficiency: Report to the Robert Wood Johnson Foundation. Ann Arbor, MI: Department of Health Management and Policy, University of Michigan; 2002.. Inquiry, 41(2), pp.218-231 Summer 2004

Cave, Douglas G. 1995. Profiling Physician Practice Patterns Using Diagnostic Episode Clusters. Medical Care 33(5), pp. 463-486.

Cave, Douglas G. 1995. Small-Area Variations in the Treatment of Prevalent Medical Conditions: A Comparison of Three Cities in the Northeast. The Journal of Ambulatory Care Management 18(3), pp. 42-57.

Cave, Douglas G. 1994. Analyzing the Content of Physicians' Medical Practices. The Journal of Ambulatory Care Management 17(3), pp. 15-36.

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Organization	CIGNA
Category	Performance Ratings/Reports/Scorecards/Databases/Benchmarking
Source	www.cigna.com
Measure	**Quality Management /Quality Initiatives** http://www.cigna.com/health/provider/medical/quality.html#top **Provider Recognition Directory** http://cigna.benefitnation.net/cignams/default.asp

Summary

CIGNA provides health care and related benefits offered through the workplace. Key product lines include health care products and services (medical, pharmacy, behavioral health, clinical information management, dental and vision benefits, and case and disease management); and group disability, life and accident insurance. In addition, CIGNA also provides life, accident, health and expatriate employee benefits insurance coverage in selected international markets, primarily in Asia and Europe.

CIGNA HealthCare has a comprehensive quality management suite in the following key areas. Areas relevant to this study are outlined below. The reader is referred to the website for complete details.

- Accreditation
- Member and Provider Satisfaction
- Patient Safety
- Provider Credentialing & Re-Credentialing
- Continuity and Coordination of care
- Clinical Programs
- Pharmacy
- Provider Recognition
- Medical Record Reviews
- Medical Technology
- Medical Ethics

1. Clinical Programs

Preventive care and quality chronic care initiatives include reminder mailings about missed services to members and their primary care providers. Clinical outreach programs have been extended to Open Access Plus and Preferred Provider Organization membership. In 2006, the clinical effectiveness results for this population were measured and results submitted to NCQA to be included in developing benchmark data in 2007.

2. Member and Provider Satisfaction

CIGNA HealthCare 2006 national results for the HEDIS Effectiveness of Care (EOC) measures increased in 2006 by 3.19 percent (1.58 percentage points) over 2005. During the last four years (2002-2006), overall EOC rates have increased 17.86 percent. Areas covered include immunization, cardiac care, maternity, diabetes, prevention screening, asthma management and medication management. Results are available nationally or by local plan area. Improvement in the Consumer Assessment of Health Plans (CAHPS) survey results, with improvements or stability in all of the 10 key CAHPS measures.

3. Patient Safety

Participating hospitals that meet or exceed Leapfrog standards are recognized through online Provider Excellence Recognition Directory hospital selection tool. Many CIGNA Healthcare activities are based on meeting IOM patient safety goals. Examples include use of a pharmacy edit system to help identify potential medical problems when a prescription is filled and can notify the pharmacist online.

4. Provider Recognition

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4.1 Recognition programs designed to reward excellence, help change practice patterns, help improve care, and help members make more informed decisions.

- **Provider Excellence Recognition Directory** includes participating physicians who have achieved quality-related recognition from the National Committee for Quality Assurance (NCQA) for diabetes, heart/stroke care, or Physician Practice Connections. It also includes participating hospitals that meet one or more of The Leapfrog Group patient safety standards.
- **Centers of Excellence Hospital Value Profile** Participating hospitals have both a patient outcomes and cost efficiency score for several procedures/conditions. Hospitals receive a score of one, two or three stars for both patient outcomes and cost efficiency for each of the 19 procedures/conditions, as well as an overall score. CIGNA HealthCare identifies hospitals as **Centers of Excellence** when they achieve the highest (three star) scores for both patient outcomes and cost efficiency. Patient outcomes on selected procedure/condition are measured using publicly available patient data and hospital self-reported public information. Cost efficiency is measured as the hospital's cost (not including physician's fees and outpatient services) compared to the national average cost for a particular procedure/condition. Score is based on a combination of public information and CIGNA HealthCare contracted rates. Public information is a combination of all-patient data, where available, and Medicare length-of-stay data reported by facilities.

4.2 Physician Quality and Cost Efficiency Profile. Member only online access to quality and cost efficiency profiles for some physician specialties. Profiles for participating physicians in 21 specialties are available in most service areas in the form of star (*) designations.

Quality stars are determined based on:

- NCQA recognition for diabetes care, cardiac and stroke care, or physician practice connections.
- Performance on select evidence-based quality measures derived from measures endorsed by the Ambulatory Care Quality Alliance (AQA), National Quality Forum (NQF) and Health Plan Employer Data and Information Set (HEDIS).
- Satisfaction of CIGNA Healthcare board certification criteria.
- For bariatric surgeons performing at a Certified Hospital for Bariatric Surgery, satisfaction of CIGNA Healthcare bariatric surgery criteria.

Cost efficiency stars reflect a specialist's cost efficiency relative to peers using the Episode Treatment Groups (ETGs) methodology. This methodology looks at medical costs for an episode of care (inpatient, outpatient, laboratory, radiology, pharmacy, etc.) and includes case-mix adjustment to help account for differences in the severity of patients' illnesses.

4.3 CIGNA Care Network - a benefit plan option available for CIGNA HealthCare plans in 58 service areas across the country as of January 1, 2007. Developed in response to customers' requests for more information about physician quality and cost efficiency, the CIGNA Care Network® designation helps distinguish physicians within CIGNA provider network based on their performance under specific quality and cost efficiency measures in 21 areas of specialty care. A lower member copayment or coinsurance level applies if the member chooses a CIGNA Care Network® designated physician.

A subset of participating physicians in 21 specialties receive the CIGNA Care Network® designation providers based on specific selection criteria. These specialties include allergy and immunology, gastroenterology, gynecology, orthopedics and surgery and dermatology. Specialists are evaluated annually. Those who perform in approximately the top 25 percent of the market for these measures receive the CIGNA Care Network designation. To be considered for the CIGNA Care Network designation, the participating specialist or group must have managed episodes of care for a minimum of 20 unique CIGNA HealthCare members over a two-year period. The specialist's relative efficiency is evaluated using the Episode Treatment Groups (ETG) methodology developed by Symmetry Health Data Systems, Inc. This methodology looks at medical costs (inpatient, outpatient, laboratory,

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radiology, pharmacy, etc.) for a given episode of care and profiles specialty care physicians against physicians in similar specialties. ETGs include case-mix adjustment to help account for differences in the severity of patients' illnesses and provide a consistent and reliable way to measure and compare costs.

5. Provider Credentialing and Recredentialing

Credentialing process evaluates practitioner qualifications including certification, training, licensure and criteria related to professional conduct. Recredentialing occurs every three years or sooner if required by law. Criteria include education, training, work history, malpractice history, onsite visits, disciplinary history, and professional licensure. Information is peer reviewed by the health plan, credentialing committee and medical director.

6. Medical Record Reviews

CIGNA HealthCare conducts an Ambulatory Medical Record Review (AMRR) for physicians in their managed care networks. The AMRR evaluates medical records, but does not define standards of care or replace clinical judgment. Records are selected at random from network primary care physicians (PCPs) who have more than 50 members as patients. Review criteria include documentation of presenting problems and actions undertaken. Providers are encouraged to achieve best practice including use of an electronic medical record documentation system, visible means of specifying patient allergies and reactions, consistent use of pre-printed forms for assessment, planning and follow-up needs and the use of a patient history questionnaire initiated with the patent's first visit and updated regularly.

7. Continuity and Coordination of Care

CIGNA annually analyzes data to assess the extent to which providers caring for members in conjunction with one or more specialists, communicate and coordinate care. The most commonly identified barriers to coordination of care include lack of recognition for the need to communicate; no means for communicating information; and unaware other providers were involved in the care. CIGNA has developed communication tools available to download to help facilitate communication between providers.

8. Medical Technology and Medical Ethics

Medical Technology Assessment Committee reviews new medical products and procedures in an effort to ensure coverage is provided only for products and processes proven safe and effective for members. Physicians and other clinicians, analyze literature, policies and technology assessments and evidence summaries from external experts in the field to determine if new technologies will be approved for coverage. CIGNA HealthCare recognizes the importance of ethics in health care and has developed a set of formal ethical principles to frame clinical decision-making and developed an ethics-based care management decision tool to support physicians as they make complex medical decisions.

Publications

Centers of Excellence brochure https://secure.cigna.com/health/provider/medical/pdf_coe.pdf

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Organization	**CMS Medicare & Medicaid**
Category	Standards Setting, Industry Organizations
Source	www.cms.hhs.gov
Measure	**Better Quality Information to Improve Care for Medicare Beneficiaries (BQI) Project** http://www.cms.hhs.gov/BQI/

CMS Medicare & Medicaid

Federal agency responsible for administering the Medicare, Medicaid, SCHIP (State Children's Health Insurance Program). Mission is to ensure effective, up-to-date health care coverage and to promote quality care for beneficiaries. Quality assurance programs administered by the CMS are responsible for developing health and safety standards for providers of health care services authorized by Medicare and Medicaid legislation. CMS reports to Congress and Congress is advised by MedPAC, an independent Congressional agency formed in 1997. In addition to advising the Congress on payments to private health plans participating in Medicare and providers in Medicare's traditional fee-for-service program, MedPAC is also tasked with analyzing access to care, quality of care, and other issues affecting Medicare.

Summary BQI

The Better Quality Information to Improve Care for Medicare Beneficiaries (BQI) Project is a CMS-funded quality improvement organization (QIO) special project. The Delmarva Foundation for Medical Care has subcontracted with 6 pilot sites which are testing methods to aggregate Medicare claims data with data from commercial health plans and, in some cases, Medicaid, in order to calculate and report quality measures for physician groups and, in some cases, individual physicians. This project is one piece of the Department of Health and Human Services' Value-driven Health Care Initiative.

The 6 communities working with Delmarva are:

- Arizona State University Center for Health Information & Research (CHIR) - http://chir.asu.edu/
- California Cooperative Health Care Reporting Initiative (CCHRI) - http://www.cchri.org/
- Indiana Health Information Exchange (IHIE) - http://www.ihie.com/
- Massachusetts Health Quality Partners (MHQP) - http://www.mhqp.org
- MN Community Measurement (MNCM) - http://www.mnhealthcare.org/
- Wisconsin Collaborative for Healthcare Quality (WCHQ) - http://www.wchq.org/

The BQI Project aims to:

1) provide beneficiaries in these 6 communities with health care performance information on the physicians who treat them, in order to help them select physicians and make treatment choices
2) provide performance information to the physician groups and/or physicians who treat these beneficiaries, which can be used by the physician groups and/or physicians to improve the quality of care they provide.

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Methodology

Testing the pooling of private data with Medicare claims data to produce more accurate, comprehensive measures of quality of services at the provider level. Results will provide performance information to physicians to improve quality of care delivered to Medicare beneficiaries and to give provider performance information to beneficiaries to enable them to make more informed choices.

Results

The results will be used to guide future efforts for aggregating Medicare claims data with data from other payers to produce quality measure results to give a more comprehensive picture of the quality of services being provided by physicians to Medicare beneficiaries.

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Organization	CMS Medicare & Medicaid
Category	Standards Setting, Industry Organizations
Source	www.cms.hhs.gov
Measure	**Chartered Value Exchanges** http://www.hhs.gov/valuedriven/communities/valueexchanges/exchanges.html http://www.hhs.gov/valuedriven/communities/index.html

Summary

A “Value Exchange” is a multi-stakeholder collaborative that has taken clear action in its community to convene community purchasers, health plans, providers, and consumers to advance the four cornerstones of Value-Driven Health Care. Consumers deserve to know the quality and cost of their health care. Health care transparency provides consumers with the information necessary, and the incentive, to choose health care providers based on value. Regional/local public-private collaboration is essential to the success of the Value-driven Health Care Initiative.

HHS is developing a nationwide system and network of collaboratives to foster and encourage their growth. Those early in the development process have the opportunity to be recognized as Community Leaders. More advanced Community Leaders may become Chartered Value Exchanges. In September 2008, HHS announced 11 additional CVEs creating a network of 25 local collaborations of health care providers, employers, insurers, and consumers working jointly to improve care and make pricing and quality data widely available.

As Chartered Value Exchanges, these groups gain access to performance information from Medicare that gauges how well physicians treat patients. These performance measurement results can be combined with similar private-sector data to produce a comprehensive consumer guide on the quality of care available. Chartered Value Exchanges also will join a nationwide Learning Network sponsored by the Department of Health and Human Services' Agency for Healthcare Research and Quality (AHRQ). This network will provide peer-to-peer learning experiences through facilitated meetings, both face to face and on the Web, and will also feature tools, access to experts, and an ongoing private Web-based knowledge management system.

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Organization	**CMS Medicare & Medicaid**
Category	Incentive/Reward Programs
Source	www.cms.hhs.gov
Measure	**Electronic Health Record Demonstration Project** http://www.cms.hhs.gov/DemoProjectsEvalRpts/MD/itemdetail.asp?filterType=none&filterByDID=-99&sortByDID=3&sortOrder=descending&itemID=CMS1204776&intNumPerPage=10

Summary

New program – introduced 2008. CMS will provide Medicare incentive payments in 12 communities nationwide to physicians who use certified Electronic Health records (EHRs) to improve patient care. Financial incentives will be provided to as many as 1,200 small and medium size primary care physician practices over a 5 year period. Total payments over the five years, may be up to $58,000 per physician or $290,00 per practice

Methodology

All participating primary care physician practices will be required to have a Certification Commission for Healthcare Information Technology (CCHIT)-certified EHR by the end of the second year. Physician practices must, as part of the demonstration, be utilizing the EHR to perform specific minimum core functionalities that can positively impact patient care processes, (e.g., clinical documentation, ordering of lab tests, recording lab tests, and recording of prescriptions). However, the core incentive payment will be based on performance on the quality measures.

The first operational year of the demonstration will provide payments to participating practices based on CCHIT-certified EHR functionalities used to manage the care of patients, with higher payment for more sophisticated HIT use (e.g., use of the EHR to facilitate care management activities, sharing of records among providers of care, etc.). During the second operational year of the demonstration, payments will be made to participating physician practices that are using CCHIT-certified EHRs and reporting clinical quality measures, again with additional payments based on EHR functionalities employed by the practice.

During years 3 to 5 of the demonstration, payments to participating practices will be based on performance on the designated clinical quality measures, with an added bonus each year based on the degree to which the practice has used the EHR to change and improve the way it operates.

Publications

Demonstration Summary http://www.cms.hhs.gov/DemoProjectsEvalRpts/downloads/EHR_DemoSummary.pdf

Evaluation of the Electronic Health Records Demonstration summary
http://www.cms.hhs.gov/DemoProjectsEvalRpts/downloads/EHR_EvaluationSummary.pdf

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Organization	**CMS Medicare & Medicaid**
Category	Performance Ratings/Reports/Scorecards/Databases/Benchmarking
Source	www.cms.hhs.gov
Measure	**Hospital Quality Initiative (HQI) - Hospital Compare** (refer also The Hospital Quality Alliance entry) http://www.cms.hhs.gov/HospitalQualityInits/Downloads/Hospitaloverview.pdf www.hospitalcompare.hhs.gov http://www.hospitalcompare.hhs.gov/Hospital/Static/InformationForProfessionals_tabset.asp?activeTab=1&language=English&version=default

Summary

The Hospital Quality Initiative (HQI) aims to improve the care provided by the nation's hospitals and to provide quality information to consumers and others. **Hospital Compare** is one element of this initiative that reports on compliance with best practice clinical procedures in the treatment of heart attack, heart failure, pneumonia, and surgical infection prevention. Intent is to help improve hospitals' quality of care by distributing objective, easy to understand data on hospital performance, quality information from the consumer perspectives, and Medicare payment and volume information.

The HQI measure set currently consists of 26 measures:

Key areas covered:

- Acute Myocardial Infarction
- Heart Failure
- Pneumonia
- Surgical Care Improvement
- Project
- Hospital Consumer Assessment of Healthcare Providers and Systems
- Children's Asthma Care

These measures were chosen because they are related to three serious medical conditions and surgical care improvement and it is possible for hospitals to submit information for public reporting.

In December 2002, the American Hospital Association (AHA), Federation of American Hospitals (FAH), and Association of American Medical Colleges (AAMC) launched the **Hospital Quality Alliance (HQA),** a national public-private collaboration to encourage hospitals to voluntarily collect and report hospital quality performance information. This effort is intended to make important information about hospital performance accessible to the public and to inform and invigorate efforts to improve quality. CMS and the Joint Commission participate in the HQA, along with the AHA, the FAH, the AAMC, the American Medical Association, the American Nurses Association, the National Association of Children's Hospitals and Related Organizations, American Association of Retired People, American Federation of Labor and Council of Industrial Organizations, the Consumer-Purchaser Disclosure Project, the Agency for Healthcare Research and Quality, the National Quality Forum, the Blue Cross and Blue Shield Association, the National Business Coalition on Health, General Electric, and the U.S. Chamber of Commerce.

Methodology

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The measures currently reported on **Hospital Compare** include the ten starter measures plus additional measures that many hospitals also voluntarily report. The measures represent wide agreement from CMS, the hospital industry and public sector stakeholders such as The Joint Commission, the National Quality Forum (NQF), and the Agency for Healthcare Research and Quality (AHRQ).

The data collection approach is primarily retrospective. Data sources for required data elements included administrative data and medical record documents. Hospital Compare as of March 2008 includes inpatient hospital payment information and the number of Medicare patients treated (volume) for certain illnesses.

Hospital Quality Alliance recommends reporting against 21 indicators of quality according to best practice in a particular disease category:

1. **Process of Care Measures:**
   Eight measures related to heart attack care, four measures related to heart failure care, seven measures related to pneumonia care, five measures related to surgical care improvement, two measures related to asthma care for children only.

2. **Hospital Outcomes of Care**
   Measures include the 30-day Risk Adjusted Death (Mortality) Rates for heart attack, heart failure and pneumonia at different hospitals compared to the U.S. National rate. These are produced from Medicare claims and enrollment data using a complex statistical model. The model predicts patient deaths for any cause within 30 days of hospital admission for heart attack, heart failure and pneumonia, whether the patients die while still in the hospital or after discharge. Thirty-day mortality is used because this is the time period when deaths are most likely to be related to the care patients received in the hospital.

Deaths that occur outside the hospital within 30 days are included along with deaths that occur in the hospital, because some hospitals discharge patients sooner than others. Risk-adjusted model calculates a death (mortality) rate that adjusts for the kinds of patient who go to that hospital.

Results

The ultimate goal of CMS and its collaborators in the HQA is for this set of measures to be reported by all hospitals, and accepted by all purchasers, oversight and accrediting entities, payers and providers.

As part of the Hospital Quality Initiative, CMS is exploring pay-for-performance via the **Premier Hospital Quality Incentive Demonstration** (refer Premier Healthcare entry). Under the demonstration, hospitals will receive bonuses based on their performance on quality measures selected for inpatients with specific clinical conditions: heart attack, heart failure, pneumonia, coronary artery bypass graft, and hip and knee replacements. Hospitals will be scored on the quality measures related to each condition measured. Hospitals in the top 20% will be recognized and given a financial bonus.

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Organization	CMS Medicare & Medicaid
Category	Standards Setting, Industry Organizations
Source	www.cms.hhs.gov
Measure	**Measures Management System (MMS)** http://www.cms.hhs.gov/QualityInitiativesGenInfo/downloads/QualityMeasuresDevelopmentOverview.pdf

Summary

CMS has developed a standardized approach for the development of quality measures that it uses in its quality initiatives. Launched in October 2003, the Measures Management System (MMS) is composed of a set of business processes and decision criteria that CMS funded measure developers follow in the development, implementation, and maintenance of quality measures. Under the stewardship of Quality Measurement and Health Assessment Group (QMHAG) in the Office of Clinical Standards and Quality of the Centers for Medicare & Medicaid Services (CMS).

Methodology

Version 6 of the Measures Management System includes steps that will allow CMS to be more responsive to the need for transparency; for diverse, multi-stakeholder input; and for measure contractors to more easily justify their measures to NQF, providers, and stakeholders. It will provide clearer guidance, with less confusion and less duplication of effort than the previous versions. This version is more user-friendly, more efficient, and more effective in guiding the measure contractors and CMS staff in the development, implementation, and maintenance of the highest-caliber quality measures possible. New forms have been developed based on requests from measure contractors, and other forms have been modified based on user feedback.

Assumptions include the need to produce scientifically acceptable, valid, and reliable quality measures.

Design principles include

- Transparency of decision-making processes and criteria
- Clear accountability
- Standardization: Substantially identical processes are used across measure settings, including decision-making criteria.
- Evidence-based processes
- Efficiency: Avoidance of non-value-added tasks
- Harmonization: Whenever feasible, the system should reflect the same measurement development and evaluation policies as those already in use by CMS or those developed or used by external measure developers
- Responsiveness: The system has the ability to meet the diverse needs of CMS and its partners

Publications

A blueprint for Measures Management System V. 6. www.hsag.com/mms/01_6.1_Introduction.doc

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Organization	**CMS Medicare & Medicaid**
Category	Standards Setting, Industry Organizations
Source	www.cms.hhs.gov
Measure	**Medicare Hospital Value-Based Purchasing (VBP) Plan**

Summary

The proposal is intended to make a portion of hospital payment contingent on actual performance on specific measures rather than on a hospital's reporting data for these measures. Under the plan, the value-based purchasing program would be phased in over three years, ultimately replacing Medicare's Reporting Hospital Quality Data for Annual Payment Update (RHQDAPU) program.

Value-based purchasing links assessment of performance, through the use of measures, to financial and other incentives, such as public reporting. A comprehensive set of performance measures includes not only measures of clinical effectiveness and patient-centeredness, but also measures of resource use. Quality measures are the basic foundation and pre-requisite for a payment system that encourages physicians to provide the most clinically appropriate care, rather than the highest volume.

A value based purchasing program which would begin in 2009 is authorized in the Deficit Reduction Act of 2005. Congressional action is required for it to be enacted.

Publications

Medicare Hospital Value-Based Purchasing Plan Development Issues Paper 2007
http://www.cms.hhs.gov/AcuteInpatientPPS/downloads/hospital_VBP_plan_issues_paper.pdf

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Organization	CMS Medicare & Medicaid
Category	Incentive/Reward Programs
Source	www.cms.hhs.gov
Measure	**Medicare Quality Improvement Organization (QIO) Program.** http://www.cms.hhs.gov/QualityImprovementOrgs/01_Overview.asp#TopOfPage

Summary

QIO program was created in 1982. QIO's work to reduce disparities, or variations, in health care provided to minority and underserved Medicare beneficiaries by helping providers increase access to health care services, address cultural and language differences, and overcome social barriers to preventive care. QIOs work under contract to the Centers for Medicare & Medicaid Services (CMS) in three-year cycles.

QIO's provide

- Provide technical assistance and coaching
- cultural competency training
- assist with integration of HIT into physician practices

CMS contracts with QIOs —state-based organizations staffed with clinicians, analysts, and others with expertise in case review and quality improvement. Covers hospitals and physician offices, to include nursing homes and home health agencies.

Four themes of the 9th Statement of Work (SOW):

1. **Beneficiary Protection -** Failing to provide medically necessary services or items. Failing to provide services and items economically, Failing to provide items and services of a quality that meets professionally recognized standards of healthcare.
2. **Patient Pathways** to focus on improving coordination across the continuum of care; promoting seamless transitions from the hospital to home, home health care, or skilled nursing care; and improving the quality of care for Medicare beneficiaries who transition between care settings. The QIOs will work with health systems to: Decrease the rate of unnecessary hospitalizations, Reduce readmissions following hospitalizations, Achieve high-value health care.
3. **Patient Safety -** In the area of patient safety, the 9th SOW focuses on six areas:

   - Improving inpatient surgical safety
   - Reducing rates of NMSA (Nosocomial Methicillin-resistant Staphylococcus Aureus) infections
   - Improving drug safety
   - Reducing rates of pressure ulcers
   - Reducing rates of use of physical restraints
   - Reducing incidence of poor performance in nursing homes

4. **Prevention**
   The 9th SOW contains two cancer-screening mandates (breast and colorectal), two immunization mandates (influenza and pneumococcal), and two disease-management initiatives (diabetes self-management and chronic kidney disease prevention).

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Methodology

CMS publicly announced the award of 53 contracts for the QIO Program 9th Statement of Work (SOW) with an effective date of Aug. 1, 2008. Of the 53 contracts for the core 9th SOW, 13 were competitively awarded and 40 were negotiated renewals. QIO contracts are for 3 years and conducted on a competitive bidding process.

Results

Lumetra was California`s federally-designated Medicare Quality Improvement Organization (QIO). The contract was awarded to Health Services Advisory Group in August 2008 and this is currently under challenge. HSAG is the QIO for Arizona.

www.lumetra.com
www.hsag.com

Publications

Report to Congress Improving the Medicare Quality Improvement Organization Program – Response to the Institute of Medicine Study 2006. http://www.cms.hhs.gov/QualityImprovementOrgs/downloads/QIO_Improvement_RTC_fnl.pdf

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Organization	**CMS Medicare & Medicaid**
Category	Standards Setting, Industry Organizations
Source	www.cms.gov
Measure	**Patient Protection and Affordable Care Act (2010) – measurement provisions** http://www.cms.gov/LegislativeUpdate/downloads/PPACA.pdf http://www.cms.gov/Center/healthreform.asp http://www.gpo.gov/fdsys/pkg/BILLS-111hr3590ENR/pdf/BILLS-111hr3590ENR.pdf

Summary

The comprehensive health reform legislation, the Patient Protection and Affordable Care Act (PPACA) was signed into law on March 23, 2010. The provisions of this law included expansion of health insurance coverage, the expansion of public programs, financing health reform, improving quality and health system performance, prevention and wellness, long-term care, workforce training and development. This summary only covers aspects of the PPACA related to improving quality and health system performance. The reader is referred to the CMS links above or to the references listed at the end of this entry for further information on the provisions of the PPACA.

Improving quality and health system performance

The Affordable Care Act includes a wide range of strategies and provisions that will improve the quality of care, develop and promote new models of care delivery, appropriately price services, modernize the health system, and fight waste, fraud, and abuse.

1. Center for Medicare and Medicaid Innovation

To support the ongoing development of new models of payment and delivery, the Affordable Care Act establishes the Center for Medicare and Medicaid Innovation. The new law invests $10 billion in this Center over the next 10 years to test payment and delivery innovations that can improve the quality of care and/or increase cost efficiency; identifying successes that could be expanded by the Secretary of Health and Human Services (either regionally or nationally). These funds will produce returns on investment and reduce Medicare spending over the long-term.

Intended to be operational by 2011, the Center is intended to enhance the CMS's role in promoting improvements in payment and service delivery. The objective is "to test innovative payment and service delivery models to reduce program expenditures…while preserving or enhancing quality of care." Areas of focus include primary care and long-term care as well as examining various payment methods. Research protocol constraints that have heretofore restricted CMS in the conduct of demonstrations and pilot programs have been relaxed to foster innovation, give more flexibility in research design and evaluation methods and to foster a faster research process. The CMI has approval to select and run pilot programs rather than demonstration projects, enabling the Secretary of Health and Human Services the authority to expand pilots that promise spending reductions or improvements in the quality of care. The objective is to be able to disseminate research information more rapidly whilst maintaining a credible and valid research process.

2. Accountable Care Organizations

The Affordable Care Act promotes team-based health care through Accountable Care Organizations (ACOs) under the Medicare shared savings program. ACOs create delivery systems that encourage and support teams of physicians, hospitals, and other

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health care providers to collaboratively manage and coordinate care for Medicare beneficiaries. If these providers meet certain quality and efficiency benchmarks, they may receive a share of any savings from reducing duplicative services, improving productivity, minimizing paperwork, or otherwise improving cost efficiency. While the CMS Office of the Actuary estimates that this provision will be budget neutral, the CBO has projected that it will reduce Medicare spending by nearly $5 billion over the next ten years. CMS is working to make the program operational by January 1, 2012. Proposed rules will be issued later in 2010 and CMS and its partner organizations will continue to hold public forums to foster ACO development and coordinate with on-going private sector efforts.

3. Independent Payment Advisory Board

The Affordable Care Act also establishes the Independent Payment Advisory Board, or IPAB, to monitor the fiscal health of the Medicare program and to recommend payment policy revisions to contain Medicare cost growth. The IPAB will begin work in 2012 and will be required to submit its recommendations to Congress annually on how to best improve quality of care for Medicare beneficiaries, while reducing the rate of growth in Medicare costs. The law stipulates that the IPAB will have to report to the public on system-wide health care costs, patient access to care, utilization, and quality of care. The IPAB's proposals on how to improve care and control program expenditures are binding when Medicare cost projections exceed certain targets, unless Congress acts to reduce expenditures in other ways. The CMS Office of the Actuary projects that the IPAB could reduce Medicare costs by almost $24 billion by 2019.

Other provisions include:[1]

Improving Quality/Health System Performance

- Comparative effectiveness research
- Medical malpractice
- National Medicare pilot re bundled payment for acute, inpatient hospital services, physician services, outpatient hospital services, and post-acute care services for an episode of care that begins three days prior to a hospitalization and spans 30 days following discharge.
- Hospital value-based purchasing program in Medicare to pay hospitals based on performance on quality measures
- Medicaid demonstration projects to pay bundled payments for episodes of care

National quality strategy

- National quality improvement strategy that includes priorities to improve the delivery of health care services, patient health outcomes, and population health.

Prevention/Wellness National strategy

- Develop a national strategy to improve the nation's health. Establish a grant program to support the delivery of evidence-based and community-based prevention and wellness services

[1] These notes are highly summarized. Refer to the Act for full details. http://www.gpo.gov/fdsys/pkg/BILLS-111hr3590ENR/pdf/BILLS-111hr3590ENR.pdf

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Coverage of preventive services

- Cover for proven preventive services and eliminating cost-sharing for preventive services in Medicare and Medicaid.
- Medicare beneficiaries access to a comprehensive health risk assessment and creation of a personalized prevention plan.
- Require qualified health plans to provide at a minimum coverage without cost-sharing for preventive services rated A or B by the U.S. Preventive Services Task Force, recommended immunizations, preventive care for infants, children, and adolescents, and additional preventive care and screenings for women.
- Provide grants for up to five years to small employers that establish wellness programs.

Publications

The Patient Protection and Affordable Care Act - All CMS Provisions -- As of July 23, 2010, http://www.cms.gov/LegislativeUpdate/downloads/PPACA.pdf

Affordable Care Act Update: Implementing Medicare Cost Savings
http://www.cms.gov/apps/docs/ACA-Update-Implementing-Medicare-Costs-Savings.pdf

Health Affairs edition June 2010 - Volume 29, Number 6 - *Moving Forward On Health Reform* includes the following articles:

- The Foundation That Health Reform Lays For Improved Payment, Care Coordination, And Prevention
  Kenneth E. Thorpe and Lydia L. Ogden
- Innovation In Medicare And Medicaid Will Be Central To Health Reform's Success
  Stuart Guterman, Karen Davis, Kristof Stremikis, and Heather Drake
- How Physician Practices Could Share Personnel And Resources To Support Medical Homes
  Melinda Abrams, Edward L. Schor, and Stephen Schoenbaum
- Communities' Readiness To Commit To High-Quality Health Care *Risa Lavizzo-Mourey*

Health Affairs July 2010 - Volume 29, Number 7 - *Weighing the Impact of Health Reform* includes the following articles:

- The Vast *Terra Incognita* Of U.S. Health Care Reform - *Susan Dentzer*
- Lessons For The New CMS Innovation Center From The Medicare Health Support Program
  Michael S. Barr, Sandra M. Foote, Randall Krakauer, and Patrick H. Mattingly
- How The Center For Medicare And Medicaid Innovation Should Test Accountable Care Organizations
  Stephen M. Shortell, Lawrence P. Casalino, and Elliott S. Fisher
- Public Reporting On Hospital Process Improvements Is Linked To Better Patient Outcomes
  Rachel M. Werner and Eric T. Bradlow

Kaiser Family Foundation Healthcare Reform Gateway http://healthreform.kff.org/

Mechanic R, Altman S. Medicare's opportunity to encourage innovation in health care delivery. N Engl J Med. 2010;362(9):772-4

[entry updated 2010]

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Organization	**CMS Medicare & Medicaid**
Category	Incentive/Reward Programs
Source	www.cms.hhs.gov
Measure	**Physician Group Practice Demonstration project** http://www.cms.hhs.gov/DemoProjectsEvalRpts/downloads/PGP_Fact_Sheet.pdf http://www.cms.hhs.gov/DemoProjectsEvalRpts/MD/list.asp#TopOfPage http://www.commonwealthfund.org/usr_doc/1094_Trisolini_Medicare_phys_group_practice_demo_lessons_learned.pdf?section=4039

Summary

First pay-for-performance initiative for physicians under the Medicare program. Introduced 2005. Aim to create incentives for physician groups to coordinate the overall care delivered to Medicare patients, reward improved quality and cost efficiency of health care services, and create a framework to collaborate with providers to the advantage of Medicare beneficiaries. 3yr project, extended for a fourth year - scheduled to end March 31, 2009.

CMS rewards physician groups for

- improving patient outcomes by proactively coordinating their patients' total health care needs - especially those with chronic illness, multiple co-morbidities and those near the end of life
- share in any financial savings that result from improving the quality and cost efficiency of care
- groups have incentives to use new care management strategies and electronic tools that, based on clinical evidence and patient data, improve patient outcomes and lower total medical costs
- designed to anticipate patient needs, prevent chronic disease complications and avoidable hospitalizations, and improve quality of care.

Methodology

Promote cost efficiency and effectiveness through investment in care management programs, process redesign, and tools for physicians and their clinical care teams. Rewards physicians for improving health outcomes. Groups continue to be paid on a fee-for-service basis but have the opportunity to share in costs savings generated through enhancements in care management.

Physician groups may earn performance payments of up to 80% of the savings they generate. The Medicare Trust Funds retain at least 20% of the savings. Performance payments are divided between cost efficiency for generating savings and performance on 32 quality measures phased in during the demonstration. As quality measures are added in performance years two and three, the quality portion is increased so that by the third performance year 50% of any performance payment is for cost efficiency and 50% is for achieving national benchmarks or improvement targets on quality.

Quality measures were developed by CMS working in an extensive process with the American Medical Association's Physician Consortium for Performance Improvement and the National Committee for Quality Assurance (NCQA). The measures have undergone review or validation by the National Quality Forum. National benchmarks and group specific quality improvement targets are used to provide incentives for quality improvement as well as to recognize groups that are achieving high levels of performance.

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CMS selected ten physician groups on a competitive basis to participate in the demonstration. The groups were selected based on technical review panel findings, organizational structure, operational feasibility, geographic location, and demonstration implementation strategy. Multi-specialty physician groups with well-developed clinical and management information systems were sought. 10 physician groups represent 5,000 physicians and 224,000 Medicare fee-for-service beneficiaries.

Results

At the end of the second performance year, all 10 of the participating physician groups continued to improve the quality of care for chronically ill patients by achieving benchmark or target performance on at least 25 out of 27 quality markers for patients with diabetes, coronary artery disease and congestive heart failure.

Five of the physician groups achieved benchmark quality performance on all 27 quality measures. These groups achieved outstanding levels of performance by having clinical champions (physicians or nurses who are in charge of quality reporting) at the practice, redesigning clinical care processes, and investing in health information technology.

Publications

Physician Group Practice Demonstration Quality Measurement and Reporting Specifications Version 2
http://www.cms.hhs.gov/DemoProjectsEvalRpts/downloads/Quality_Specs_Report.pdf

Medicare Physician Group Practice Demonstration Design:Quality and Efficiency Pay-for-Performance
John Kautter, Gregory C. Pope, Michael Trisolini, and Sherry Grund, Health Care Financing Review/Fall 2007/Volume 29, Number 1 pp. 15-29 http://www.cms.hhs.gov/DemoProjectsEvalRpts/downloads/PGP_Demo_Design.pdf

Physician Group Practice Demonstration First Evaluation Report http://www.cms.hhs.gov/reports/downloads/Leavitt1.pdf

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Organization	**CMS Medicare & Medicaid**
Category	Incentive/Reward Programs
Source	www.cms.hhs.gov
Measure	**Physician Quality Reporting Initiative (PQRI)** http://www.cms.hhs.gov/pqri/

Summary

The 2006 Tax Relief and Health Care Act required the establishment of a physician quality reporting system, including an incentive payment for eligible professionals who satisfactorily report data on quality measures for covered services furnished to Medicare beneficiaries. An incentive payment of 1.5 percent of their total allowed charges for Physician Fee Schedule can be earned. PQRI was introduced 2007. In 2008, the Physician Quality Reporting Initiative (PQRI) consisted of 119 quality measures, including 2 structural measures. One structural measure assesses the use of electronic health records and the other electronic prescribing. The PQRI is a voluntary program open to physicians and other eligible professionals (EPs) who successfully report quality data related to covered services provided under the Medicare Physician Fee Schedule (PFS).

Methodology

Eligible professionals review the detailed PQRI Quality Measure Specifications and related information on the CMS PQRI website and select measures applicable to their patient panels and the professional services. The selected measures are reported by submitting the specified quality-data codes on claims for services paid under the Medicare Physician Fee Schedule (PFS) and provided during the reporting period. The 2008 Physician Quality Reporting Initiative (PQRI) consists of 119 measures, each of which has an unique number. The quality measures consist of a numerator and a denominator that enable calculation of the percentage of a defined patient population that receive a particular process of care or achieve a particular outcome. Denominator population is defined by ICD-9 and CPT Category I codes. Providers must successfully report on the quality measures that apply to their practice at least 80% of the time to collect the bonus. In addition, providers must select the most appropriate quality measures for their practice to ensure that the full 1.5 percent bonus is paid.

Results

The Physician Quality Reporting Initiative (PQRI) is a first step toward linking Medicare health professionals' payments to quality, which is consistent with Medicare's ongoing transformation from passive payer to active purchaser of high-value health care. In the Value-Driven Health Care (VDHC) initiative, HHS has identified four cornerstones for health care improvement: interoperable health information technology, measuring and publishing quality information, measuring and publishing price information, and promoting quality and efficiency of care.

Publications

Physician Quality Reporting Initiative (PQRI) 2007 Reporting Experience.

http://www.cms.hhs.gov/PQRI/Downloads/PQRI2007ReportExperience.pdf

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Organization	**The Commonwealth Fund**
Category	Performance Ratings/Reports/Scorecards/Databases/Benchmarking
Source	http://www.whynotthebest.org
Measure	**WhyNotthe Best.org**

Summary

The Commonwealth Fund is a private foundation that aims to promote a high performing health care system that achieves better access, improved quality, and greater efficiency, particularly for society's most vulnerable, including low-income people, the uninsured, minority Americans, young children, and elderly adults. The Fund carries out this mandate by supporting independent research on health care issues and making grants to improve health care practice and policy. An international program in health policy is designed to stimulate innovative policies and practices in the United States and other industrialized countries.

WhyNotthe Best.org

New Web resource, WhyNotTheBest.org was launched Dec 2008. Created and is maintained by The Commonwealth Fund, and is a free resource for health care professionals (not consumers) interested in tracking performance on various measures of health care quality. It enables organizations to compare their performance against that of peer organizations, against a range of user selected benchmarks, and over time. Site contains case studies and improvement tools that spotlight successful improvement strategies of the nation's top performers.

Currently, the site includes measures of hospital quality that are publicly reported on the Centers for Medicare and Medicaid Services Hospital Compare web site. It includes 24 Hospital Quality Alliance measures that report how often hospitals deliver recommended care processes for four conditions: heart attack, heart failure, pneumonia, and surgical care improvement. It also includes 10 measures from the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS), which reports hospital patients' satisfaction with their care. Data will be updated four times a year and are included for nearly all 4,400 U.S. hospitals.

Methodology

Data are drawn from publicly reported data from Hospital Compare.

1. Performance is reported on individual measure and composite measures

8 measures for heart attack care, 8 measures for pneumonia care, 4 measures for overall heart failure care, 5 measures for overall surgical care improvement and 9 measures on patient satisfaction.

In addition to reporting performance for each individual measure, the site presents summary performance scores for each hospital for each of the four conditions. Specifically, it includes the following summary measures:

- Heart Attack Summary Score (composite of eight process-of-care measures for this condition)
- Heart Failure Summary Score (composite of four process-of-care measures for this condition)

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- Pneumonia Summary Score (composite of seven process-of-care measures for this condition)
- Surgical Care Improvement Summary Score (composite of five care processes used to prevent surgical infections)
- Overall Quality Summary Score (composite of summary scores for the four conditions above)

Summary scores for each condition are created through using a methodology prescribed by the Joint Commission. This approach suggests that the summary score be the number of times a hospital performed the appropriate action across all measures for that condition, divided by the number of opportunities the hospital had to provide appropriate care for that condition. Summary scores were not calculated if a hospital did not report on all the measures for each condition (all 24 measures for the overall score) and did not have at least 30 patients for at least one of the measures for each condition. Scores are not weighed, except that measures with larger denominators do contribute more weight to the calculation of the mean for that measure. None of the measures is risk adjusted. The site does not include composite measures for the HCAHPS data.

2. Benchmarks: Top Performers

For each measure included on the site, it identifies the top 1% of performers—the “top performers.” Other benchmarks are: the top 10%, top 2%, middle 50%, and bottom 2%. Can also benchmark again state averages.

3. Top Performers on Process-of-Care Measures

Requires reported data for every available measure and recorded data on 30 or more patients for each of the four conditions (heart failure, heart attack, pneumonia, and surgical care improvement). No explicit weighting is incorporated, but higher-occurring cases give weight to that measure in the average. Since these are process measures (versus outcome measures), no risk adjustment was applied.

4. Top Performers on HCAHPS

To appear among the top performers on the HCAHPS data, hospitals are ranked according to the percentage of survey respondents giving a 9 or 10 rating of overall hospital care.

Results

WhyNotTheBest.org presents hospital performance information as determined by publicly reported process-of-care and patient satisfaction measures. There are numerous programs that measure various aspects of the performance of health care organizations, using different criteria and methodologies. Some calculate rankings, some present awards, and any are "distinctions," or lists of hospitals, health systems, home care organizations, or other health care settings that meet certain criteria.

Publications

Why Not The Best? Results From The National Score Card On U.S. Health System Performance, 2008. The Commonwealth Fund Commission on a High Performance Health System. JULY 2008
http://www.commonwealthfund.org/usr_doc/Why_Not_the_Best_national_scorecard_2008.pdf?section=4039

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Organization	The Commonwealth Fund Commission on a High Performance Health System
Category	Performance Ratings/Reports/Scorecards/Databases/Benchmarking
Source	http://www.commonwealthfund.org/usr_doc/Why_Not_the_Best_national_scorecard_2008.pdf?section=4039
Measure	National Scorecard on U.S. Health System Performance

Summary

Established in 2005, the 19 member Commission brings together 19 member group of experts from all parts of the health care sector to promote a high-performing health system that provides all Americans with affordable access to high-quality, safe care while maximizing efficiency in its delivery and administration. National Scorecard first published 2006.

Three central goals:

1. to provide benchmarks for assessing health system performance
2. to have a mechanism for monitoring change over time
3. to be able to estimate the effects of proposed policies to improve performance.

Scorecard includes key indicators of national health system performance organized into five core dimensions:

1. **Healthy lives** - includes life expectancy, mortality, and prevalence of disability and limitations due to health
2. **Quality** - broad measure covering the extent to which the care delivered is effective, well-coordinated, safe, timely, and patient-centered
3. **Access** - concerned with participation in the health care system and the affordability of insurance coverage and medical services
4. **Efficiency** - assesses overuse or inappropriate use of services, preventable hospitalizations and readmissions, regional variation in quality and cost, administrative complexity, and use of information systems
5. **Equity** - disparities among population groups in terms of health status, care, and coverage.

Set of 37 performance indicators

- **Healthy Lives** – 5 indicators
- **Quality** – 19 indicators
- **Access** – 5 indicators
- **Efficiency** – 8 indicators

Methodology

For each indicator, the Scorecard compares national performance against benchmark levels achieved by top performing groups within the U.S. or other countries. In a few instances, benchmarks reflect targets or policy goal. Each score is a ratio of the current U.S. average performance to the benchmark representing best levels of achievement, with a maximum possible score of 100. Benchmarks were based on rates achieved by the top 10 percent of U.S. states, regions, hospitals, health plans or other providers or top countries. Where patient data were available only at the national level, benchmarks were based on the experiences of high-income, insured individuals. Four access benchmarks aim for logical policy goals, such as 100 percent of the population to be adequately insured.

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Trend analysis - compared the baseline and current national averages as well as the change in the range of performance. Time trends typically capture two years and up to five years for some indicators. Builds on metrics developed by public and private quality improvement efforts, as well as several unique indicators created for the Scorecard that are not currently tracked elsewhere.

Costs data – used the most recent data on the lowest-cost groups as benchmarks. For patient-reported experiences in hospitals, used the newly available broad sample to benchmark. For infant mortality, the benchmark was top U.S. states.

Ratios were averaged within dimension and averaged by dimensions for an overall score. Equity was derived by comparing the percentage of the group at risk (e.g., percent not receiving recommended care, percent uninsured) by insurance, income, and race/ ethnicity on a subset of indicators. Also included a few specific indicators of health care equity to highlight areas of concern. The risk ratios compare rates for insured relative to uninsured; high income to low income; and whites to blacks and Hispanics.

Results

Claims to be the first comprehensive means of measuring and monitoring health care outcomes, quality, access, efficiency, and equity in the United States. The 2008 Scorecard, presents trends for each dimension of health system performance and for individual indicators. Results confirm that the U.S. health system continues to fall far short of what is attainable, especially given the resources invested. Across 37 core indicators of performance, the U.S. achieves an overall score of 65 out of a possible 100 when comparing national averages with U.S. and international performance benchmarks.

Between 2006-2008 scorecards, access to health care significantly declined, while health system efficiency remained low. Quality metrics that have been the focus of national campaigns or public reporting efforts did show gains.

Publications

Why Not the Best? *Results from the National Scorecard on U.S. Health System Performance, 2008.* The Commonwealth Fund Commission on a High Performance Health System July 2008 Report.
http://www.commonwealthfund.org/~/media/Files/Publications/Fund%20Report/2008/Jul/Why%20Not%20the%20Best%20%20Results%20from%20the%20National%20Scorecard%20on%20U%20S%20%20Health%20System%20Performance%20%202008/Why_Not_the_Best_national_scorecard_2008%20pdf.pdf

Executive Summary and Methodology. July 2008.
http://www.commonwealthfund.org/~/media/Files/Publications/Fund%20Report/2008/Jul/Why%20Not%20the%20Best%20%20Results%20from%20the%20National%20Scorecard%20on%20U%20S%20%20Health%20System%20Performance%20%202008/1150_WhyNottheBest_EXEC_SUMM_METHODOLOGY_ONLY%20pdf.pdf

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Organization	**Consumer Purchaser Disclosure Project**
Category	Summary for Public; Consumer; Infomediary
Source	www.healthcaredisclosure.org
Measure	**Patient Charter for Physician Performance Measurement, Reporting and Tiering Programs**

Summary

The Consumer Purchaser Disclosure Project is a group of leading employer, consumer, and labor organizations working toward a common goal to ensure that all Americans have access to publicly reported health care performance information. Vision is that Americans will be able to select hospitals, physicians, and treatments based on nationally standardized measures for clinical quality, consumer experience, equity, and efficiency. Aim is a transparent health care market, in which decision-making is supported by publicly reported comparative information.

Four priority areas:

1. Encouraging development of quality measures relevant to consumers and purchasers;
2. Promoting the endorsement of a robust set of performance measures through the National Quality Forums (NQF);
3. Encouraging adoption and public reporting of NQF-endorsed measures supplemented by other qualified measures to fill gaps in NQF measurement sets;
4. Enhancing the availability of data to support public reporting

Methodology

Enable consumers to select hospitals, physicians, and treatments based on nationally standardized measures for clinical quality, consumer experience, equity, and efficiency. Public reporting and payment reform will lead to improvements in both quality and affordability.

Driving this improvement will be

1. consumers using valid performance information to choose providers and treatments,
2. purchasers building performance expectations into their contracts, payments and benefit designs, and
3. providers acting on their desire to improve supported with better information.

Criteria for Physician Performance Measurement, Reporting and Tiering Programs

1. Measures should be meaningful to consumers and reflect a diverse array of physician clinical activities.
2. Those being measured should be actively involved.
3. Measures and methodology should be transparent and valid.
4. Measures should be based on national standards to the greatest extent possible.

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Results

Comprehensive national agreement with leading physician groups and health insurers on principles to guide how health plans measure doctors' performance and report the information to consumers.

Published a **"Patient Charter for Physician Performance Measurement, Reporting and Tiering Programs"** which creates a national set of principles to guide measuring and reporting to consumers about doctors' performance.

Publications

Patient Charter for Physician Performance Measurement, Reporting and Tiering Programs
http://healthcaredisclosure.org/docs/files/PatientCharter.pdf

All Fact Sheets - http://healthcaredisclosure.org/docs/files/DisclosureFactSheetsAllCombined10-10-07.pdf

Measures to Market Report. White Paper on Sustainable Business Models for Physician Performance Measurement and Reporting in Ambulatory Health Care www.healthcaredisclosure.org/docs/files/MeasurestoMarketReport.pdf

Pocket Guide to 7 Key Measurement Issues - http://healthcaredisclosure.org/docs/files/PocketGuideOct2007.pdf

Guidelines for Purchaser, Consumer and Health Plan Measurement of Provider Performance. Updated September 2006
http://www.rwjf.org/files/research/measurementguidelines092006.pdf

CMS Roadmaps for Quality Measurement, Resource Use and Promoting Value in Medicare: Charting a Path that Could Support Transformation in Health Care. February 2009 http://healthcaredisclosure.org/docs/files/DisclosureCMSRoadmapsSummary.pdf

CMS has submitted a report to Congress on hospital value-based purchasing and is waiting for action from Congress to proceed. For recommendations from 22 consumer, labor, and purchaser organizations on how this should be implemented go to: http://healthcaredisclosure.org/docs/files/CPDPMedicareHospital_VBPrecs4-19-07.pdf.

Additionally, CMS will be submitting a plan to Congress on physician value-based purchasing in 2010. Twenty consumer, labor, and purchaser organizations provided suggestions in the areas of measurement, incentives, data, and public reporting: http://healthcaredisclosure.org/docs/files/CPDPMedicareMD_VBPrecs12-16-08.pdf.

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Organization	**D2Hawkeye** (refer also Verisk Health entry)
Category	Proprietary/Analytics/Decision Support/Healthcare Data Technology
Source	http://www.d2hawkeye.com http://www.veriskhealth.com
Measure	**D2Explorer** (Relational Database) **D2ReportManager** (Customized Reporting) **D2Analyzer** (Customized Data Sets) http://www.veriskhealth.com/specialtyPages/content.aspx?type=obj&id=67

Summary

D2Hawkeye (D2) provides healthcare data service solutions, including data mining, decision support, clinical quality analysis, and risk analysis tools. The Company builds and manages fully-integrated medical and financial databases for its customers, applying its proprietary evidence-based medical rules, and provides an intuitive, easy-to-use, ASP-based interface for medical analytics and reporting. Industry professionals use D2's tools to estimate cost and risk trends, to identify emerging high-risk consumers for optimal allocation of medical management resources and interventions, and to compare performance against industry benchmarks. The Company also provides medical advisory, medical analytics, benchmarking and other business services on an outsourced basis.

D2 was founded in July 2001, employs 260 people, and has significant data operations based in South Asia. Data services and software solutions are currently used by more than 140 customers. Each month, D2Hawkeye collects, analyzes and manages data for over 6,000 mid-sized employers, typically on behalf of third party administrators and disease management companies. This growing monthly data stream represents over 11 million U.S consumers, and ranks the Company as one of the largest combined medical and pharmacy claims databases in the United States. It was acquired by Verisk Health in January 2009.

Services:

Health Plans - combine data silos – from medical, pharmacy, eligibility, case and disease management information – into one comprehensive database that allows analysis of clinical and financial burdens and identify emerging high-risk member populations and individual members.

Third Party administrators - master the fast-changing healthcare environment, using advanced medical analytics, clinical quality analyses and risk analysis tools, and support systems for case management, pharmacy benefit management and disease management. Customers include more than sixty of the nation's most prestigious regional and national TPAs.

Case management and Disease Management - business intelligence and predictive modeling products. These data mining and analytics systems enable managers to stratify member populations and identify "at risk" and "emerging risk" members. Once these members are identified, our products provide clinical staff with the ability to make the most effective and efficient clinical touch. This results in superior ROI and labor efficiency for our CM and DM customers. Includes:

- Virtual Medical Record
- National benchmark data
- Financial risk prediction
- Quality of Care report cards

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Physician Groups - Product **D2Explorer** helps risk-bearing Physician Groups manage their member population, both as a medical responsibility and as a financial imperative. It's an advanced data mining system that applies medical and financial intelligence to convert medical data into knowledge. Analyze costs by specialty, provider and procedure. The Virtual Medical Record feature enables drill down to a comprehensive listing of all medical and pharmaceutical claims for each patient and easily identify emerging high risk members. Quality assurance and pay for performance analysis. Performance measurements of both group and individual providers.

Re-insurers, MGUs and Stop-Loss - use D2Hawkeye products for risk stratification, and for ability to immediately drill down to underlying claims and their attendant risk. Identify emerging high risk members and case management and disease management opportunities. Business intelligence technologies apply hundreds of evidence-based medical and financial rules to claims data, quickly identifying trends and uncovering areas of concern. Patient-centric tools provide both aggregate and individual analyses of service, specialty, diagnosis, procedure and provider.

Employers - holistic solution to both contain healthcare costs and to improve the quality of care that employees receive. Solutions often result in improved employee productivity and retention. Provides a comprehensive view into the drivers of cost, quality, and productivity issues. For each driver have experience crafting a customized plan to help work with benefits consultant, health plan, or pbm to develop an action plan. These plans not only incorporate typical cost savings opportunities - such as improving network utilization - but also incorporate case management, disease management, and wellness opportunities. A typical employer will realize a 10 - 15% healthcare cost reduction while improving the health and productivity of their employees and their dependents.

Pharmaceutical Industry - New research tool D2DrugBox enables clients to draw on this database to optimize study of the safety and efficacy of specific drugs and drug-therapy interventions. D2DrugBox uses advanced statistical methods to compare field data on drugs of the same class, and generate outcomes information. It can be used to analyze a specific population of choice, and the effects of individual drugs and drug combinations on specific diseases. Including:

- Virtual drug trials
- Phase IV monitoring and post-market sentinel monitoring
- Justifiable pricing based on costs of disease

Products:

D2Explorer - a comprehensive relational database platform with thousands of data-mining algorithms and query tools that quickly gives a close up view of healthcare landscape.

D2ReportManager - design, distribute and archive customized financial and clinical reports. Currently 35 reports available to define client-specific report package.

D2Analyzer - allows sophisticated users to build their own data sets. It's an on-line analytical processing (OLAP) tool designed for advanced data mining and *ad hoc* query analyses.

D2Consulting - answers most important strategy and healthcare questions using physician consultants, advanced data analytics technologies, and national medical benchmark databases.

D2Connect - provides comprehensive eBusiness services, custom software development, and technology outsourcing

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Publications

Predicting Overall and Impactable Future Cost with the D2Hawkeye Risk Modeling System. Shiva Gautam, Ph.D. and Surya Singh, M.D. http://www.d2hawkeye.com/D26conpre/research-presentation.php

Application of D2Hawkeye Risk Index to Predict High Cost Cases May, 2007 Shiva Gautam.
R-Squared_White_Paper_Shiva_Guatam[1].pdf

Advanced Analytics for Care Management Case Study 2008. Advanced_Analytics_for_Care_Management.pdf

Algorithmic Prediction of Health-Care Costs Dimitris Bertsimas, Margrét V. Bjarnadóttir, Michael A. Kane, J. Christian Kryder, Rudra Pandey, Santosh Vempala, Grant Wang. OPERATIONS RESEARCH Vol. 56, No. 6, November-December 2008, pp. 1382-1392

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Organization	**Dartmouth Atlas Project**
Category	Performance Ratings/Reports/Scorecards/Databases/Benchmarking
Source	http://www.dartmouthatlas.org/index.shtm
Measure	**Dartmouth Atlas Project**

Summary

For more than 20 years, the Dartmouth Atlas Project has documented glaring variations in how medical resources are distributed and used in the United States. The project, principally funded by The Robert Wood Johnson Foundation, provides comprehensive information and analysis about national, regional and local markets, as well as individual hospitals and their affiliated physicians. These reports, used by policymakers, the media, health care analysts and others, have radically changed our understanding of the efficiency and effectiveness of our health care system.

Web based, free of charge access to interactive databases. Allows users to create their own queries based upon hospital service area, hospital referral region, national and hospital-specific profiles; analysis of procedures, costs, and variation patterns.

National Atlas reports available to download include:

1. Tracking the Care of Patients with Severe Chronic Illness: The Dartmouth Atlas of Health Care 2008
2. The Care of Patients with Severe Chronic Illness: A Report on the Medicare Program 2006
3. The Quality of Medical Care in the United States: A Report on the Medicare Program. The Dartmouth Atlas of Health Care 1999
4. The Dartmouth Atlas of Health Care 1998
5. The Dartmouth Atlas of Health Care 1996

Began in 1993. Initially examined the geographic distribution and use by defined populations of health care resources (eg. beds, physician FTE's, dollars, procedures). Scope broadened to report on individual hospital performance and most recently, to examine patterns of end-of-life care, chronic care and inequities in Medicare reimbursement. Specific analyses of surgical variations, specialty specific analyses (cardiovascular care, vascular care, musculo-skeletal care) and some state and regional specific analyses are available.

Evaluates performance of national, regional, and local health care systems and individual hospitals. Reports on variations in resource inputs, utilization and outcomes of care in 3,436 hospital service areas and 306 hospital referral regions of the United States.

Available data tools include:

1. **Hospital Care Intensity Report** - enables comparison of relative intensity of inpatient care (time spent in hospital and intensity of physician services) delivered to chronically ill persons.

   Three basic reports:

   - Medicare Spending Report
   - Resource Allocation Report
   - Patient Experience Report

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2. **Benchmarking**. Enables comparisons between hospital/areas of choice with national averages, state averages, or local comparisons
3. **Various databases** that enable data manipulation, distribution, medical care costs, events profiling, geographic queries,

Methodology

Population-based, small area analysis method. Analyzes variation in utilization of health care in small geographic or demographic areas to determine utilization patterns and associated variables that may contribute to the variation.

Claims based, data primarily based upon risk-adjusted Medicare data. Other data bases used include American Hospital Association, American Medical Association, American Osteopathic Association, and federal agencies, including the Agency for Health Care Policy and Research, the Bureau of the Census, the Health Care Financing Administration, the National Center for Health Statistics, and the Department of Veterans Affairs.

Used zip codes to establish geographic boundaries of naturally occurring health care markets based on where Medicare enrollees received care = 3,436 hospital service areas which were further aggregated into 306 hospital referral regions. Developed measures of resource inputs, including physician labor, hospital beds, intensive care beds, and Medicare program reimbursements.

Utilization measures included traditional epidemiologic, population-based rates of events occurring over a designated period of time such as hospital days, intensive care unit days, physician visits/specialist visits. Quality measures include referral patterns, processes of care. Define errors of omission as including only those services proven to be effective in saving lives or reducing morbidity, and for which the side effects are so minimal that failure to provide these services probably reflects medical error. Uses 12 specific services that should be provided and whose appropriate use could be monitored using the Medicare database. Many of these services are included in HEDIS measures.

Most recent edition (2008 Chronic Care) examined care delivered to beneficiaries in their last two years of life who had one or more of nine chronic illnesses, including congestive heart failure, chronic lung disease, cancer, coronary artery disease, renal failure, peripheral vascular disease, diabetes, chronic liver disease, and dementia.

Results

Early reports found variations in care were related resources & capacity available in the locality and to practice patterns of local physicians. The provision of more services was not found to have any enhanced health outcomes or improved satisfaction for the population. The recent studies (2006 & 2008) examine care provided to beneficiaries with chronic illness in the last two years of life. These studies report on large variations in chronic care practice and spending related to supply of resources and differences in medical opinion and practices. Concerned with variation in use of effective care and in the outcomes of care. Confirms that not all variation is unwarranted ie: on basis of medical need.

Three key areas identified. Much of the variation found to relate to provider quality defects:

1. **Failure to provide needed care** or higher than average levels of undesirable outcomes through medical error or system failures
2. **Systematic underuse of effective care techniques**, misuse of preference-sensitive care (eg. Discretionary surgery)

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3. **Overuse of supply-sensitive care** such as physician visits, tests and hospitalization rates among chronically ill patients

Future Goals

1. Expand performance measures to include preference-sensitive and supply-sensitive measures of efficiency and decision quality.

2. Establish the actuarial costs that preferred providers encounter in delivering efficient care – joint project with CECS, Mayo Clinic and Intermountain Health Care

Other research projects with Dartmouth Atlas include…

- Institute for Healthcare Improvement re the use of hospital-specific quality improvement measures
- AAMC and a select group of academic medical centers to build a collaborative study group focused on variations in costs of care for the chronically ill.
- HealthPartners (MN) and Partners HealthCare (Boston, MA) are initiating efforts based upon their electronic and internal clinical and administrative databases to address unwarranted variations in the provision of effective, preference-sensitive and supply-sensitive care.
- Commonwealth Fund - Proposed research program to investigate the relationship between organizational structure of physician practices and the processes and outcomes of care (group size, specialty composition, corporate structure) and the quality and costs of care provided to Medicare beneficiaries.
- Discussion with research groups at the Mayo Clinic, DHMC, and at Intermountain Health Care to refine a proposal to CMS to initiate a national demonstration project under Medicare's Health Care Quality Demonstration Programs (HCQDP) authorized under Section 646 of the Medicare Modernization Act.

Publications

Disparities in Health and Health Care among Medicare Beneficiaries. A Brief Report of the Dartmouth Atlas Project. June 2008 http://www.dartmouthatlas.org/af4q/AF4Q_Disparities_Report.pdf

Regional and Racial Variation in Health Care among Medicare Beneficiaries. A Brief Report of the Dartmouth Atlas Project. Dec 2008 update http://www.dartmouthatlas.org/af4q/AF4Q_disparities_Dec2008.pdf

Tracking the Care of Patients with Severe Chronic Illness: The Dartmouth Atlas of Health Care 2008 http://www.dartmouthatlas.org/atlases/2008_Chronic_Care_Atlas.pdf

Baker LC, Fisher ES, Wennberg JE. Variations in hospital resource use for Medicare and privately insured populations in California. *Health Affairs* 2008 Feb;27(2):w123-w134.

Goodman DC, Grumbach K. Does having more physicians lead to better health system performance? *JAMA* 2008 Jan;299(3):335-7.

Wennberg JE, O'Connor AM, Collins ED, Weinstein JN. Extending The P4P Agenda, Part 1: How Medicare Can Improve Patient Decision Making And Reduce Unnecessary Care. *Health Affairs* 2007 Nov;26(6):1564-74.

Wennberg JE, Fisher ES, Skinner JS, Bronner KK. Extending The P4P Agenda, Part 2: How Medicare Can Reduce Waste And Improve The Care Of The Chronically Ill. *Health Affairs* 2007 Nov;26(6):1575-85.

Wennberg JE, Bronner KK, Skinner JS, Fisher ES, Goodman DC. Inpatient care intensity and patients' ratings of their hospital experiences. *Health Affairs* 2009 Jan;28(1):103-112

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Understanding Practice Patterns: A Focus on What the Quality Movement Can Do to Reduce Unwarranted Variations Presentation by John Wennberg. December 14, 2005 http://www.dartmouthatlas.org/atlases/IHI_lecture_December05.pdf

Bending the cost curve. Achieving accountability for quality and costs Health Care Summit Killington, Vermont October 17, 2005 Elliott S. Fisher, MD. Presentation. www.dartmouthatlas.org/atlases/Vermont_Summit.pdf

Effective Care http://www.dartmouthatlas.org/topics/effective_care.pdf

Preference Sensitive care http://www.dartmouthatlas.org/topics/preference_sensitive.pdf

Supply Sensitive care http://www.dartmouthatlas.org/topics/supply_sensitive.pdf

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Organization	**Deloitte Center for Health Solutions, Deloitte LLP**
Category	Other
Source	www.deloitte.com
Measure	**Episodes and Payment Reform papers; Comparative Effectiveness paper**

Summary

The Deloitte Center for Health Solutions is the health services research arm of Deloitte LLP. The goal is to inform all stakeholders in the health care system about emerging trends, challenges and opportunities using rigorous research. Through independent research, roundtables and other forms of engagement, Deloitte LLP seeks to be a trusted source for relevant, timely and reliable insights.

The Deloitte Center for Health Solutions produces research and other thought leadership that is objective, data-driven and embraces a diversity of viewpoints on trends and issues affecting U.S. health care.

Research is focused in three major areas:

- Health policy and health reforms in the U.S. health care system
- Disruptive Innovations that result in innovative solutions to improve efficiency and effectiveness
- Consumerism incorporating how end users of health goods and services think and behave

In addition to conducting both primary and secondary research studies (surveys, forecasts, case studies, qualitative research), DCHS also provides briefings and educational training sessions to corporate boards, trade associations and senior management teams. We also produce Webcasts and podcasts to further inform the debate on issues of importance.

Deloitte has published several white papers on episode measurement and payment reform.

ACOs

The 2010 Patient Protection and Affordable Care Act (PPACA) includes a Medicare pilot ACO program which aims to explore optimal ACO structures and processes. Other programs in locations like Massachusetts and Vermont, at Baylor, and through the Dartmouth/Brookings ACO collaborative, are attempting to pilot these programs.

Based on an assessment of ACO literature coupled with Deloitte's analysis, this paper concludes that successful ACOs are more likely to have specific competencies in governance and leadership, operational and clinical effectiveness, IT and infrastructure, risk management and workforce organization. Finally, to enable ACOs to lower costs and improve care, health plans and providers should consider reasonable targets to reduce spending and improve outcomes. At the same time, physicians and consumers will look for a rationale to participate.

Bundled or Episode Based Payments

Another payment reform alternative is bundled payment system, sometimes called episode-based payments, to appropriately incentivize hospitals and physicians to better coordinate care, resulting in improved efficiency and outcomes and lower costs. The majority of these cost reductions could be achieved if coordination of care from admission through post-discharge activity improved. A means to that end might be a single-bundled payment mechanism.

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Proposed changes in hospital payments (starting in 2013) will reward the avoidance of readmissions, and Medicare's plans to implement bundled payments to hospitals (starting in 2015) for admissions that result in 20 percent of post-acute spending. Bundled payments will become increasingly important.

Medical Home 2.0

Conceptually, a medical home model makes sense: Improved consumer access to primary care health services and increased accountability for healthy lifestyles are foundational to a reformed health system. For primary care clinicians, the current system of volume-based incentives limits their ability to appropriately diagnose and adequately manage patient care. For consumers, lack of access to effective and clinically accurate diagnostics and therapeutics via primary care is a formula for delayed treatment, overall poor health and higher costs. The medical home model is designed to address these issues.

The "medical home 2.0" is an advancement in the design, delivery and payment for health care services that leverages emergent characteristics of a transformed health system – shared decision-making with patients, multidisciplinary teams where all participate actively in the continuum of care, incentives for adherence to evidence-based practices and cost efficiency and health information technologies that equip members of the care team and consumers to make appropriate decisions and monitor results.

Comparative Effectiveness: Health Care Policy Perspectives for Consideration

A Deloitte study that profiles comparative effectiveness systems in the United Kingdom, Australia, Canada and Germany concludes that, if implemented correctly, comparative effectiveness has the potential to improve care and reduce health care costs for Americans.

The study, "Comparative Effectiveness: Perspectives for Consideration" by the Deloitte Center for Health Solutions:

- Reviews the current state of comparative effectiveness research in U.S. health care
- Profiles comparative effectiveness systems in the United Kingdom, Australia, Canada and Germany
- Examines how comparative effectiveness studies in these four countries are applied to:
  - A diagnostic screening technology (to detect colon cancer)
  - Pharmaceutical medication (the use of statins for treatment of elevated cholesterol)
  - A surgical procedure (treatment for benign prostatic hyperplasia)

Generating better evidence about the costs and benefits of different treatment options – through research on the comparative effectiveness of those options – has the potential to bend the curve in health care spending and reduce inappropriate variation in the system. The report findings conclude that, in the U.S., a "tools, not rules" approach, with industry and policy makers working side by side, will result in a comparative effectiveness model that delivers better value and lower costs.

Publications

http://www.deloitte.com/assets/Dcom-UnitedStates/Local%20Assets/Documents/US_CHS_AccountableCareOrganizations_070610.pdf

http://www.deloitte.com/assets/Dcom-UnitedStates/Local%20Assets/Documents/us_chs_EpisodeBasedPayment_PerspectivesforConsideration_091609.pdf

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http://www.deloitte.com/assets/Dcom-UnitedStates/Local%20Assets/Documents/US_CHS_MedicalHome2_092210.pdf

http://www.deloitte.com/assets/Dcom-UnitedStates/Local%20Assets/Documents/us_chs_ComparisoneffectivenessStudy_may2009(1).pdf

[entry updated 2010]

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Organization	Dr Foster Intelligence. United Kingdom
Category	International, Performance Ratings/Reports/Scorecards/Databases/Benchmarking
Source	http://www.drfosterintelligence.co.uk/
Measure	**Dr Foster Intelligence Good Hospital Guide** http://www.drfoster.co.uk/Guides/

Summary

Dr Foster Intelligence is a public-private partnership launched in February 2006 that aims to improve the quality and efficiency of health and social care through better use of information. Aim to make it easier for professionals and the public to access health and social care information through a range of innovative products and services. The partnership is in the form of a 50:50 joint venture involving the new Health and Social Care Information Centre (a special health authority of the NHS) and Dr Foster, a commercial provider of healthcare information.

Good Hospital Guide

Annual, first published in 2001. Guides contain information about hospital-specific mortality rates; the total number of staff; wait times; numbers of complaints; as well as private hospital prices for services. A partnership (50:50 joint venture) between Health and Social Care Information Centre (a special health authority of the NHS) and Dr. Foster, a commercial provider of healthcare information.

Other products include:

- Real Time Monitoring (RTM)
- Clinician Outcomes and Benchmarking Tool
- Practice and Provider Monitor
- Patient Experience Tracker
- High-impact User Manager

Methodology

The Dr Foster Research Hospital Guide lists all NHS acute hospitals with more than 300 beds, some smaller NHS acute hospitals that provide key services to a particular geographical area, selected specialist hospitals that provide services covered by the questionnaire, and private hospitals with more than 30 beds.

Two main sources were used for the guide: central Department of Health data for the four UK nations, most of which is at Trust level, and data collected through Dr Foster Research surveys which are also mainly completed at Trust level.

Data relating to mortality and procedure waiting times, volumes, readmission rates, length of stay and day case rates is based on Hospital Episode Statistics (HES) which covers the NHS in England only. In future, plan to include Scotland, Wales and Northern Ireland and the private sector in assessments of quality and safety, using comparable routinely collected data.

Trust Level Information (mostly only for England) includes:

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- Hospital Standardized mortality Ratio
- Number of operations done
- Waiting times by operation
- Day case rates
- Length of stay
- Re-admission rate
- Doctors per 100 beds
- Nurses per 100 beds
- Long outpatient waits
- Outpatient waits by Specialty
- Inpatient waits by Specialty
- Quality of service overall rating
- Infection Control
- Admissions cancelled within seven days of admission for a non-clinical reason
- Choice of food prepared safely
- Effective barriers to prevent prescribing admin errors relating to allergy
- Food and help with eating is available 24 hours a day
- Patients treated with dignity and respect
- Surroundings are well designed, maintained and cleaned
- Views of patients and others are taken into account

Results

Reports do not seek to rank the indicators of individual trusts but to identify 'outliers', namely those whose performances fall beyond statistical control limits and can therefore be regarded as significantly outside expected levels, whether positive or negative. Report on key areas including choice and competition and dimensions of quality including patient safety, effectiveness of care, and patients' experiences.

Publications

Hospital Guide 2008 - http://www.drfosterhealth.co.uk/docs/hospital-guide-2008.pdf

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Organization	**The Fraser Institute. Canada.**
Category	International, Performance ratings, Reports, Scorecards, Databases, Benchmarking
Source	www.fraserinstitute.org
Measure	**Hospital Report Card: British Columbia 2008.** **Hospital Report Card: Ontario 2008.**

Summary

An independent research and educational organization with offices in Calgary, Montréal, Tampa, Toronto, and Vancouver, and international partners in over 70 countries. The Fraser Institute measures and studies the impact of markets and government interventions on the welfare of individuals.

Hospital Report Card = Performance report card enabling individuals are able to look up a given condition or procedure and compare death rates, volumes of procedures, rates of adverse events, and utilization rates. Shown across 39 quality and safety indicators for 95 hospitals and 50 municipalities over five years. Rates, scores, and ranks are published separately for each indicator. Future editions of The Fraser Institute's *Hospital Report Card* will include performance measurement of acute-care hospitals in other provinces.

Methodology

Based on administrative data. Uses US Agency for Healthcare Research and Quality (AHRQ) indicators. Primary source of information is the Canadian Institute for Health Information's (CIHI) Discharge Abstract Database (DAD). Demographic, administrative, and clinical data are extracted from the Discharge Abstract Database for inpatient hospital stays from all acute care hospitals in British Columbia. The international standard for risk adjustment, 3M™ APR™ DRG Classification System, is employed to risk adjust the data. Hospital death rates, adverse events rates and utilization rates are risk-adjusted for patients with the same condition but a different health status.

Uses 39 of AHRQ's indicators of quality – uses the Inpatient Quality Indicators (IQIs and Patient Safety Indicators (PSIs) of AHRQ modules. The indicators are classified into three groups: those related to medical conditions, hospital procedures, and child birth. The indicators are further classified by type: death rates, volumes of procedures, utilization rates, and adverse events. Constructed a hospital mortality index. The 39 indicators and the Hospital Mortality Index apply only to acute-care conditions and procedures for inpatient care.

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Organization	Geisinger Health System
Category	Performance Ratings/Reports/Scorecards/Databases/Benchmarking
Source	http://www.geisinger.org/
Measure	**ProvenCare Model** http://www.geisinger.org/provencare/media.html

Summary

Geisinger is a physician-led health care system, dedicated to health care, education, research and service spanning 43 counties of 20,000 square miles in Pennsylvania and serving 2.6 million people. Geisinger is an integrated delivery system with over 700 employed physicians, three acute care hospitals; specialty hospitals and ambulatory surgery campuses; and a 229,000-member health plan.

Proven Health Navigation (medical home); the ProvenCare Model

In 2005, Geisinger began developing an approach that focused upon innovation and targeted strategies around care coordination and transitions, chronic care optimization and illness prevention, transformation of acute episodic care and engagement of patients. In its core, this approach represents a system of quality and value initiatives based on 3 major programs— Proven Health Navigation (medical home); the ProvenCare model; and transitions of care. The goal of such an approach is to optimize disease management by using a rational reimbursement paradigm for appropriate interventions, providing innovative incentives, and engaging patients in their own care as part of any intervention.

- **ProvenHealth Navigation -** Advanced medical home; this means wrapping a bundle of services around a patient, or a consumer, and his/her family. The goal of Proven Health Navigation is to address healthy behaviors, disease prevention, and disease management once a patient has past the point where prevention is no longer working.

- **ProvenCare -** ProvenCare is about optimizing an acute care intervention and rationalizing the reimbursement paradigm for that intervention, as well as engaging the consumer more actively in his/her own self-care during the time of intervention.

- **Transitions of care -** Recognizes the many handoffs between outpatient and inpatient, between inpatient and outpatient, between inpatient and nursing home, between home and nursing home— particularly vulnerable points for ensuring care safety, quality, and efficiency.

A key component of Geisinger's approach to healthcare is an innovative model of incentives for the consumer, the provider, and the payer. ProvenCare's unique approach to risk management revolves around a 90-day 'care warranty' (for participating payers). ProvenCare Portfolio includes elective CABG; elective PCI, total hip replacement, cataract, EPO, perinatal, bariatric surgery, low back pain.

ProvenCare Components include:

- Patient-centricity
- Appropriate care
- Evidence/consensus-based best practices
- Highly reliable care

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- Optimized work flows
- Explicit accountabilities
- Packaged pricing
- Performance-based reimbursement "Warranty"

Methodology

Proven Care Process

1. Identify eligible patients
2. Document appropriateness
3. Enroll and activate the patient and family
4. Deliver evidence-based care
5. Geisinger is paid a global fee - One fee for the entire identified period of time; Global fee includes 50% share of historical readmission rate (guaranteed payer savings, Geisinger upside based on complication and readmission reduction and efficient care)

All or None Measures

- Measure percentage of patients who receive all related services (not individual measure alone)
- Most all or none measures will not reach 100%
- Some goals not appropriate for all patients, some goals not achievable for all patients

Health Policy Considerations

- Access to health insurance is key - should include regional plans (provide flexibility and innovation)

- Formation of Integrated Systems should be facilitated
  - Bundled payments
  - Episode of care payments
  - Treatment based – not insurance risk
  - Accountable care organizations
  - “Cost saving” shared with providers

- Healthcare Information Technology
  - Computers and Electronic Health Records are necessary, not sufficient
  - Redesign of care required
  - Ongoing upgrades needed

- Comparative effectiveness research
- Training of next generation

Publications

Continuous Innovation In Health Care: Implications Of The Geisinger Experience. Ronald A. Paulus, Karen Davis, and Glenn D. Steele, *Health Affairs* 27, no. 5 (2008): 1235–1245

Pay for Performance, Version 2.0? Thomas H. Lee. NEJM 357;6 www.nejm.org august 9, 2007
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ProvenCare: quality improvement model for designing highly reliable care in cardiac surgery. S A Berry, M C Doll, K E McKinley, A S Casale, A Bothe, Jr. *Qual Saf Health Care* 2009;**18**:360-368

"ProvenCare: A Provider-Driven Pay-for-Performance Program for Acute Episodic Cardiac Surgical Care," A.S. Casale et al., *Annals of Surgery* 246, no. 4 (2007): 613–621.

Presentation at National Health Policy Conference
http://www.academyhealth.org/files/nhpc/2009/steele.pdf

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Organization	HCI^3 (Health Care Incentives Improvement Institute)
Category	Incentive/Reward Programs; Standards Setting, Industry Organizations
Source	www.hci3.org
Measure	**Bridges to Excellence** http://www.bridgestoexcellence.org/

Summary

The Health Care Incentives Improvement Institute ™, Inc. (HCI3™) is a not-for-profit multi-stakeholder organization resulting from the late 2009 merger of Bridges To Excellence, Inc. and PROMETHEUS Payment, Inc. A broad range of programs has been created to measure outcomes; reduce care defects; promote a team approach to caring for patients; realign payment incentives around quality, and reward excellence.

Bridges to Excellence® (BTE): A family of programs that measure the quality of care delivered in physician practices. Special emphasis is placed on managing patients with chronic conditions, who are most at risk of incurring PACs (preventing avoidable complications). Recognitions cover all major chronic conditions, plus preventive care, office systems—and a Medical Home measurement scheme to promote comprehensive care delivery and strong relationships between patients and their care teams. Scope includes asthma, cardiac, COPD, congestive heart failure, coronary artery disease, depression, diabetes, hypertension, medical home, physician office, primary care physician, spine. BTE Recognition is based on clinical data, which clinicians and practices voluntarily submit to an independent performance assessment organization for scoring. Each BTE Recognition program has three levels of certification, in order to promote continuous quality improvement.

Methodology

Bridges to Excellence - BTE Recognition programs use standardized sets of measures and criteria to analyze quality of care, including AQA/NQF-endorsed and NCQA-developed measures.

Development of each Recognition program involves:

1. Selection of a physician panel to help develop the program. The panel includes a balance of specialists and primary care physicians.
2. Identification of an inventory of measures from the National Quality Forum (NQF), AQA, American Medical Association (AMA), Physician Quality Reporting Initiative (PQRI), National Committee for Quality Assurance (NCQA), and the Agency for Healthcare Research and Quality (AHRQ). The relative strength of each of the measures is weighed to determine the core measures and thresholds for the program.
3. Program rules such as patient eligibility and specifications, measures' weights, and recognition levels and tiers are decided upon. Scoring rules are then defined, which includes defining measures criteria and weights, setting recognition levels, and developing recognition tiers. Each BTE recognition program has three levels of certification, in order to promote continuous quality improvement.
4. An actuarial analysis is performed in which reward amounts for achieving different levels of recognition are suggested.

BTE Recognition is based on clinical data, which clinicians and practices voluntarily submit to an independent performance assessment organization (PAOs) for scoring. PAOs are one of the two types of organizations who take part in the performance

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assessment for BTE Recognitions. PAOs score the data, while Data Aggregators (BTE Approved Registries) collect the data from clinicians for scoring. PAOs are third-party organizations responsible for evaluating the performance of clinicians and practices nationally and recognizing those who demonstrate they provide high quality care in their communities. PAOs validate and score the data submitted based on BTE's clinical measures and specifications. After recognizing eligible clinicians, PAOs act as the data conduit, submitting recognition data to BTE's data platform, the Recognition Data Exchange (RDE). The RDE distributes individual clinicians' recognition information to BTE administrators and consumer portals for use in their internal quality programs and public recognition. Consistent with BTE's principles, all assessment programs are voluntary and anonymous for clinicians – only successful recognitions are reported to BTE by the PAOs.

Results

Bridges to Excellence: Typically, BTE-recognized physicians have been found to

- Outperform non-recognized physicians on process measures of quality.
- Have fewer episodes per patient and lower resource use per episode.
- Have lower average costs per patient and per episode.

Patients with chronic conditions generally had fewer hospital admissions, and were healthier on average. Recognized practices reported a higher level of shared accountability between patients and providers. As a result, these patients are better managed and incur fewer potentially avoidable hospitalizations and emergency department visits. BTE programs measure the quality of care in a physician's practice across all patients in that practice, not simply the patients of the participating payers and purchasers. As a result, when a physician participates in the program and becomes recognized, the quality of care improves for all the patients in that practice.

Publications

<u>HCI3</u>

A Vision To transform U.S. Health Care. *The Programs To Make It A Reality.*
http://www.bridgestoexcellence.org/librarydocument/content/9/HCI3VisionBrch-F2.pdf
http://www.bridgestoexcellence.org/librarydocument/content/8/HCI3-All-Print-Brochures.pdf (HCI3 extended brochure)

<u>Bridges to Excellence</u>

Bridges to Excellence—Recognizing High-Quality Care: Analysis of Physician Quality and Resource Use.
Rosenthal. Meredith B., Francois S. de Brantes, Anna D. Sinaiko, Matthew Frankel, Russell D. Robbins, and Sara Young. *Am J Manag Care. 2008;14(10):670-677*
de Brantes. Francois, Paula S. Wickland, and John P. Williams The Value of Ambulatory Care Measures: A Review of Clinical and Financial Impact from an Employer/Payer Perspective., *Am J Manag Care. 2008;14(6):360-368)*
Hazelwood, Anita, Cook, Ellen D. Improving Quality of Health Care Through Pay-for-Performance Programs. Health Care Manager. 27(2):104-112, April/June 2008..
Measuring Provider Efficiency Version 1.0. A collaborative multi-stakeholder effort. Sponsored by The Leapfrog Group & Bridges To Excellence. Supported in part by a grant from the Commonwealth Fund
http://www.ahip.org/content/fileviewer.aspx?docid=7407&linkid=53923

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Organization	HCI³ (Health Care Incentives Improvement Institute)
Category	Incentive/Reward Programs; Standards Setting, Industry Organizations
Source	www.hci3.org
Measure	**PROMETHEUS Payment System** www.PrometheusPayment.org

Summary

The Health Care Incentives Improvement Institute ™, Inc. (HCI3™) is a not-for-profit multi-stakeholder organization resulting from the late 2009 merger of Bridges To Excellence, Inc. and PROMETHEUS Payment, Inc. A broad range of programs has been created to measure outcomes; reduce care defects; promote a team approach to caring for patients; realign payment incentives around quality, and reward excellence.

PROMETHEUS Payment®: A compensation approach, based on medical episodes of care, that provides a blueprint for payment reform. The model offers direct incentives for providers to reduce PACs, work in teams, share information, and take collective responsibility for delivering better treatment value and outcomes. PROMETHEUS uses Evidence-informed Case Rates™ (ECRs) to price medical episodes of care for chronic conditions, hospitalizations and other procedures. PROMETHEUS removes the current financial incentives that reward the health care system when patients fall into the quality chasm. Instead, the model increases provider margins as they work to close that chasm, and encourages them to collaborate effectively for a patient's overall health. Evidence-informed Case Rates include CAD, CHF, HTN, diabetes, hip replacement, knee replacement, bariatric surgery, colon resection, pneumonia, pregnancy and delivery, angioplasty (PCI), AMI, COPD, CABG, stroke, asthma, knee arthroscopy, cholecystectomy, GERD, colonoscopy, hysterectomy.

Methodology

PROMETHEUS Payment System - The PROMETHEUS model packages payment around a comprehensive episode of medical care that covers all patient services related to a single illness or condition. Covered services are based on commonly accepted clinical guidelines or expert opinions that define the best methods for treating a given condition from beginning to end. The prices of all treatments are tallied to generate an Evidence-informed Case Rate™ (ECR). This creates a budget for the entire care episode. ECRs include all covered services bundled across all providers that would typically treat a patient for the given condition (hospital, physicians, laboratory, pharmacy, rehabilitation facility, etc.). The ECR is adjusted for the severity and complexity of each patient's condition.

To determine the relevant costs of a specific episode, the model separates out two types of risk.

- **Probability Risk:** These are risks outside the provider's control, assumed by the insurer.
- **Technical Risk**: These are risks within a provider's control, and therefore assumed by the provider. These include potentially avoidable complications (PACs) and other variations. PACs are deficiencies in care that cause harm to the patient, and might have been prevented with more effective treatment. It has been found that up to 40 cents of each dollar spent on chronic conditions, and up to 20 cents of each dollar spent on acute hospitalizations and procedures, are because of PACs.

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EVIDENCE-INFORMED CASE RATES (ECR)

An Evidence-informed Case Rate, or ECR®, is a budget for an entire care episode that includes all covered services bundled across all providers that would typically treat a patient for a single illness or condition (hospital, physicians, laboratory, pharmacy, rehabilitation facility, etc.) ECRs are also patient-specific in that they are adjusted for the severity and complexity of each patient's condition. ECR® methodology was developed by the PROMETHEUS Payment design team.

- ECRs are calculated by taking into account - covered services, practice pattern variation, severity-adjustment, a margin, and potentially avoidable complication (PAC) allowance.
- Covered services are commonly accepted clinical guidelines or expert opinions that define the best methods for treating a given condition from beginning to end. The covered services are then adjusted to reflect local practice patterns.
- An ECR is severity-adjusted based on both patient and provider characteristics. The severity-adjustment is arrived at through a stepwise multi-variable regression model. This adjustment takes multiple factors into account including patient demographics and co-morbidities, geographic location, and provider specialty.
- An ECR also factors in a margin, which reflects the importance for any going concern to have a return on capital assets invested and a reason to reinvest in business operations. Currently a margin of zero percent is factored into the ECR, though this number can be adjusted by the user.
- A substantial PAC allowance is included in each ECR. The allowance is determined by running claims data through the PROMETHEUS Payment system to measure PAC rates. This rate is the current deficit. Fifty percent of this deficit is added to the ECR as the PAC allowance. If PACs occur, the allowance is used to offset costs of corrective treatment. But if providers reduce or eliminate PACs, the unused portion of the allowance is distributed among the providers as a bonus, based on an algorithm agreed upon by the implementers.

Results

PROMETHEUS Payment System: Pilot implementations designed to test the validity of the PROMETHEUS model are under way around the country. An independent evaluation is being conducted by the Harvard School of Public Health and RAND Corporation**.**

Publications

HCI3

A Vision To transform U.S. Health Care. *The Programs To Make It A Reality.*
http://www.bridgestoexcellence.org/librarydocument/content/9/HCI3VisionBrch-F2.pdf
http://www.bridgestoexcellence.org/librarydocument/content/8/HCI3-All-Print-Brochures.pdf (HCI3 extended brochure)

PROMETHEUS Payment System

What's The Most Rational And Sustainable Pathway To A New Health Care Payment System?
http://www.bridgestoexcellence.org/librarydocument/content/10/Prometheus%20Brch-F6.pdf
PROMETHEUS Payment: What's The Score? How Scores Determine Provider Payment
http://www.bridgestoexcellence.org/librarydocument/content/36/Whats%20The%20Score.FINAL.pdf
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Organization	**The Healthcare Commission/Care Quality Commission. United Kingdom**
Category	International; Performance Ratings/Reports/Scorecards/Databases/Benchmarking
Source	www.cqc.org.uk
Measure	**Annual Health Check** http://www.cqc.org.uk/guidanceforprofessionals/healthcare/nhsstaff/annualhealthcheck2008/09.cfm

Summary

Care Quality Commission.

Established in April 2009. It took over the work of the Healthcare Commission, the Commission for Social Care Inspection and the Mental Health Act Commission which have been dissolved. Purpose is to regulate and improve the quality of health and social care and look after the interests of people detained under the Mental Health Act. The Care Quality Commission is the independent regulator of health and social care in England. Aims to make sure better care is provided for everyone, whether that's in hospital, in care homes, in people's own homes, or elsewhere.

Objectives

- One port of call for information on standards, safety and available provision.
- Bring together the best inspection and regulation methods, combining intelligence systems and statistical analysis with on-the-ground inspection and the views and verdicts of people who use health and social care services and the staff that work in health and social care.
- An independent, authoritative view on the contribution that care makes to preventing illness and promoting ongoing healthy, independent living and wellbeing.

Annual Health Check - Statutory requirement to assess and report on the performance of healthcare organizations in the NHS and independent sector, to ensure that they are providing a high standard of care and undertaking continuous improvement. Introduced the annual health check in 2005. The 2008/09 assessment cycle will be the fourth assessment year. Required to publish an annual rating of performance for each organization.

Quality of services score. A two part assessment of compliance with core standards set by the Department of Health, or whether requirements have been met.

1. **Standards**. The core standards set out the basic standards of healthcare eg the safety and quality of care and the accessibility of services.
2. **Indicators**. The indicators are based on a set of 'vital signs' that are published by the Department of Health to provide a national framework of priority issues within which local services are to be planned and provided.
3. **Quality of financial management.** Newly introduced in 2008/09. Score on the quality of financial management, derived from work done by the Audit Commission for non-foundation trusts and Monitor for foundation trusts.

Methodology

Assess:

- Acute trusts (including foundation trusts)

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- Ambulance trusts
- Mental health trusts (including foundation trusts)
- Learning disability trusts
- Primary care trusts (both as providers and commissioners of care)
- Care trusts
- The Health Protection Agency
- NHS Direct
- NHS Blood and Transplant.

Focus includes safety, cleanliness, the quality of the clinical care that patients receive, and whether they are treated with dignity and respect.

Results

External evaluation found:

- Most trusts thought that the components of the annual health check have a positive impact on the care that patients receive: 93% thought this about their self-assessment against core standards; 89% about national targets and 81% about service reviews.
- Sixty-seven per cent of trusts thought that the process had improved patients' safety in their organizations.
- A significant minority expressed concern over whether the process allowed for a true reflection of their overall performance.

Publications

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The Annual Health Check. Assessing and Rating the NHS. 2008/09.
http://www.healthcarecommission.org.uk/_db/_documents/The_annual_health_check_2008_09_Assessing_and_rating_the_NHS.pdf

About the Care Quality Commission. http://www.cqc.org.uk/_db/_documents/About_CQC.pdf

The annual health check 2007/08.
http://www.cqc.org.uk/_db/_documents/0708_annual_health_check_overview_document.pdf

Healthcare Commission State of Healthcare 2008Assurance and Reassurance.
http://www.cqc.org.uk/_db/_documents/State_of_Healthcare_2008_-_Assurance_and_reassurance.pdf

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Organization	HealthGrades
Category	Performance Ratings/Reports/Scorecards/Databases/Benchmarking
Source	http://www.healthgrades.com/hospital-solutions/connecting-point/
Measure	**Hospital Quality in America** http://www.healthgrades.com/media/DMS/pdf/HealthGradesEleventhAnnualHospitalQualityStudy2008.pdf

Summary

HealthGrades is the leading healthcare ratings organization, providing ratings and profiles of hospitals, nursing homes and physicians to consumers, corporations, health plans and hospitals. Millions of consumers and hundreds of the nation's largest employers, health plans and hospitals rely on HealthGrades' independent ratings, consulting and products to make healthcare decisions based on the quality of care. Founded in 1999, the firm is headquartered in Golden, Colorado, and has over 160 employees.

HealthGrades has studied and measured the quality of care at the nation's hospitals since 1998. Reviewed and measured quality of approx. 5,000 US hospitals. Results published annually on the web. Focus is on measuring global quality which incorporates performance/ process measures, outcomes, systems, and people. Believed that the combination of quality metrics which focus both on process and outcomes will provide the ideal motivation for improved healthcare.

America's 50 Best Hospitals Award - Identifies hospitals that have received HealthGrades' Distinguished Hospital Award for Clinical Excellence designation for the most consecutive years.

Distinguished Hospital Award – Patient Safety - Analyzes patient outcome data for virtually every US hospital.

Distinguished Hospital Award – Clinical Excellence- Evaluates and compares hospital performance in two groups: teaching and non-teaching hospitals.

Ten clinical areas and thirty procedures and treatment areas at hospitals are rated. In each category, hospitals receive a five-, three- or one-star rating, indicating that their risk-adjusted mortality or complications rates are above, at or below average.

- Five star = performance was better than predicted and the difference was statistically significant.
- Three star = Actual performance was not statistically significant from what was predicted,
- One star = Actual performance was worse than predicted and the difference was statistically significant.

Methodology

2008 study (11th in series) analyzed over 41 million Medicare discharges from every U.S. hospital from 2005 through 2007. Risk adjusted mortality and complication rates were calculated and hospitals were assigned a 1-star (poor), 3-star (as expected), or 5-star (best) quality rating for 27 diagnoses and procedures. Part two of the study, assessed quality differences between 1-, 3-, and 5-star rated hospitals by analyzing the in-hospital mortality rates for over 11 million Medicare discharges associated with 17 diagnoses and procedures.

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Performance of individual states and regions was evaluated across eight service areas: cardiac surgery, coronary interventional procedures, critical care, gastrointestinal services, heart attack treatment, heart failure, pulmonary care, and stroke care. State and regional performance was benchmarked against the national average and against the best-performing hospitals

Data Source and Analysis - Initial data purchased from the Centers for Medicare and Medicaid Services (CMS) (MedPAR file) containing inpatient records for Medicare patients. Data analyzed via multivariate Logistic Regression-Based Ratings –to account for patient characteristics/risk factors such as age, gender, source of admission, specific procedure performed, and co-morbid conditions such as hypertension, chronic renal failure, heart failure, diabetes and other underlying medical diagnoses that could increase the patient's risk of mortality or complication.

Results

In general, 70 percent to 80 percent of hospitals in each procedure/diagnosis are classified as three stars, with actual results statistically the same as predicted results. Approximately 10 percent to 15 percent were one-star hospitals and 10 percent to 15 percent were five-star hospitals.

Research has found:

1. Large gaps persist between the "best" and the "worst" hospitals across all procedures and diagnoses studied.
2. Five-star rated hospitals had significantly lower risk-adjusted mortality across all three years studied. If all hospitals performed at the level of a 5-star rated hospital across the 17 procedures and diagnoses studied, 237,420 Medicare lives could have potentially been saved from 2005 to 2007
3. Fifty-four percent (128,749) of the potentially preventable deaths were associated with just four diagnoses: Sepsis, Heart Failure, Pneumonia, Respiratory Failure.
4. There is a relationship between volume and quality of care as measured by risk-adjusted mortality for several procedures: coronary bypass surgery, coronary interventional procedures, and resection/replacement abdominal aorta.

Publications

The Eleventh Annual HealthGrades Hospital Quality in America Study
http://www.healthgrades.com/media/DMS/pdf/HealthGradesEleventhAnnualHospitalQualityStudy2008.pdf

America's 50 Best Hospitals Methodology
http://www.healthgrades.com/media/DMS/pdf/Americas50BestHospitalsMethodology.pdf

The Seventh Annual HealthGrades Hospital Quality and Clinical Excellence Study. January 2009

http://www.healthgrades.com/media/dms/pdf/HospitalQualityClinicalExcellenceStudy2009.pdf

Distinguished Hospital Award Clinical Excellence™ 2009 Methodology
http://www.healthgrades.com/media/DMS/pdf/DHAClinicalExcellenceMethodology.pdf

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Organization	**HealthGrades**
Category	Performance Ratings/Reports/Scorecards/Databases/Benchmarking
Source	http://www.healthgrades.com
Measure	**Strategic Quality Initiative (SQI)** **Strategic Quality Partnership (SQP)** http://www.healthgrades.com/hospital-solutions/ratings-and-awards/index.cfm?fuseaction=modNBG&modtype=hospitalSolutions&modact=hospitalPartnership

Summary

HealthGrades is the leading healthcare ratings organization, providing ratings and profiles of hospitals, nursing homes and physicians to consumers, corporations, health plans and hospitals. Millions of consumers and hundreds of the nation's largest employers, health plans and hospitals rely on HealthGrades' independent ratings, consulting and products to make healthcare decisions based on the quality of care. Founded in 1999, the firm is headquartered in Golden, Colorado, and has over 160 employees.

Quality ratings and cost information for 5,000 hospitals, 16,000 nursing homes & in-depth profiles of 650,000 physicians in the US. Focus is on helping hospitals understand, improve and communicate the quality of care they deliver through a suite of products and physician-led clinical-advisory services.

HealthGrades programs include:

- **Strategic Quality Initiative (SQI)** and **Strategic Quality Partnership (SQP)** programs which help the nation's top-performing hospitals build and maintain a reputation for excellence and compete on the basis of quality. SQI has proven successful in increasing patient volume and market share and bolstering staff recruitment and retention for the company's more than 350 hospital partners.
- **Clinical Excellence Research and Consulting Group (CERC)** works with clinical staff and physicians to identify areas of quality improvement for hospitals and offers them a suite of tools and services to enhance their quality of care.

Methodology

HealthGrades uses inpatient data from the CMS. Reports on hospital performance can be purchased by the general public, industry and governments.

Service ratings (options are: five star 'Best' rating; three star 'As expected' rating; one star 'Poor' rating) are provided by major diagnostic category (cardiac, orthopedic, pulmonary, vascular, gastrointestinal, critical care, women's health, stroke, general surgery, etc) based on performance according to procedural and outcome indicators (i.e. survival rates while in hospital and at 1 month, 3 month, 6 month intervals after discharge; rates of heart failure while in hospital and after 6 months after discharge; sepsis rates while in hospital and at 1 month, 3 month, 6 month intervals after discharge) collected for patients over several years.

Hospital Grades also publishes performance against 13 patient safety indicators (using AHRQ software) based on surveying patient safety events for 1,000 patients at the hospital

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Consultants provide strategic business-development tools and quality-analysis solutions to help top-performing hospitals sustain and communicate their high-quality at the service line or overall hospital level.

Results

More than 300 top-performing Hospitals use HealthGrades' expertise to improve their quality. Benefit Consultants such as Mercer and Towers Perrin incorporate HealthGrades' quality information within their online benefits portals. More than 125 of the nation's largest Employers provide HealthGrades' ratings and information to more than 10 million beneficiaries. Insurance Companies such as CNA and Zurich obtain essential data from HealthGrades to evaluate business risk and provider quality. Payers such as Independence Blue Cross, Blue Cross and Blue Shield of Minnesota, Mutual of Omaha and EAPs recognize HealthGrades as a valuable resource for defining reimbursement & creating provider networks.

Publications

Strategic Quality Initiative Brochure http://www.healthgrades.com/media/DMS/pdf/HospitalSQIBrochure.pdf

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Organization	**HealthGrades**
Category	Performance Ratings/Reports/Scorecards/Databases/Benchmarking
Source	http://www.healthgrades.com
Measure	**HealthGrades Five-Star Doctors** **HealthGrades Recognized Doctors** http://www.healthgrades.com/physician-solutions/clinical-excellence-consulting/

Summary

HealthGrades is the leading healthcare ratings organization, providing ratings and profiles of hospitals, nursing homes and physicians to consumers, corporations, health plans and hospitals. Millions of consumers and hundreds of the nation's largest employers, health plans and hospitals rely on HealthGrades' independent ratings, consulting and products to make healthcare decisions based on the quality of care. Founded in 1999, the firm is headquartered in Golden, Colorado, and has over 160 employees.

HealthGrades Five-Star Doctors; HealthGrades Recognized Doctors

Online search engine to access details of HealthGrade designated “top doctors”- selected purely on objective quality measures, rather than subjective surveys of patients or colleagues. Two designations: HealthGrades Five-Star Doctors and HealthGrades Recognized Doctor. Free quality reports on 750,000 practicing physicians. Each report contains background information that includes medical training, board certification, state medical board sanctions, malpractice information (in 17 states), group-practice affiliation and patient-satisfaction ratings. Each report also contains HealthGrades’ quality ratings for the hospitals with which the physician is affiliated.

Methodology

Physician data is sourced from a variety of public and private data sources and is cross matched and verified. Data sources include:

- 50 states’ medical board records
- Centers for Medicare and Medicaid Services (CMS) of the U.S. Department of Health and Human Services, including the National Provider Identifier (NPI)
- American Board of Medical Specialties (ABMS)
- American Osteopathic Association Bureau of Osteopathic Specialists

Physician data are updated several times a year. Additionally, quarterly updates are made to the Recognized Doctor list based on new sanction, board certification, and malpractice data.

Physicians designated as “**HealthGrades Five-Star Doctors**” (6.5 percent of all doctors) are:

- affiliated with hospitals that are rated with five stars in that physician’s specialty by HealthGrades;
- board certified in their specialty; and
- free from malpractice judgments and sanctions.

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Physicians designated as "**HealthGrades Recognized Doctors**" (66 percent of all doctors) are:

- board-certified in their specialty; and
- free from malpractice judgments and sanctions

Results

Of the 750,000 practicing physicians in the country, 48,914 doctors in 16 specialties are designated HealthGrades Five-Star Doctors, and 492,693 are designated HealthGrades Recognized Doctors

Publications

Five-Star Doctors Selected by HealthGrades; Based on Objective Quality Measures (Press Release)
http://www.healthgrades.com/media/DMS/pdf/HealthGradesFiveStarDoctorsRelease020509.pdf

Five-Star Doctor Methodology 2009
http://www.healthgrades.com/media/DMS/pdf/HealthGradesFiveStarDoctorMethodology2009.pdf

Recognized Doctor Methodology 2009
http://www.healthgrades.com/media/DMS/pdf/HealthGradesRecognizedDoctorMethodology2009.pdf

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Organization	**HealthInsight**
Category	State focus; Performance Ratings/Reports/Scorecards/Databases/Benchmarking
Source	http://www.healthinsight.org/about/about.html
Measure	**National Rankings for Hospitals** http://www.healthinsight.org/performance/hosp_rankings/hospitals.html

Summary

HealthInsight is a private, non-profit Medicare Quality Improvement Organization (QIO) dedicated to improving the healthcare systems of Nevada and Utah. Provides rankings of Hospitals, Home Health Care and Nursing Homes.

HealthInsight aims to:

1. Assist healthcare providers in hospitals, nursing homes, home health agencies, and physician offices to improve the processes and outcomes of medical care;
2. Assist providers to locate gaps in care delivery systems and identify opportunities aimed at increasing efficiency and reducing human error;
3. Assist physician offices with the adoption and implementation of electronic health records (EHR) technology;
4. Conduct medical record case review to determine if services provided are medically necessary, appropriate, and meet professionally recognized standards of care; and
5. Educate Medicare beneficiaries about their healthcare rights and responsibilities and respond to their concerns about the quality of care received.

Methodology

Computes hospital rankings using publicly reported data downloaded from the Centers for Medicare & Medicaid Services (CMS) Hospital Compare website. Hospitals voluntarily report these data, and some hospitals may not provide data for some topics or measures. For each measure the denominator is the number of eligible cases, and the numerator is the number of eligible cases where the recommended care was provided. The overall success rate for each hospital is calculated by summing the numerators and denominators for all measures reported. Hospital performance is ranked on this overall rate and then converted to percentiles. The analysis uses all performance measures included in the database and does not exclude any hospitals or measures based on the number of cases in the denominator. This means that for some hospitals the rankings are based on only a few eligible cases; and the rankings for these facilities should be interpreted cautiously.

Areas covered include

- Heart Attack (Acute Myocardial Infarction or AMI)
- Heart Failure
- Pneumonia
- Surgical Infection Prevention

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Organization	**Healthnet**
Category	Performance Ratings/Reports/Scorecards/Databases/Benchmarking
Source	www.healthnet.com
Measure	**Decision Power** https://www.healthnet.com/portal/provider/content.do?category=DecisionPower&mainResourceFile=/content/general/unprotected/html/national/gen_decision_power_pre_post.html®ion=XX

Summary

Health Net, Inc. is among the nation's largest publicly traded managed health care companies. The company's health plans and government contracts subsidiaries provide health benefits to approximately 6.6 million individuals across the country through group, individual, Medicare, Medicaid and TRICARE and Veterans Affairs programs. The company's subsidiaries also offer managed health care products related to prescription drugs, and offer managed health care product coordination for multi-region employers and administrative services for medical groups and self-funded benefits programs.

Decision Power

Consumer focused resource. Based on Wennberg's work identifying distinctive variations in clinical practice patterns that characterize medical care in the United States. Aim is convergence of medical evidence with patient values and preferences to create a quality decision in medical care. Web based program that connects patients, physicians and information.

Hospital comparison capability enabling consumer to review

- Number of patients treated for condition or procedure
- Mortality rates
- Unfavorable outcomes
- Average lengths of stay
- Relative costs

Focus includes:

1. Wellness & Prevention
2. Chronic Conditions
3. Preference-sensitive Conditions
4. Severe Illness
5. Health Risk Questionnaire
6. Personal Health Record
7. Condition Centers/Education
8. Medication Center
9. Mental health support
10. Health Coaching

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Organization	**HealthPartners**
Category	Performance Ratings/Reports/Scorecards/Databases/Benchmarking
Source	http://www.healthpartners.com/provider/
Measure	**Quality Improvement Program - Partners in Excellence Program (PIE) and Clinical Indicators** http://www.healthpartners.com/portal/p158a.htm http://www.healthpartners.com/portal/p130.htm

Summary

HealthPartners is a consumer governed non-profit healthcare organization committed to improving the health of its members, patients and the community. Founded in 1957, HealthPartners provides coverage to more than 630,000 members and delivers care to approximately 350,000 patients at HealthPartners Clinics. Staff of 9,600 includes physicians and employees in 50 locations who are dedicated to providing patient centered care that includes:

- disease management and prevention
- innovative inpatient and outpatient services
- hospice
- pharmacy
- health improvement
- research
- medical education

HealthPartners' Quality and Utilization Program activities and initiatives encompass medical, behavioral health, dental, and select administrative services across preventive, acute, and chronic episodes of care. The scope of the Quality Improvement Program includes:

- the full spectrum of clinical services offered
- all locations of care delivery
- all providers of care
- all members and recipients of care
- the administrative services and processes of the plan

Key areas include:

1. Clinical Quality Improvement -Clinical topics relevant to HealthPartners' membership are evaluated on an annual basis
2. Patient Safety – reducing errors of care
3. Behavioral Health - Partners for Better Health goals, performance measurement and analysis, and clinical-practice guidelines. Monitoring and evaluation includes quality of care (case reviews), outcomes of care, process of care, access to behavioral health, member satisfaction, and provider satisfaction.
4. Service Improvement - satisfaction surveys, complaint analysis, and monitoring of Member Services activities.
5. Access and Availability of Services timely healthcare services from primary care, behavioral health, and specialty providers.

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6. Member Experience Customer satisfaction is assessed using a variety of methodologies including surveys, complaint analysis, focus groups
7. Provider Satisfaction Provider satisfaction with the health plan is assessed through satisfaction surveys and feedback from health plan providers

Methodology

Quality Improvement Program is implemented through:

1. Performance Measurement and Analysis
2. Clinical practice guidelines
3. Quality of Care Case Review Process
4. Provider Profiling / Monitoring
5. Complaint Analysis
6. Provider Incentives for Quality
7. Credentialing
8. Disease management programs
9. Utilization / Case Management

Quality and utilization management activities are evaluated and modified annually based on the results of the annual review process, as well as observations, trends, and patterns identified in response to current and new state and federal regulatory mandates.

Utilization Management

Evidence based study the patient populations to evaluate appropriate levels of care. These programs include:

- inpatient concurrent review and care coordination to ensure a safe and timely transition from the hospital
- "best practice" for selected kinds of care
- outpatient case management to provide care coordination
- the CareCheck program to coordinate out-of-network hospitalizations

Partners in Excellence Program (PIE)

This program forms the basis for HealthPartners bonuses and public recognition for both medical and specialty groups achieving either excellent or superior performance in clinical quality, patient experience, and affordability targets. Primary and specialty care groups earned nearly $678,000 for meeting quality measures on care and patient satisfaction in 2007. The Partners in Excellence bonuses recognize excellent and superior care for primary care (large and small groups) and pediatric care, as well as several specialty areas: pharmacy, cardiology, OB/GYN, physical therapy, behavioral health and ENT. The awards are part of HealthPartners pay-for-performance program, which will pay out a total of more than $21 million for meeting goals in 2007.

Clinical Indicators

HealthPartners recognizes the value of clinic systems that support a planned approach to patient care. The performance reflected in the Clinical Indicator Reports show the continued focus of our community of providers on the highest quality care. These reports provide valid and reliable information for provider groups to use in their efforts toward continuous improvement of patient care and outcome. Each optimal measure reflects whether health care was optimally managed for individual patients by assessing the multiple components that are necessary for excellent care.

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Clinical Indicators align with community best practice defined by the Institute for clinical Systems Improvement guidelines.

Annual Clinical Indicators Report features comparative provider performance on clinical measures related to preventive and chronic care, behavioral health, pharmacy, specialty and hospital care. The primary purpose is to provide valid and reliable information for providers to use in their efforts to improve patient care and outcomes. Includes comparative provider performance on 54 measures. Rates are reported by primary provider group, specialty provider group or hospital. The Partners in Excellence (PIE) program recognizes provider groups achieving superior outcomes in heart disease, diabetes, depression, prevention, medication prescribing and patient satisfaction.

- Measurement is based on chart review, administrative data, hybrid (combination administrative and chart review) and member survey.
- Provider rates with 95th percentile confidence intervals
- HealthPartners rate: weighted population average
- Partners in Excellence goals

Risk Adjustment

Risk adjustment is considered when developing quality measures and HealthPartners has adopted NCQA's approach to risk adjustment. Clinical measures are consistent with evidenced-based clinical guidelines. Case-mix and severity is only applied when the guideline specifically defines different treatment protocols or expected outcomes based on variations in the health of the population.

Publications

2008 Clinical Indicators Report. http://www.healthpartners.com/files/45237.pdf

2008 Clinical Indicators Report. Technical Supplement. http://www.healthpartners.com/files/45239.pdf

Pursuing Perfection in Quality Care 2007. http://www.healthpartners.com/files/31689.pdf

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Organization	Health Benchmarks
Category	Proprietary/Analytics/Decision Support/Healthcare Data Technology
Source	http://www.healthbenchmarks.com/
Measure	**HBI Physician Clinical Quality Indicators** **HBI Cost of Care Measures** **HBI Health Value Index** **Performance Benchmarking** http://www.healthbenchmarks.com/HealthPlans.aspx#indicators

Summary

An applied health services research company that specializes in transforming healthcare data into meaningful, actionable information. HBI conducts complex health outcomes research and analysis to facilitate evidenced-based decision-making. An industry leader in the development of physician and hospital pay-for-performance programs.

Methodology

Extensive inventory of evidence-based quality and cost metrics used to generate meaningful physician and hospital performance profiles through administrative claims datasets.

1. **HBI Physician Clinical Quality Indicators**
   Uses evidenced-based clinical metrics designed to run cost-effectively on administrative claims data. HBI measures the quality of care delivered by both generalists and specialists. Current inventory of nearly 90 clinical quality indicators covers more than 30 physician specialty areas, and focus on core areas including prevention, early detection, chronic care management, clinical evaluation, ambulatory care follow-up, medication management, and over-utilization. Each indicator is updated annually to assure adherence with the most current clinical guidelines and is rigorously tested in real-world environments to ensure the highest validity and accuracy.
2. **HBI Cost of Care Measures**
   Cost of Care Measures when united with Clinical Quality Indicators create a complete measure of overall provider performance in order to balance the need for cost savings with the goal of improving physician quality. Risk adjusted for patient and physician factors.
3. **HBI Health Value Index**
   Combines cost and quality measurement methodologies, to create a composite score - HBI Health Value Index (HVI). This is a single, reportable statistic serves as an indicator of a provider's overall performance in delivering evidence-based, guideline-recommended care.
4. **Performance Benchmarking.** HBI leverages its data warehouse of more than 20 million unique members to generate national benchmarks of clinical quality, cost, and other performance marks.
5. **Data warehouse** of more than 20 million unique members leveraged to generate national benchmarks of clinical quality, cost, and other performance marks.

   The data repository integrates data from numerous sources including:

   - Inpatient claims

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- Outpatient claims
- Employer data
- Pharmacy claims
- Membership and demographic data
- Carve-out vendor data (e.g. mental health)
- Financial data
- Laboratory values

Results

HBI Physician Clinical Quality Indicators - HBI's current inventory of nearly 90 clinical quality indicators covers more than 30 physician specialty areas, and focus on core areas including prevention, early detection, chronic care management, clinical evaluation, ambulatory care follow-up, medication management, and over-utilization.

HBI Cost of Care Measures - Draws upon in-house expertise and state-of-the-art, evidence-based measurement methodologies. HBI utilizes an episode-based foundation and a robust analytic framework to create meaningful measures of true physician cost using administrative claims data.

- adjust for identifiable patient risk factors and physician case-mix to maximize the total costs measured
- Evaluate all episodes of care to minimize factors that may bias final cost profiles

HBI Health Value Index - This single, reportable statistic serves as an indicator of a provider's overall performance in delivering evidence-based, guideline-recommended care.

Publications

Patient Outcomes and Evidence-Based Medicine in a Preferred Provider Organization Setting: A Six-Year Evaluation of a Physician Pay-for-Performance Program 2007. Amanda S. Gilmore, Yingxu Zhao, Ning Kang, Kira L. Ryskina, Antonio P. Legorreta, Deborah A. Taira, Richard S. Chung, Health Services Research, Volume 42, Issue 6p1 , Pages 2140 - 2159

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Organization	**Health Dialog**
Category	Proprietary/Analytics/Decision Support/Healthcare Data Technology
Source	http://www.healthdialog.com/hd/Core/Analytics/solutions/PPMS.htm
Measure	**Provider Performance Measurement System** http://www.healthdialog.com/hd/Core/Analytics/solutions/PPMS.htm

Summary

Health Dialog is a leading provider of care management and analytic services and is a wholly-owned subsidiary of Bupa, a global provider of healthcare services. The company was built in collaboration with the not-for-profit Foundation for Informed Medical Decision Making (FIMDM) to directly address unwarranted variation in healthcare. The firm provides sophisticated analytics that drive actionable and measurable solutions for populations, including care management programs and provider measurement services. Support both international programs and U.S.-based clients, including health plans, large employers, provider groups, and government programs.

Provider Performance Measurement System

Approach directly addresses unwarranted variation in healthcare – the overuse, underuse, and misuse of healthcare services. Based on research by Wennberg et al, unwarranted variation is defined as differences in healthcare service delivery that cannot be explained by illness, medical need, or dictates of evidence-based medicine.

Classified into one of three categories:

1. Effective care and patient safety,
2. Preference-sensitive care, treatment for conditions that have significant trade-offs in terms of risks and benefits for the patient.
3. Supply-sensitive care, care which is strongly correlated with healthcare system resource capacity and is generally provided in the absence of medical evidence and clinical theory.

The Provider Performance Measurement System (PPMS) enables identification of physicians who deliver both high-quality and efficient care.

Methodology

Population based. HDAS' methodology and clinical insights using **Unwarranted Variation Analytics** expands beyond the limitations of existing grouper-based methods, including those that use an episode grouping logic. Unlike other metrics proposed to measure provider quality and efficiency, this system of population-based measures capture both the decisions about which types of treatment are being recommended and the efficiency of delivery after that decision has been made. These measures incorporate both facility (e.g., use of ER and hospital) and professional services (e.g., physician visits, consults, use of imaging studies, and laboratory studies).

Through the use of Provider Performance Measurement System, payors can achieve the following outcomes:

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1. **Improved Network Design and Management**—identification of high-performance providers and the interventions needed to increase their use over lower-performing providers.
2. **Improved Quality and Cost Performance**—results in declining per-member/per-month (PMPM) costs by working with all providers to improve quality of care in all three categories of unwarranted variation and resource allocation.
3. **Improved Benefit Plan Design**—the creation of incentives that lead patients using inefficient providers to choose the "preferred provider," further decreasing pmpm costs

The **Patient Profile** drives Health Dialog's predictive modeling, population segmentation, outreach, and reporting efforts. A comprehensive, longitudinal source of current and historical information about the health of individuals and the system in which they obtain care. Considers more than 1,500 demographic and clinical and health system facts derived from medical, pharmacy, laboratory, and claims data. Can be augmented with data from patient surveys, laboratory values, health risk assessments, and other data sources.

The **Opportunity Analysis** identifies and prioritizes opportunities to reduce unwarranted variation, thereby helping to improve clinical care and reduce costs.

Predictive modeling module incorporates research on treatment-pattern variation to identify high-risk and high-need individuals, and develop targeted interventions to improve care and reduce costs. Uses individual-level information that predicts financial risk and provides insights into the impactibility or readiness of each individual to become engaged in the healthcare process.

The **Provider Performance Measurement System** (PPMS) allows identification of physicians who deliver both high-quality and efficient care. PPMS helps identify root causes and formulate solutions, enabling meaningful interventions to change provider behavior, such as network structure and payment mechanisms.

Results

Because our Health Coaches work with individuals at greatest risk across a broad spectrum of medical conditions and needs, our approach impacts a higher percentage of medical costs than traditional silo-oriented disease management, and results in fewer hospitalizations and surgeries. In terms of chronic member claims, we have seen overall cost reductions on the order of 4%-11%.

Health Dialog's program reduces hospital admission rates significantly. In a chronic commercial population (HMO and POS) rates were reduced by 11% in the first year and 17% in the second, while Medicare population rates were reduced by 7% in year one and 11% in year two

Publications

O'Connor, A.M., et al. Modifying Unwarranted Variations in Health Care: Shared Decision Making Using Patient Decision Aids. Health Affairs Web Exclusive. October 2004. http://content.healthaffairs.org/cgi/reprint/hlthaff.var.63v1?

HealthDialog America's 50 Best Hospitals Award.
www.healthgrades.com/media/DMS/pdf/Americas50BestHospitalsReport2007.pdf

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Organization	**The Health System Performance Research Network (HSPRN) Canada**
Category	International; Performance Ratings/Reports/Scorecards/Databases/Benchmarking
Source	www.hsprn.ca
Measure	**The Hospital Report Series** http://www.oha.com/client/oha/oha_lp4w_lnd_webstation.nsf/page/Hospital+Report www.hospitalreport.ca

Summary

Initially sponsored by Ontario Hospital Association and the Ministry of Health and Long Term Care. In January 2008, the research activities of the Hospital Report Research Collaborative (HRRC) were assumed by the Health System Performance Research Network (HSPRN). Aims to produce a series of report cards for hospitals of Ontario to help people better understand and assess the performance of their local hospitals and of the provinces hospitals as a whole. Also supports efforts by hospitals to improve the quality of their services.

Reports on Acute Care, Complex Continuing Care, Emergency Department Care, Rehabilitation, Mental Health.

Indicators - Clinical Utilization and Outcomes (7), Financial Performance and Condition (9), Patient Satisfaction (4 general, 8 pediatric), System Integration and Change (12)

Methodology

Uses a balanced scorecard. Broad areas (quadrants) of activities and outcomes are accessed in the areas of Financial Performance, Clinical Utilization and Outcomes, System Integration and Change and Patient Satisfaction. Performance measures for each of the four quadrants are provided at the hospital-specific level, along with average scores by local health integration network (LHIN), hospital type and the province as a whole. a summary of performance scores for 40 indicators across four areas of performance.

Results

From 2008, hospital specific results are available for participating hospitals on an e-scorecard developed using the Metrics3d platform (ABS Systems). Comparative information is available where can customize comparator groups, regions and the province as a whole.

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Organization	The Hearst Corporation
Category	International, Standards Setting, Industry Organizations; Summary for Public, Consumer
Source	http://www.mapofmedicine.com/
Measure	**Healthguides** http://healthguides.mapofmedicine.com/choices/map-open/index.html **Map of Medicine** http://www.mapofmedicine.com/

Summary

Map of Medicine provides a web-based visualization of the ideal, evidence-based patient-care journey for common and important conditions (covers 28 medical specialties) – a graphic pathway overview that can be shared across all care settings. It was originally developed in 2001 with support of University College London and the Royal Free Hampstead NHS Trust. In June 2005 the growing business was acquired by international publishers Informa plc. Three years later, Map of Medicine was acquired in April 2008 by Hearst Corporation. Map of Medicine is currently in negotiations with healthcare communities in a number of other countries including northern Europe, Australia and New Zealand.

The Map of Medicine is a tool for achieving clinical consensus throughout a healthcare community.

- Delivers current, evidence-based clinical knowledge from the world's most authoritative sources, constantly reviewed
- Displays this knowledge in an easy-to-use Pathways format, reflecting the patient journey
- Provides a framework for creating local Pathways using modified or new content specific to a healthcare community.

The Map creates an overarching benchmark for clinical process, a framework for sharing knowledge across care settings, and a tool for mediating a multi-disciplinary dialogue about the care process. The Map can be customized for extensive local input.

Full access to the Map of Medicine is licensed to healthcare communities. In addition to the clinicians version, the Map of Medicine has developed a patient-oriented version – **Healthguides** –available on the NHS Choices website. NHS Choices is the new digital 'front door' to the NHS. Healthguides is a limited functionality version of the Map that allows patients to see what the doctor sees. They present the different steps of a patient journey, from symptoms to diagnosis and treatment, using the same easy to follow charts as the Map of Medicine. Access to the Map of Medicine evidence based clinical knowledge system is currently licensed for English and Welsh residents only, however there are 20 open access pathways, which enable other visitors to see the Map features and capabilities.

Methodology

Map of Medicine develops pathways from recognized international sources of evidence-based knowledge. These are supported where necessary with expert opinion.

- Content is sourced from evidence-based suppliers (including universities, research institutes and professional journals) and the world's most authoritative government and pan-national medical organizations

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- A team of senior clinicians, specialist medical writers, scientists and editors drafts a care Pathway based upon the evidence-based information
- The draft is peer-reviewed and amended, typically going through three to five iterations
- Pathways are then signed off and accredited by relevant authorities
- Pathways are reviewed at least annually, with updates issued quarterly or more frequently if required.
- There is provision for 48 hour releases where a safety alert is issued by a national body or pharmaceutical manufacturer eg. about a life-threatening drug side effect.

Content is sourced from wide range of specialist journals, medical communities and organizations including the British Medical Journal (BMJ), NICE, SIGN, the Cochrane database and leading sources from the UK, US, Europe, Asia and Oceania. Specialist groups or networks are invited to renew and update content.

Scope - Map of Medicine has Pathways for the most common and important conditions and co-morbidities. Currently there are around 400 Pathways, and more are being prepared. New Pathways and clinical content are added to the Map every 3 months.

Topics - arranged into the following areas: Medicine, Surgery, Oncology, Obstetrics and Gynaecology, Mental Health, Paediatrics and Accident and Emergency. Content is enhanced with maps and visual images.

Integration - information is coded to be machine-readable and inter-operable with leading third-party clinical software systems and a pre-requisite to implementing an EMR system.

Results

Experience with the Map is being developed in a number of reference and 'early adopter' sites in England and Wales. Other evaluation projects are underway– eg, in six developing nations in Africa.

Findings to date include achievements in

- reducing emergency referrals,
- time savings in developing local pathways,
- better clinical consensus between practitioners working together with improved communications,
- reducing variations in care,
- reducing referrals and improving their quality, and effectively increasing outpatient capacity,
- safer patient care journeys,
- evidence-based Pathways offer potential for significant improvements in patient care (avoided hospitalizations, reduced length of stay, additional test avoidance),
- access to growing body of evidence for clinicians working outside area of expertise such as when on call;
- monitoring of alerts and reduction of these to the most important or relevant
- Better planning and better resource use.

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Organization	**Highmark Blue Cross Blue Shield**
Category	Payment Reform
Source	https://www.highmark.com/hmk2/index.shtml
Measure	**QualityBLUE** https://prc.highmarkblueshield.com/rscprc/hbs/pub?document=https%3A//www.highmarkblueshield.com/health/documents/qualityblue.html&docId=71

Summary

Highmark was created in 1996 by the consolidation of two Pennsylvania licensees of the Blue Cross and Blue Shield Association — Pennsylvania Blue Shield (now Highmark Blue Shield) and Blue Cross of Western Pennsylvania (now Highmark Blue Cross Blue Shield).

They have developed pay for performance programs for hospitals and physicians. They also provide a broad Provider Resource Center which includes a variety of incentive programs and resources.

Highmark was awarded a Best of Blue Clinical Distinction Award for QualityBLUE, its hospital pay-for-performance program. These awards are presented in collaboration between BCBSA and the Harvard Medical School Department of Health Care Policy, where Harvard researchers evaluate and select programs by Blue Cross and Blue Shield companies for recognition based on their innovation, effectiveness and potential for replication.

Methodology

Highmark's hospital pay-for-performance program emphasizes safety and reducing health care costs. The program started in 2002 and today, 64 hospitals participate in the program covering Central and Western Pennsylvania and West Virginia hospitals. The program saves hundreds of lives each year and reduces costs by millions of dollars.

QualityBLUE Hospital Pay for Performance aims to improve patient care and safety across Highmark's hospital networks through participation in a number of innovative initiatives, including:

- MRSA and Central Line-Associated Blood Stream Infection Prevention;
- Surgical Care Improvement Project: Surgical Site Infection Reduction and Venous Thromboembolism Prevention;
- Get With The Guidelines Stroke and Cardiac Care
- Reduction of Clostridium Difficile and Catheter Associated Urinary Tract Infections
- Implementation of medical technology to improve clinical quality or patient safety

The program aligns with industry standards and guidelines, as well as evidence-based medicine to improve member outcomes and drive to the provision of defect-free care provided by participating hospitals.

Highmark also has a similar bonus program for physicians including a Provider Resource Center including a Best Practice Guidebook, submission guides, and other support materials.

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Results

The nationwide average for **central line associated bloodstream infections** in an intensive care setting is 5 incidents per 1,000 line days. Participating hospitals were able to reduce the rate to an average of 1 infection per 1,000. Recently, new QualityBLUE hospital participants reduced the infections to less than 1 per 1,000.

Collectively, the QualityBLUE participants averaged nearly 93 percent compliance with the **preoperative antibiotic administration**, compared to a state and national average of 78 percent compliance.

Improvement has also been seen on their other hospital programs.

On the physician side, since 2006, when the measure was implemented, the percent of generic medications prescribed has increased from an average of 46 percent to 73 percent. Highmark estimates that $87 million savings during the past year through increased generic substitution.

Publications

https://prc.highmarkblueshield.com/rscprc/hbs/pub?document=https%3A//www.highmarkblueshield.com/health/documents/qualityblue.html&docId=71

https://www.highmarkblueshield.com/health/pdfs/bs-best-practice-guidebook.pdf

http://www.bcbs.com/issues/uninsured/highmark-blue-cross-blue-shiel.html

[entry updated 2010]

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Organization	The Hospital Quality Alliance (HQA)
Category	Standards Setting, Industry Organizations
Source	http://www.hospitalqualityalliance.org/
Measure	**Hospital Compare** (Refer also CMS Medicare Hospital Compare entry) www.HospitalCompare.hhs.gov

Summary

In December 2002, the organizations representing America's hospitals joined with consumer representatives, physician and nursing organizations, employers and payers, oversight organizations and government agencies to launch the Hospital Quality Alliance (HQA). The HQA is a national public-private collaboration that is committed to making meaningful, relevant, and easily understood information about hospital performance accessible to the public and to informing and encouraging efforts to improve quality.

The HQA believes that the availability and use of clinical quality, patient experience, equity, efficiency, and pricing information will spur positive changes in health care delivery. A cornerstone of the collaboration is Hospital Compare which publicly reports hospital performance in a consistent, unified manner to ensure the availability of credible information about the care delivered in the nation's hospitals.

The Hospital Quality Alliance facilitates continuous improvement in patient care through:

- Implementing measures that portray the quality, cost and value of hospital care;
- Developing and using measure reporting in the nation's hospitals; and
- Sharing useful hospital performance information with the public.

Vision

Through its work and by collaborating with quality improvement organizations in other settings, the HQA envisions more efficient, equitable care at all levels of a patient's experience. Through a consensus-based process, clinical quality, efficiency measures and pricing information that meets the needs and expectations of the general public, government and purchasers, and providers and practitioners will be available. The availability and use of these data will spur positive changes in health care delivery and payment and a reduction in disparities in care.

Hospital Compare contains performance information about more than 4,000 hospitals and data are updated quarterly in approximately March, June, September, and December. The HQA will continue to expand Hospital Compare to include additional measures that will help consumers assess hospital quality and value and make informed decisions about their care.

Quality Measures

Measuring quality and publicly reporting the information is a powerful mechanism to drive improvements in the US health care system. Consumers need reliable, comparative data to help make informed decisions and health care providers need standardized performance information to support their improvement efforts.

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The Hospital Quality Alliance advances measures that are endorsed by the National Quality Forum - a multi-stakeholder organization comprised of more than 350 organizations representing consumers, purchasers, health care professionals, providers, health systems, insurers, state governments, and federal agencies. By implementing consensus-based, nationally standardized performance measures, the HQA promotes a common, unified approach to measurement and reporting.

Hospital Compare contains performance information about more than 4,000 hospitals and data are updated quarterly in approximately March, June, September, and December. The HQA will continue to expand Hospital Compare to include additional measures that will help consumers assess hospital quality and value and make informed decisions about their care.

Publications

Hospital Quality Reporting in the United States: A Cost Analysis for the Hospital Quality Alliance. 2006
http://www.hospitalqualityalliance.org/hospitalqualityalliance/files/BAH1206.pdf

Envisioning the Roadmap for a National Hospital Quality Reporting 2006 White Paper
http://www.hospitalqualityalliance.org/hospitalqualityalliance/files/BAH606.pdf

Identifying Long Term Priorities For Hospital Performance Measures. A White Paper. Marsha Gold 2006
http://www.hospitalqualityalliance.org/hospitalqualityalliance/content/2006/2006oct-ahrqwhiteppr.pdf

Jha, A. K., Li, Z., Orav, E. J., and Epstein, A. M. (2005). Care in U.S. hospitals – The Hospital Quality Alliance program. The New England Journal of Medicine, 353 (3), 265-274.
http://www.commonwealthfund.org/usr_doc/849Jha_UShospitals_NEJM_ITL.pdf?section=4039

Jha, A. K., Orav, E. O., Li, Z., and Epstein, A. M. (2007). The inverse relationship between mortality rates and performance in the hospital quality alliance measures. Health Affairs, 26(4), 1104-1110. http://www.bvsde.paho.org/bvsacd/cd66/AshishKJha.pdf

Lindenauer, P. K., Remus, D., Roman, S., Rothberg, M. B., Benjamin, E. M., Ma, A., and Bratzler, D. W.(2007. Public reporting and pay for performance in hospital quality improvement. The New England Journal of Medicine, 356 (5), 486-496.
http://content.nejm.org/cgi/content/full/356/5/486

Shih, A. and Schoenbaum, S. C. (2007). Measuring hospital performance: The importance of process measures. New York, NY: Commonwealth Fund .
http://www.commonwealthfund.org/usr_doc/1046_Shih_measuring_hosp_performance_process.pdf?section=4039

Werner, R. M. and Bralow, E. T. (2006). Relationship between Medicare's Hospital Compare performance measures and mortality rates. Journal of the American Medical Association, 296(22), 2694-2702.
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Williams, S.C., Schmaltz, S. P., Morton, D. J., Koss, R. G., and Loeb, J. M. (2005. Quality of care in U.S. hospitals as reflected by standardized measures, 2002-2004. The New England Journal of Medicine, 353 (3), 255-264.
http://content.nejm.org/cgi/content/abstract/353/3/255

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Organization	**Humana**
Category	Incentive and Reward Programs
Source	www.humana.com/
Measure	Humana Provider Quality Rewards Program

Summary:

Humana Inc., headquartered in Louisville, Kentucky, is one of the nation's largest publicly traded health and supplemental benefits companies, with approximately 10.1 million medical members and 7.0 million specialty members. Humana is a full-service benefits solutions company, offering a wide array of health, pharmacy and supplemental benefit plans for employer groups, government programs and individuals.

Humana's Compare Hospitals tool and **Physician Profile** tool help plan members make informed decisions and increase transparency.

Compare Hospitals – Contains information to consider when deciding where to seek services for certain procedures or diagnoses. Consumers select measurement criteria and weigh the importance of each measurement, based on personal preferences, to create a custom report.

Measures include:

1. Outcomes, process and structure, and patient experience measures; includes quality and safety practices developed by The Leapfrog Group.
2. Outcome measures include mortality rates, complication rates, failure-to-rescue rate, numbers of patients treated, and length of stay.
3. Process measures used are supported by the Centers for Medicare & Medicaid Services (CMS) and the Hospital Quality Alliance.
4. Structure measures are based on two Leapfrog Group measures: Computerized Physician Order Entry and Intensive Care Unit Physician Staffing.
5. Patient experience results are based on the HCAHPS survey (Hospital Consumer Assessment of Healthcare Providers and Systems), and as published by CMS.

Physician Profile Tool - shows how often a doctor adhered to specific standards in treating a certain condition or providing preventive care, and shows data for other doctors in the same market who treat the same condition.

Methodology

Compare Hospitals - Data is sourced from currently available public data for facilities in all 50 states. Public data sources include various state and federal agencies and are provided by HealthShare Technology, Inc.

Physician Profile Tool - Information is based on Humana members' claims history and evidence-based measures developed by ActiveHealth Management.

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Humana Provider Quality Rewards Program

Humana's Provider Quality Rewards Program recognizes and rewards providers who have met targeted goals through additional rewards beyond their current fee schedule. There are different rewards models based on the complexity of the primary care practice. Physicians who meet the targeted criteria receive additional bonus payments.

The criteria are as follows:

- Physicians must meet National Committee for Quality Assurance (NCQA) Healthcare Effectiveness Data and Information Set (HEDIS) level targeted goals
- Additional rewards are available for those physicians who meet goals in the areas of pharmacy engagement, and patient engagement.
- Patient satisfaction

Measures include both process, structure, administrative and outcomes measures. Indicators are taken from national standard setting organizations such as National Quality Forum (NQF).

Humana also participates in several multi-payer Patient Centered Medical Home (PCMH) programs as well as piloting several practices as stand alone NCQA-PCMH certified physician practices. Humana has over 50,000 members in 64 practices in several medical home pilots across the country. Favorable clinical trends are emerging with improvements in hemoglobin A1c, blood pressure rates and LDL levels. Member satisfaction levels are also showing improvement. ER, Diagnostic Imaging and Inpatient metrics indicate cost improvements and decreased utilization. Pharmacy metrics including Generic Dispensing Rate are increasing at a faster rate in Humana's pilots.

Additionally, in order to support transition of practices into Medical Homes and advance use of Electronic Health Records (EHR), Humana has developed a pilot program with athenahealth to encourage practices to adopt EHR. Through partnership with athenahealth, Humana will be able to help subsidize 100 primary care practices in alignment with the HITECH Act to help enhance care delivery and increase administrative efficiencies. The overall goal is to maximize financial incentives for physician practice that promote quality, prevention and improved outcomes while supporting rapid and timely data exchange

Humana is also one of five Accountable Care Organizations pilots being conducted by Brookings-Dartmouth. Humana/Norton is leading the development with respect to:

- Standard set of quality measures
- Standard patient attribution model to define the population
- Self-funded employer participation
- Gain-share model completion

For additional information, please refer to the following link: http://www.soa.org/files/pdf/2010-spring-health-goldberg-86.pdf which contains information presented during the SOA '10 Health meeting held June 28-30, 2010. The information contained in that presentation is accurate as of June 30, 2010. Please note that some of the details contained in that presentation may have changed since June 30, 2010.

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Publications

Humana Provider Quality Rewards Program http://www.ncmedsoc.org/blog/index.php/archives/8165

Humana medical home – Metcare of Florida http://www.pcpcc.net/content/metcare-floridahumana-patient-centered-medical-home

Overview of all Humana medical home programs http://www.pcpcc.net/search/node/Humana

athenahealth medical home program

http://www.thestreet.com/story/10830671/athenahealth-and-humana-executives-discuss-the-new-humana-athenahealth-medical-home-ehr-rewards-program.html

http://www.humana.com/providers/whats_new/reward_physicians.aspx

Humana and Brookings-Dartmouth ACO pilot projects

http://www.ipalc.org/ACO_WG/ACO%20Learning%20Network%20October%206%20Slides.pdf

http://www.businesswire.com/news/humana/20101123005238/en/Norton-Healthcare-Humana-Launch-Accountable-Care-Organization

[entry updated 2010]

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Organization	**Integrated Healthcare Association (IHA)**
Category	Payment Reform
Source	http://www.iha.org/
Measure	**Episode of Care Payment Project** http://www.iha.org/pdfs_documents/related_resources/BundledEpisodePilot3292010.pdf

Summary

The Integrated Healthcare Association (IHA), a nonprofit, statewide health care leadership group in California composed of health plans, physician groups, hospitals, health care systems, purchasers, pharmaceutical, technologic, consumer and academic representatives. IHA promotes quality improvement, accountability, and affordability of health care in California. The IHA P4P program is the largest nongovernmental physician incentive program in the U.S. and includes 8 health plans (including Kaiser for reporting only) and over 229 medical organizations representing 35,000 physicians providing care for 10.5 million members. Other IHA programs include: value-based purchasing of medical devices; the measurement and reward of healthcare efficiency; and healthcare affordability.

Episode of care payments Project Pilot - to investigate whether bundled payments for specific medical procedures can improve health care efficiency, generate cost savings and improve health care outcomes. Project will test feasibility of episode of care payments for total knee or hip replacements. Later phases of the pilot will expand the types of procedures and include others areas of California. The episode of care project will test the feasibility of a reformed payment structure that establishes a single budget or fee for a procedure that involves multiple providers. The concept is being tested in commercial populations, with an objective of testing their ability to price episodes appropriately and to build the contracting and administrative infrastructure necessary to administer these complex payment arrangements. Some initial participants are also working on a separate mini-pilot for HMO and Medicare Advantage populations that will go live late in 2010.

Methodology

The initial focus is on commercial PPO patient populations in Los Angeles and Orange Counties, with plans to expand to HMO populations and to service areas across California in later phases. Pilot participants include several physician groups, five major health plans, and ten hospitals in southern California.

The pilot extends the bundled payment with warranty and evidence-based care pathways approach (pioneered by Geisinger) to populations outside integrated delivery systems, testing the feasibility of disseminating the methodology across different forms of organizational and contractual relationships between physicians and hospitals.

IHA will develop the framework for episode payment (episode definition, data analysis methodology, and standard quality measures) and support collaborative resolution of operational issues. Final parameters, including episode price, will be incorporated into existing contracts between health plans and providers. IHA will not intervene in price negotiations, nor attempt to identify or set a market price for the bundles. IHA does not intend to aggregate data across health plans, share charge or reimbursement information across competing health plans or providers, or publically report identifiable charge or quality metrics.

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Results

Target was to go live with episode payment beginning in August 2010.

Publications

The Commonwealth Fund Commission on a High Performance Health System. *The Path to a High Performance U.S. Health System: A 2020 Vision and the Policies to Pave the Way.* February 2009.

Health Care Financing Administration. *Medicare Participating Heart Bypass Center Demonstration, Extramural Research Report.* September 1998.

IHA Bundled Episode Payment Pilot (BEPP) FAQ's. July 2010
http://www.iha.org/pdfs_documents/medical_device/BPPFAQ_June2010.pdf
http://www.iha.org/pdfs_documents/news_events/04_26_10_BundledEpisodePaymentPressRelease.pdf

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Organization	**Ingenix**
Category	Proprietary/Analytics/Decision Support/Healthcare Data Technology
Source	http://www.ingenix.com/Products/Hospitals/PerformanceImprovementDataAnalysisSolutions/HCOM/
Measure	**Hospital Benchmarks** https://www.hospitalbenchmarks.com/index.aspx **Hospital Insights** http://www.ingenix.com/Products/Hospitals/PerformanceImprovementDataAnalysisSolutions/HospitalINSIGHT/

Summary

Ingenix is a global health care information, technology and consulting leader. Serve a diverse customer base within the health care community, including payers, physicians and hospitals, employers, pharmaceutical companies, consumers, property and casualty insurers, and government agencies. Invest significantly in research and development, and have acquired more than 50 companies over the past 10 years. Market facing brands include i3, Ingenix Consulting and The Lewin Group. Ingenix is a wholly-owned subsidiary of UnitedHealth Group.

Hospital Benchmarks

A customizable internet subscription service targeted towards hospital administrators that provides instant access to reliable data to make decisions regarding financial and operational performance. Nearly all U.S. hospitals are included - Data is available for all 50 states and 6,000+ hospitals. Search on hospital name, hospital provider number, state, city, zip code, or a combination of these terms. Five pre-defined reports provide four years of comparative information and cover hospital profile, availability of services, financial history, utilization, price and cost information.

HospitalBenchmarks.com helps:

- Identify which hospitals are contracting risks
- Identify the volume for the top DRGs and MDCs
- Calculate the price and costs for the top DRGs
- Compare state financial performance to hospitals
- Review balance sheets and income statements

HospitalBenchmarks.com provides detailed, hospital-specific information that is customizable by individual hospital including.

- Facility beds, Ownership and Control, Swing Beds, Accreditation, Alcohol/drug unit beds, Hospital Patient Days, Psychiatric Unit Beds, Hospital Discharges, Rehabilitation Beds, Medicare Days (%), Nursery Beds, Medicaid Days (%)
- Available services – types of clinical services available, whether the particular hospital provides that service, number of county hospitals providing that service
- Financial history – over 3 years, state average, detailed information on revenue, expenses, net results, balance sheet and income sheet data, along with 70 or so ratios that are calculated with this data.
- Utilization – over 3 years, state average, medical categories, outpatient surgical, Top 20 DRG's, Top 10 ambulatory procedures,

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- Price/Cost information – length of stay, charges, cost = all given at both hospital and national level x inpatient DRG's, outpatient surgical; specific procedure/room rates for semi-private room, ER visit, office visits, radiology, laboratory

Hospital Insights

Web-based benchmarking tool for creating comparative performance profiles for any Medicare hospital in the nation. Profiles provide a snapshot of how a hospital is performing in the areas of coding, compliance, reimbursement and outcomes.

Performance Benchmarking

Database enables production of graphical, comparative performance profiles in the areas of coding, compliance, reimbursement and outcomes for any Medicare hospital in the nation.

- Focuses billing and revenue optimization efforts
- Enhances performance monitoring programs
- Improves compliance
- extensive drill down tools to not only identify problem areas, but also to identify their source

Reporting includes - Coding and Compliance Reports, Reimbursement Reports and Clinical Outcomes Reports.

Methodology

Uses Medicare cost report data. This tool has been developed from one the most comprehensive health care database in the United States with detailed statistics on more than 6,000 U.S. hospitals.

Hospital INSIGHT draws data from multiple public data sources, including:

- Medicare Provider Analysis and Review File (MedPAR)
- Hospital Cost Report Information System (HCRIS)
- Medicare Outpatient Prospective Payment System (OPPS) claims file

Publications

Hospital INSIGHT™ Improve the Efficiency and Cost Effectiveness of Care. Product Brochure
http://www.ingenix.com/content/attachments/06-10202%20Hospital%20Insight.pdf

Revenue Cycle Management. Using data to benchmark coding and compliance performance helps improve revenue management. Product Brochure
http://www.ingenix.com/content/attachments/06_10384FacilityEditingRevCycleWP.pdf

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Organization	**Ingenix**
Category	Proprietary/Analytics/Decision Support/Healthcare Data Technology
Source	http://www.ingenix.com
Measure	**Hospital Quality** http://www.ingenix.com/Products/Payers/ConsumerTools/ConsumerHealthTools/IngenixHiQ/

Summary

Ingenix is a global health care information, technology and consulting leader. Serve a diverse customer base within the health care community, including payers, physicians and hospitals, employers, pharmaceutical companies, consumers, property and casualty insurers, and government agencies. Invest significantly in research and development, and have acquired more than 50 companies over the past 10 years. Market facing brands include i3, Ingenix Consulting and The Lewin Group. Ingenix is a wholly-owned subsidiary of UnitedHealth Group.

Hospital Quality

Part of a family of intelligent directories integrating provider performance information, Ingenix Hospital Quality complements ProviderLookup Online application. Supports consumer-driven health care by enabling health plan members choose a hospital by rating its cost, quality, and performance at the condition level.

Seeks to

- Manage medical expense trend—encouraging plan members obtain high-quality care by identifying the most effective and efficient providers.
- Create competitive advantage by offering clients superior Consumer Driven Health Plan support.
- Increase plan member satisfaction, loyalty, and portal traffic
- Enhance provider effectiveness and efficiency through competition.

Information offered includes

- Metrics on more than 150 conditions such as: Patient Severity, Volume, Complications, Mortality, Avoidable bed days, Length of Stay, Cost
- Highly accurate in-/out-of-network information
    - Demographic information for more than 5,000 hospitals including: Patient safety ratings, Services provided, Volume by condition, Accreditation

Methodology

Ingenix Hospital Quality employs well-established methodologies and a culmination of industry best practices to provide best-in-class value. Data is risk-adjusted for severity using 3M APR-DRG and proprietary methodologies which are fully documented along with data sources.

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Organization	**Ingenix**
Category	Proprietary/Analytics/Decision Support/Healthcare Data Technology
Source	http://www.ingenix.com/Products/Payers/ConsumerTools/EvidenceBasedHealthPAYCT/EBMConnect/
Measure	**Symmetry EBM Connect**

Ingenix is a global health care information, technology and consulting leader. Serve a diverse customer base within the health care community, including payers, physicians and hospitals, employers, pharmaceutical companies, consumers, property and casualty insurers, and government agencies. Invest significantly in research and development, and have acquired more than 50 companies over the past 10 years. Market facing brands include i3, Ingenix Consulting and The Lewin Group. Ingenix is a wholly-owned subsidiary of UnitedHealth Group.

Symmetry Suite is an integrated platform and consistent methodology with tools for clinical resource measurement, risk assessment, predictive modeling, and quality measurement. Components include **Symmetry EBM Connect** (tracks and incorporates national standards); **Episode Risk Groups** (focus on episodes of care as risk marker rather than services provided); **Episode Treatment Group; Pharmacy Risk Groups; Procedure Episode Groups** (new tool to measure surgical specialists with value-based measurement).

Summary - EBM Connect

A robust grouping engine built on nationally recognized treatment guidelines; flexible output files that easily allow integration of results with a variety of systems; and complete transparency of rules. Symmetry EBM Connect reviews nearly 500 components of care.

Covers important preventive screenings and 26 medical conditions that are common, costly, and for which there is strong evidence to support the documented guidelines. A panel of medical experts—including board-certified physicians, specialists and analysts—reviews nationally recognized evidence-based guidelines to create the rules logic in EBM Connect.

Methodology

EBM Connect compares the medical claim, pharmacy claim, lab result, and enrollment data from plan with evidence-based best practices for 30 clinical conditions and preventive measures enabling assessment of both provider and patient compliance in several areas.

Results

Output files from Symmetry EBM Connect can support reporting at the plan, physician, or patient levels. Plan level reports identify plan's best opportunities for quality and cost improvement by highlighting the areas of lowest guideline compliance.

Physician level reports show compliance levels for individual practitioners, creating a basis for provider profiling, tiered networks, and performance-based compensation.

Patient level reports help case managers identify individual intervention opportunities and provide invaluable insight for patient education.

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Publications

Symmetry EBM Connect Product Sheet -
http://www.ingenix.com/content/attachments/SymmetryEBMConnectproductsheet.pdf

Closing the Quality Gap – The Role of Evidence Based Medicine.
http://www.ingenix.com/content/attachments/ClosingGap_AHIP_12-04.pdf

Creating Quality Composite Scores: Challenges and Issues in Physician Quality Measurement
http://www.ingenix.com/content/attachments/29504_Decision_Support_EBM_WhitePaper_LO4.pdf

Symmetry Suite 7.0 Continuing a History of Innovation http://www.ingenix.com/content/attachments/EvolutionofSymmetry.pdf

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Organization	Ingenix
Category	Proprietary/Analytics/Decision Support/Healthcare Data Technology
Source	http://www.ingenix.com/Products/Payers/CareHealthManagementPAY/EnterpriseWideDecisionSupport/EpisodeRiskGroups/ http://www.ingenix.com/Products/Payers/CareHealthManagementPAY/DataAnalysisValueMeasurementSolutions/PharmacyRiskGroups/
Measure	**Symmetry Episode Risk Groups** **Symmetry Pharmacy Risk Groups**

Ingenix is a global health care information, technology and consulting leader. It serves a diverse customer base within the health care community, including payers, physicians and hospitals, employers, pharmaceutical companies, consumers, property and casualty insurers, and government agencies. It Invests significantly in research and development, and has acquired more than 50 companies over the past 10 years. Market facing brands include i3, Ingenix Consulting and The Lewin Group. Ingenix is a wholly-owned subsidiary of UnitedHealth Group.

Symmetry Suite is an integrated platform and consistent methodology with tools for clinical resource measurement, risk assessment, predictive modeling, and quality measurement. Components include **Symmetry EBM Connect** (tracks and incorporates national standards); **Episode Risk Groups** (focus on episodes of care as risk marker rather than services provided); **Episode Treatment Group; Pharmacy Risk Groups; Procedure Episode Groups** (new tool to measure surgical specialists with value-based measurement).

Summary - Episode Risk Groups

Episode Risk Groups use episodes of care as markers of risk rather than the diagnoses from individual medical encounters so the focus is placed on the key information describing a patient's underlying condition instead of the individual services. Enhanced predictive accuracy of ERGs can lead to a better understanding of variations in medical costs and practice and how they relate to differences in health risk.

It aims to achieve more valid, health-based payments, precise comparisons of provider performance, and the effective targeting of patients and populations.

- Measures member health risk with a rich mix of indices
- Can rate employer groups
- Compare provider performance
- Identify higher-risk patients
- Allocate resources more effectively

Summary - Pharmacy Risk Groups

Pharmacy Risk Groups is a risk assessment solution for organizations that do not have access to complete medical claims or want to perform a more timely assessment of a member's health risk. It provides risk measures for every member in a plan. PRG enables users to make timely predictions regarding those members highest in risk.

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Measure member health risk

- Calculate relative health risk scores for members
- Develop markers for pharmaceutical treatments
- Determine the key factors driving relative risk
- Better predict future health care costs
- Better predict future pharmaceutical use

Pharmacy-based health risk assessment system – uses prescription data and proprietary classification systems to create markers of health risk that may indicate a patient's disease prevalence, severity, and comorbidities. PRG allows health care analysts and actuaries to more accurately predict future health care costs and pharmaceutical use.

Methodology

Episode Risk Groups Risk assessment methodology uses basic inputs such as the diagnoses recorded on medical claims and demographic variables to predict health risk. ERG uses episodes of care as markers of risk to better measure member health risk.

Health risk assessment model with:

- Predictive ability
- Clinical relevance
- Incentive for efficient and quality care
- Retrospective and prospective models
- Administrative practicality
- Ability to restrict manipulation and gaming

Incorporates Symmetry's Episode Treatment Groups illness classification and episode building system.

Pharmacy Risk Groups create markers of risk in the areas of disease prevalence, severity, and comorbidities, combine these markers with others that describe a member's age and gender, and weight them appropriately to provide a measure of each patient's potential need for future health care services.

PRG uses prescription claims data and Symmetry's proprietary classification systems to create markers of health risk that can indicate a patient's:

- Disease prevalence
- Disease severity
- Disease comorbidities

These markers of risk, along with markers describing a member's age and gender, are weighted appropriately to provide a measure of each patient's potential need for future health care services.

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Publications

Symmetry Episode Risk Groups http://www.ingenix.com/content/attachments/SymmetryEpisodeRiskGroupsproductsheet.pdf

Symmetry Episode Risk Groups:A Successful Approach to Health Risk Assessment. White Paper
http://www.ingenix.com/content/attachments/Symmetry_ERG_7-0_WhitePaper.pdf

Product sheet - http://www.ingenix.com/content/attachments/PRG_ProductSheet_FINAL_110907.pdf

Symmetry™ Pharmacy Risk Group. A Pharmacy-Based Approach to Health Risk Assessment.
http://www.ingenix.com/content/attachments/SymmetryPRG_WhitePaper.pdf

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Organization	**Ingenix**
Category	Proprietary/Analytics/Decision Support/Healthcare Data Technology
Source	http://www.ingenix.com/Products/Payers/CareHealthManagementPAY/DataAnalysisValueMeasurementSolutions/EpisodeTreatmentGroups/ http://www.ingenix.com/Products/Payers/CareHealthManagementPAY/DataAnalysisValueMeasurementSolutions/SymmetryProcedureEpisodeGroups/
Measure	**Symmetry Episode Treatment Groups** **Symmetry Procedure Episode Groups**

Summary

Ingenix is a global health care information, technology and consulting organization. Ingenix serves a diverse customer base within the health care community, including payers, physicians and hospitals, employers, pharmaceutical companies, consumers, property and casualty insurers, and government agencies. It has significant investments in research and development and acquisitions in more than 50 companies over the past 10 years. Market facing brands include i3, Ingenix Consulting and The Lewin Group. Ingenix is a wholly-owned subsidiary of UnitedHealth Group.

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Last year, Ingenix decided to make many underlying details about their episode and procedure methodology more broadly available. Any interested stakeholder can now access, understand, and potentially improve our leading methodology for grouping episodes of care. Summaries are available on the web. Details are available through an unpaid registration process.

Methodology

Episode treatment groups

ETGs were introduced in the mid-1990s as a condition classification methodology that combines related services into a medically relevant and distinct unit describing a complete episode of care. The clinical richness of episodes of care and their reliance on information readily available from medical and pharmaceutical insurance claims make them a sound unit of analysis to support transparency, measure health care quality and cost, and provide incentives for higher quality care. Today, ETG-based products are licensed by more than 300 U.S. health care organizations, serving more than 75 percent of the insured population.

Identifying clinical episodes of illness and the services involved in their diagnosis, management and treatment has become a key business need of any health care organization. Episodes of care provide a valuable unit of analysis to measure health care and provide incentives for high performance. While ETGs have been widely used to understand and compare episodes of care across patients, providers, and populations; they also need to evolve to reflect the increasingly complex nature of care.

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Episode Treatment Groups® (ETG®) are an illness classification methodology, and are widely used for building episodes of care. They provide a standard unit of measurement for a wide variety of health care applications. They are a consistent and reliable measurement tool for gauging the provision and financing of health care services.

The white papers on the web explore concepts and methodology employed by the ETG software including episode severity measurement, dynamic clean periods, handling chronic episodes, and building episodes of care. In addition, this can be used for attributing episodes of care to the appropriate parties or individual providers.

ETGs

- Identify clinically homogenous risk-adjusted episodes of care regardless of treatment location or duration
- Organize claims/encounter data into intuitive units
- Identify effective medical interventions
- Quantify organization's performance

Procedure Episode Groups

Procedure episodes provide a valuable unit of analysis to measure health care and provide incentives for high performers. We seek to improve the understanding, utility, and quality of Procedure Episode Groups (PEG®) with an eye toward better and more consistent calculations of key surgical quality and cost metrics.

While PEGs provide a way to understand and compare surgical episodes across patients, providers, and populations, they also need to evolve to reflect the increasingly complex nature of care.

PEGs enable health care organizations to measure the value of health care provided by specialty surgeons by providing a consistent unit of measurement that accommodates specialty surgeon’s unique procedural focus. This includes complex analysis issues such as input and output data, physician attribution, appropriate time windows, and sequence-of-care analysis.

PEGs measure:

- Including surgical procedures, workup, and post-procedural services
- Providing a simple method for comparing providers by clinical specialties
- Creating the data for sequence-of-care analysis

Methodology

Financial and clinical metrics for analyzing evidence-based medicine. Ingenix offers a software platform, Symmetry 7.0, which streamlines analysis of ETGs and directly presents risk factors that contribute to case mix. Severity scores also provide the ability to distinguish between episodes, based on the patient's underlying condition, episode-specific comorbidities and demographics.

Further, Symmetry 7.0 calibrates the "normal" range of costs, outside of which episodes are deemed outliers. Using routinely collected claims or encounter data as input, the ETG software captures the relevant services provided during a patient's treatment, and organizes the claims/encounter data into meaningful episodes of care resulting in accurate identification of clinically homogenous episodes of care, regardless of treatment location or duration. ETGs enable mapping of patient care from a services perspective to a medical destination. ETGs have helped payers understand and compare episodes of care across patients, providers and populations for more than a decade and are evolving to reflect the increasingly complex nature of care.

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In 2009, Ingenix began offering participants in the patient's circle of care - care purchasers, governments, health plans, hospital systems and physicians - access to its ETG core content and methodologies for all 542 currently supported disease conditions. This online access forum invites participants to learn more about ETGs, but also to provide input on how to improve them. Interested parties can evaluate the methodology and content sets, including many examples of how claims are grouped into episodes and how ETGs are applied. They then can make suggestions and recommendations about how to improve the ETGs' clinical constructs.

Procedure Episode Groups

Unified Unit of Measurement for Surgical Procedures
Uses algorithms based on clinical guidelines and a complete understanding of the complexity of medical claims data, to facilitate accurate identification and thorough development of complete procedure episodes.

Evaluate Clinical Specialists
Ability to accurately assign procedure episodes to the clinical specialists who performed them.

Results

Based on inpatient and ambulatory care, including pharmaceutical services, the ETG classification system groups diagnosis, procedure, and pharmacy (NDC) codes into 574 clinically homogenous groups, which can serve as analytic units for assessing and benchmarking health care utilization, demand, and management.

Designed to provide a consistent and reliable measurement tool for gauging the provision and financing of health care services, ETG can serve:

- as an analytical unit for measuring and comparing the utilization and financial performance of health care providers (provider profiling)
- as a clinically useful unit for measuring health care demand
- as a basis for establishing disease management strategies, especially with the inclusion of pharmaceutical claims
  as a basis for evaluating whether physicians are adhering to treatment guidelines and protocols .

Procedure Episode Groups

New approach to understanding surgical procedures. Methodology for measuring value:

- More than 180 Procedure Episodes, categorized into six (6) Procedure Practice Categories
- Complete unit of analysis for surgical procedures
- Easily identify repeated procedures
- Provides the information for analyzing the sequence of care related to surgical procedures
- Combined Episode Flag to alert the presence of a competing Anchor Procedure
- Responsible surgical providers are grouped into pre-defined clinical specialties creating ideal conditions for value-based measurement.

Publications (summaries from web; additional details available with free registration)

ETG Product Sheet - http://www.ingenix.com/content/attachments/ETG_ProductSheet.pdf

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What Are ETG's? http://www.ingenix.com/content/File/What_are_ETG.pdf

ETG in Measurement. 2008 http://www.ingenix.com/content/File/ETGinMeasurement%20dd_BT_2_L01.pdf

Continuing a history of innovation
Evolution of Symmetry: http://www.ingenix.com/content/attachments/EvolutionofSymmetry.pdf

Symmetry Episode Treatment Groups. Measuring Health Care with Meaningful Episodes of Care. White Paper
http://www.ingenix.com/content/File/IX_PYR_CL_19960_ETG_WP.pdf

Symmetry Episode Treatment Groups. Issues and Best Practices in Physician Episode Attribution. White Paper
http://www.ingenix.com/content/attachments/Symmetry_EpisodeAttribution_WP_FINAL_112007.pdf

Leveraging the Power of ETG 7.0: New opportunities for health care information analysis. White Paper.
http://www.ingenix.com/content/attachments/IX_PYR_CL_23746_LeveragingSymmetry_WP.pdf

Background on PEGs

Symmetry Procedure Episode Groups Product Sheet
http://www.ingenix.com/content/attachments/Procedure%20Episode%20Groups%20Product%20Sheet.pdf

What are PEGs?
http://www.ingenix.com/content/file/What%20Are%20Procedure%20Episode%20Groups.pdf

PEG Approach and Methodology
http://www.ingenix.com/content/file/PEG%20Approach%20and%20Methodology.pdf

Assessing Surgical Specialists with Value-Based Measurement
http://www.ingenix.com/content/file/100-1778_PEG%20White%20Paper%202009-01-08_L03.pdf

[entry updated 2010]

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Organization	**Institute for Healthcare Improvement (IHI)**
Category	Accreditation/Certification
Source	http://www.ihi.org/ihi
Measure	**The Improvement Map** http://www.ihi.org/IHI/Programs/ImprovementMap/

Focus/Description

The Institute for Healthcare Improvement (IHI) is an independent not-for-profit organization helping to lead the improvement of health care throughout the world. Founded in 1991 and based in Cambridge, Massachusetts, IHI works to accelerate improvement by building the will for change, cultivating promising concepts for improving patient care, and helping health care systems put those ideas into action. Aim to improve the lives of patients, the health of communities by focusing on an ambitious set of goals adapted from the Institute of Medicine's six improvement aims for the health care system: Safety, Effectiveness, Patient-Centeredness, Timeliness, Efficiency, and Equity. We call this the "No Needless List".

The Improvement Map

Scheduled for full launch in September 2009. The IHI Improvement Map is an initiative to help hospitals make sense of countless requirements and focus on high-leverage changes to transform care. An online tool that distills the best knowledge available on the key process improvements that will lead to better outcomes for patients, it is an open, free of charge resource. Tool is used to create an overall improvement plan, set priorities and provides a knowledge base. Currently designed to support hospital care.

Follows on from previous IHI campaigns which concentrated primarily on reducing needless deaths and injuries (100,000 Lives and 5 Million Lives Campaigns) Improvement Map was developed to help hospitals improve patient care by focusing on an essential set of process improvements needed to achieve the highest levels of performance in the areas that matter most to patients.

Aim is to work with national experts and innovative organizations to develop, field test, and refine components of the Improvement Map. Effort is coordinated with priorities established by other national organizations.

The Improvement Map is chartered with 15 interventions, and will continue to develop as we learn the shortest routes to the best outcomes. Twelve interventions arose from previous campaigns which were rapid response teams, evidence based care for myocardial infarction, prevention of adverse drug events, prevention of central line infections, prevention of surgical site infections, prevention of ventilator-assisted pneumonia, prevention of harm from high-alert medications, reduction of surgical complications, prevention of pressure ulcers, reduction of MRSA, evidence-based care for congestive heart failure, and best-practices for hospital boards. Three additional areas recently added are:

- WHO Surgical Safety Checklist WHO Surgical Safety Checklist
- Prevent Catheter-Associated Urinary Tract Infections Prevent Catheter-Associated Urinary Tract Infections
- Link Quality and Financial Management: Strategies to Engage the Chief Financial Officer and Provide Value for Patients Link Quality and Financial Management: Strategies to Engage the Chief Financial Officer and Provide Value for Patients

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Assistance is provided by how-to guides; mentoring by 200+ experienced hospitals; local nodes or networks; discussion groups; virtual courses, videoconference series, and other resources, available via low-cost memberships.

Improvement Methods

- IHI also offer a range of tools and improvement methods to help organizations accelerate improvement. These include tools for gathering information (e.g., Walk-through); analyzing processes (e.g., Cause and Effect Diagrams, Pareto Diagrams, Run Charts, Flowcharts); gathering data (e.g., Sampling); working in groups (e.g., Affinity Grouping, Multivoting); and documenting your work (e.g., Project Planning Forms, Plan-Do-Study-Act Worksheets, Storyboards). An information exchange operates where organizations that have developed tools in the course of their improvement efforts — for example, successful protocols, order sets and forms, instructions and guidelines for implementing key changes — make them available on IHI.org for others to use or adapt in their own organizations.

- Professional development and skills training through information avenues such as an open school for health professions; professional development courses and year-long modules that teach skills like quality improvement, patient safety, teamwork, leadership, and patient-centered care.

- Established a leadership community to place improvement in the center of business improvement strategies and improve system level performance

- Strategic Initiatives – ongoing research program to test innovations. Current areas include appropriate use of specialty care; chronic care initiative; healthcare in developing countries; low-cost high-quality care in America; health partnerships; avoidable ER visits; patient safety programs; avoidable re-hospitalization; transforming bedside care; improving patient experience.

- Repository of information on research topics such as improvement, measures and changes in clinical areas including end stage renal disease; HIV/AIDS; last phase of life and so on.

Selected Publications

Martin LA, Neumann CW, Mountford J, Bisognano M, Nolan TW. *Increasing Efficiency and Enhancing Value in Health Care: Ways to Achieve Savings in Operating Costs per Year*. IHI Innovation Series white paper. Cambridge, Massachusetts: Institute for Healthcare Improvement; 2009

Griffin FA, Resar RK. *IHI Global Trigger Tool for Measuring Adverse Events (Second Edition).* IHI Innovation Series white paper. Cambridge, MA: Institute for Healthcare Improvement; 2009.

Publication list available at http://www.ihi.org/IHI/Results/WhitePapers/whitepapersindex.htm

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Organization	**Institute of Medicine**
Category	Standards Setting, Industry Organizations
Source	http://www.iom.edu/
Measure	**The IOM Health Care Quality Initiative** http://www.iom.edu/?id=18795

Summary

The Institute of Medicine serves as adviser to the nation to improve health. Established in 1970 under the charter of the National Academy of Sciences, the Institute of Medicine provides independent, objective, evidence-based advice to policymakers, health professionals, the private sector, and the public. The mission of the Institute of Medicine embraces the health of people everywhere. The Institute of Medicine (IOM) of the **National Academies** provides science-based advice on matters of biomedical science, medicine, and health. A nonprofit organization specifically created for this purpose as well as an honorific membership organization, the IOM was chartered in 1970 as a component of the National Academy of Sciences.

The Institute provides a vital service by working outside the framework of government to ensure scientifically informed analysis and independent guidance. The Institute provides unbiased, evidence-based, and authoritative information and advice concerning health and science policy to policy-makers, professionals, leaders in every sector of society, and the public at large

The Institute's work centers principally on committee reports or studies on subjects ranging from quality of medical care to the national smallpox vaccination program; from centers of excellence at the National Institutes of Health (NIH) to protecting the nation's food supply.

The Institute of Medicine's work is organized into seventeen topic areas: mental health, child health, food & nutrition, aging, women's health, education, public policy, healthcare & quality, diseases, global health, workplace, military & veterans, health sciences, environment, treatment, public health & prevention, and minority health.

The IOM Health Care Quality Initiative. Crossing the Quality Chasm.

In 1996, the Institute of Medicine (IOM) launched a concerted, ongoing effort focused on assessing and improving the nation's quality of care, which is now in its third phase. The first phase of this Quality Initiative documented the serious and pervasive nature of the nation's overall quality problem, concluding that "the burden of harm conveyed by the collective impact of all of our health care quality problems is staggering" (Chassen et al., 1998). This phase built on an intensive review of the literature conducted by RAND to understand the scope of this issue (Schuster) and a framework was established that defined the nature of the problem as one of overuse, misuse and underuse of health care services (Chassen et al).

During the second phase, spanning 1999-2001, the Committee on Quality of Health Care in America, laid out a vision for how the health care system and related policy environment must be radically transformed in order to close the chasm between what we know to be good quality care and what actually exists in practice. The reports released during this phase--***To Err is Human: Building a Safer Health System*** (1999) and ***Crossing the Quality Chasm: A New Health System for the 21st Century*** (2001)--stress that reform around the margins is inadequate to address system ills.

The series of IOM quality reports have included a number of metrics that illustrate how wide the quality chasm is and how important it is to close this gulf, between what we know is good quality care and what the norm is in practice.

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To Err is Human put the spotlight on how tens of thousands of Americans die each year from medical errors and effectively put the issue of patient safety and quality on the radar screen of public and private policymakers. The *Quality Chasm* report described broader quality issues and defines six aims--care should be safe, effective, patient-centered, timely, efficient and equitable--and 10 rules for care delivery redesign.

Phase three of the IOM's *Quality Initiative* focuses on operationalizing the vision of a future health system described in the *Quality Chasm* report. In addition to the IOM, many others are working to create a more patient responsive 21st century health system, including clinicians/ health care organizations, employers/ consumers, foundations/ research, government agencies, and quality organizations. This collection of efforts focus reform at three different overlapping levels of the system: the environmental level, the level of the health care organization, and the interface between clinicians and patients.

Selected Publications

Crossing The Quality Chasm: A New Health System For The 21st Century. Report Brief
http://www.iom.edu/Object.File/Master/27/184/Chasm-8pager.pdf

> This report from the committee on the Quality of Health Care in America makes an urgent call for fundamental change to close the quality gap, recommends a redesign of the American health care system, and provides overarching principles for specific direction for policymakers, health care leaders, clinicians, regulators, purchasers, and others. It offers a set of performance expectations for the 21st century health care system, a set of 10 new rules to guide patient-clinician relationships, a suggested organizing framework to better align incentives inherent in payment and accountability with improvement in quality, and key steps to promote evidence-based practice and strengthen clinical information systems. Analyzing health care organizations as complex systems, this report also documents the causes of the quality gap, identifies current practices that impede quality care, and explores how systems approaches can be used to implement change.

Learning Healthcare System Concepts V. 2008 Annual Report.
http://www.iom.edu/Object.File/Master/57/381/Learning%20Healthcare%20System%20Concepts%20v200.pdf

> The Institute of Medicine's Roundtable on Evidence- Based Medicine was established in 2006, in the face of growing awareness that care that is important is often not delivered, and care that is delivered is often not important— with significant health and economic consequences for Americans. The Roundtable is composed of leadership from key sectors—patients, health providers, payers, employers, manufacturers, health information technology, researchers, and policy makers—united in their commitment to work together on innovative approaches to transform the way evidence on clinical effectiveness is developed and used to improve health and health care in the United States. It aims to marshal emerging technology and expertise to **create a learning healthcare system** in which each patient care experience naturally reflects the best available evidence, and, in turn, adds seamlessly to learning what works best in different circumstances. Activities of the Roundtable include public meetings and seminars on key topics, as well as collaborative joint projects for innovation on central issues.

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Organization	Integrated Healthcare Association (IHA)
Category	State focus; Incentive/Reward Programs
Source	http://www.iha.org/
Measure	**California Pay for Performance Collaboration** http://www.ncqa.org/tabid/666/Default.aspx

Summary

The Integrated Healthcare Association (IHA), a nonprofit, statewide health care leadership group composed of health plans, physician groups, hospitals, health care systems, purchasers, pharmaceutical, technologic, consumer and academic representatives, that promotes quality improvement, accountability, and affordability of health care in California. Principal projects include pay-for-performance, medical technology assessment and purchasing, the measurement and reward of efficiency in health care, and prevention programs directed at obesity.

California Pay for Performance (P4P) is a statewide collaboration that creates the business case for physician organization (PO) quality. IHA helps California's Health Plans reward POs for performance in clinical care, information technology (IT) adoption and patient experience by providing a clear set of health plan expectations, using common metrics and public reporting. IHA's P4P program is the largest physician incentive program in the United States. Commenced in 2003. Measures physician group performance, provides incentives for improvement and health care IT adoption.

The program enables physician groups to receive financial rewards from participating health plans based on their performance on 20 measures in 3 domains:

- clinical care,
- patient experience, and
- use of information technology to support systematic evidence-based care.

Covers:

- P4P Clinical Measures
- Technology measures
- Patient experience (collected through the Consumer Assessment Survey) covers communication with doctors, overall rating of care, specialty care, timely access to care, care coordination.

Introduced a **new efficiency domain** (2007) which includes measures for episode-based and population-based group efficiency, efficiency by clinical area, and generic drug prescribing. Reporting performance on these measures forms the basis for supplemental payments to medical groups and Independent Practice Associations. Metrics include the process and outcome of care, patient satisfaction, and the adoption by medical groups of information technology.

Goal of the program is to drive improvements in clinical quality and the patient experience through: (1) a common set of measures; (2) a public scorecard; and (3) health plan incentive payments.

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Methodology

Produces a clinical scorecard for Californian Physician Groups. Performance measurement is in 3 areas: clinical, IT and patient experience. Weighted at clinical – 50%, patient experience 30% and IT 20%. Half the clinical indicators are for preventive services the others are for chronic care management. Measures are primarily process but evolving towards outcome measures. Payment made to physicians by health plan 6-9 months after completion of measurement year. All data is independently audited. Each plan determines its own budget and methodology for calculating bonus payments to the medical groups.

Added efficiency measures in 2007 information on cost and resource use. Total resources used to treat a specific patient population over a specific period of time will be compared across physician groups, and will be risk-adjusted for disease severity and patient complexity. This will give a more comprehensive assessment of physician group performance and allow an assessment of the value of healthcare spending.

NCQA, IHA's data aggregator for the P4P Program, coordinates, collects, aggregates, analyzes and reports both health plan and PO clinical quality measures and Information Technology Development data. These data are integrated with patient experience data and reported to help health plans determine the financial reward paid to participating California POs. NCQA also is technical advisor and consultant in P4P measure development, testing and implementation.

The IHA program has an ongoing evaluation funded by the California HealthCare Foundation and conducted by the RAND corporation and University of California, Berkeley.

Results

Use uniform measures to evaluate performance across multiple health plans, different physician groups, and patient populations. Payments vary by health plan reflecting differences in enrollment and maximum payment thresholds. In 2003, average member per month payments varied between $.09 and $.84pmpm

The adoption of a common measure set of performance measures used by all health plans as the basis for reward and recognition allows the P4P stakeholders to use collective market forces to drive excellence in patient care. The aggregation of data across all participating health plans significantly improves the validity and reliability of measurement while reducing the administrative burden on insurers and providers alike. 228 medical groups, representing 40,000 physicians and providing care for 12 million HMO members participate in the P4P initiative.

All P4P measurement decisions are made by multi-stakeholder P4P committees.

In the case of the IHA-sponsored program, reporting at the physician group level, in combination with aggregating data for common measures across competing health plans, has enhanced the ability to report across multiple measures and physician organizations. The patient population in the IHA-sponsored program includes more than 6 million HMO members enrolled in 7 participating health plans. The results are collected by plans and physician organizations, subjected to an audit, and submitted to the National Committee for Quality Assurance, which aggregates the information into a single dataset. This dataset is then used for public reporting by the California Office of Patient Advocate, a state agency, and by the individual health plans for calculating incentive payments. The power of aggregating data across health plans is a significant and important component of the IHA-sponsored program design.

A very high level of collaboration by 7 health plans (Aetna, Blue Cross of California, Blue Shield of California, CIGNA HealthCare of California, Health Net, PacifiCare and Western Health Advantage) and 225 physician organizations representing 35 000 physicians.

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Publications

Managing The Metric Vs Managing The Patient: The Physician's View Of Pay For Performance. Christopher B. Forrest, Victor G. Villagra, and James E. Pope. Feb 2006, Vol.12, No. 2 The American Journal of Managed Care, 83-85 http://www.ajmc.com/Article.cfm?Menu=1&ID=3078

Practical Design and Implementation Considerations in Pay-for-performance Programs. Thomas R. Williams Feb 2006, Vol.12, No. 2 The American Journal of Managed Care, 77-80

http://www.ajmc.com/files/articlefiles/AJMC_06febWilliamsEdl77to81.pdf

IHA. Advancing Quality Through Collaboration: The California Pay For Performance Program. A Report On The First Five Years And A Strategic Plan For The Next Five Years. February *2006.* www.iha.org/wp020606.pdf

IHA. Advancing Quality Through Collaboration: A Compendium Of California Healthcare Quality Improvement Projects. *December 2006.* www.iha.org/rchrpt/Iha%20v7%20final.pdf

Integrated Healthcare Association Announces New Efficiency Measure in Pay for Performance to Improve Healthcare Quality and Reduce Costs. Press Release. www.iha.org/pressrel/021507.pdf

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Organization	**The Johns Hopkins University**
Category	Proprietary/Analytics/Decision Support/Healthcare Data Technology
Source	http://www.acg.jhsph.edu/index.htm
Measure	**Adjusted Clinical Groups Case-Mix System (ACG)** http://www.acg.jhsph.edu/html/AboutACGs.htm

Summary

Developed and refined over 15 years by healthcare researchers at Johns Hopkins University, the ACG Case-Mix System helps organizations measure and account for variations in risk, or "illness burden," among the populations enrolled with providers.

Adjusted Clinical Groups, the actuarial-cell component of the ACG System, were originally developed as a case-mix adjustment measure for ambulatory populations (in response to CMS's classification system for inpatient care, DRGs). The models were originally known as Ambulatory Care Groups (ACGs) but later extended to incorporate inpatient as well as ambulatory diagnoses. Renamed as **Adjusted Clinical Groups**, the acronym remained ACG, but the meaning of the acronym changed to reflect the broader definition of the conditions and their sources. Adopted by more than 200 healthcare organizations in the U.S. and abroad that case-mix adjust more than 25 million covered lives, the ACG System is by far the most widely used and tested population-based, risk-adjustment system in the world. Used by leading managed care, government, and research organizations, ACGs are becoming the industry standard for profiling the global resource use of contracting physicians and developing risk-adjusted capitation and other risk-sharing arrangements.

The Johns Hopkins ACG methodology is used to:
- Predict high-risk users for inclusion in care management
- Determine government- or employer-budgeted payment to health plans
- Fairly allocate resources within programs
- Set capitation payments for provider groups
- Evaluate access to care
- Assess the efficiency of provider practices
- Improve quality
- Monitor outcomes

The Adjusted Clinical Groups are used to evaluate efficiency with respect to the total health experience of a risk-adjusted population over a given period of time. The ACG system uses automated claims, encounter, and discharge abstracts data to characterize the level of overall morbidity in patients and populations. This person-focused approach assigns each individual to a single mutually exclusive ACG category, defined by patterns of morbidity over time, age, and sex.

It measures the morbidity burden of patient populations based on disease patterns, age and gender. It relies on the diagnostic code information found in professional and hospital insurance claims or other computerized records. This provides the user with a more accurate representation of how people present to the healthcare system - as a constellation of morbidities, not as individual diseases. It creates a common language for healthcare analysis that benefits providers, purchasers and consumers of healthcare. The system has broad applicability within the government and private sectors of most healthcare delivery systems. In the United States and around the globe, public agencies and private organizations use ACGs for many risk-adjustment applications.

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Methodology

Model structure: Actuarial cell, predictive modeling suite (diagnoses, pharmacy or diagnoses + pharmacy used as input), additional tools to assist in moving from measurement to management.

Adjusted Clinical Groups are based on building blocks called Aggregated Diagnosis Groups (ADGs). Each ADG is a grouping of diagnosis codes that are similar in terms of severity and likelihood of persistence of the health condition over time. All diagnostic codes are assigned to one of the 32 ADG clusters. Since individuals can have more than one diagnosis, they may have more than one ADG. Individual diseases or conditions are placed into a single ADG based on five clinical dimensions:

- **Duration** - acute, recurrent or chronic
- **Severity** - minor/stable versus major/unstable
- **Diagnostic Certainty -** symptoms versus diseases
- **Etiology** - infectious, injury or other and type of resources likely to be used
- **Specialty Care** - medical, surgical, obstetric, hematology, etc & likelihood of use of specialty services

Over time, each person develops numerous conditions. Based on the pattern of these morbidities, the ACG approach assigns each individual to a single cell. Thus, an ACG captures the specific clustering of multi-morbidities experienced by a person over a given period of time, such as a year. The ACG methodology uses a branching algorithm to place people into one of 102 discrete categories based on their assigned ADGs, age and sex.

Describing morbidity is a useful adjunct to case-mix adjustment for helping to identify population subgroups that are especially in need of critical resources, for assessing the application of evidence-based medicine and physician performance, and for sorting patients who are likely to require extensive health care resources into targeted programs and interventions. To address these needs the ACG System incorporates a series of diagnosis-based disease markers (Johns Hopkins Expanded Diagnosis Clusters or EDCs) as well as a series of pharmacy based morbidity groups (Rx-MGs). Each generic drug/route of administration combination is assigned to a single Rx-MG. The specific clinical criteria used to assign medications to an Rx-MG category include:

- The primary anatomico-physiological system
- Morbidity differentiation
- Expected duration
- Severity of the morbidity type being targeted by the medication

These four clinical dimensions not only characterize medications by morbidity type, they also have major consequences for predictive modeling. Higher levels of differentiation, chronicity, and greater severity would all be expected to increase resource use. Elements of the ACG System have been combined to create diagnoses-based, pharmacy based and combination predictive models for identifying high risk individuals for case-management and potential improved accuracy for underwriting purposes.

Recent innovations (2010) have focused on moving from measurement to management and have incorporated additional data inputs (provider information, utilization data, procedure data) to explore coordination and pharmacy utilization issues.

Results

Typically, ACGs perform up to 10 times better than age and gender adjustment, which remains the most common risk-adjustment mechanism in the insurance industry.

Publications

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The Johns Hopkins ACG® System Bibliography http://www.acg.jhsph.org/public-docs/AcgBibliography.pdf

ACG Rx-PM *Rx-Predictive Model.* Fact Sheet http://www.acg.jhsph.edu/ACGDocuments/ACG%20Rx-PM%20Product%20Sheet.pdf

Reid, R. J., L. MacWilliam, et al. (2001). Performance of the ACG case-mix system in two Canadian provinces. Med Care 39(1): 86-99.

Reid, R. J., N. P. Roos, et al. (2002). Assessing population health care need using a claims-based ACG morbidity measure: a validation analysis in the Province of Manitoba. Health Serv Res 37(5): 1345-64.

The Johns Hopkins ACG® Case-Mix System Reference Manual Version 7.0. May 2005. JOHNS HOPKINS BLOOMBERG SCHOOL OF PUBLIC HEALTH. http://www.acg.jhsph.edu/ACGDocuments/RM_Version7_081905.pdf
The reference manual was designed to augment the *Technical User Guide* that accompanies the ACG Software. The objective is to provide theoretical information about the ACG System, its utilization and technology.

[entry updated 2010]

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Organization	**The Joint Commission (JCAHO)**
Category	Performance Ratings/Reports/Scorecards/Databases/Benchmarking
Source	www.jointcommission.org
Measure	**Improving America's Hospitals: The Joint Commission's Annual Report on Quality and Safety** http://www.jointcommissionreport.org/

Summary

JCAHO is an independent, not-for-profit organization that accredits and certifies more than 16,000 health care organizations and programs in the United States. Joint Commission accreditation and certification is recognized nationwide as a symbol of quality that reflects an organization's commitment to meeting certain performance standards. An organization's compliance with these standards and other accreditation or certification requirements is measured via a comprehensive evaluation process including an on-site survey at least every three years. Joint Commission standards address the organization's level of performance in key functional areas, such as patient rights, patient treatment, and infection control.

The Joint Commission provides accreditation services for the following types of organizations:

- General, psychiatric, children's and rehabilitation hospitals
- Critical access hospitals
- Medical equipment services, hospice services and other home care organizations
- Nursing homes and other long term care facilities
- Behavioral health care organizations, addiction services
- Rehabilitation centers, group practices, office-based surgeries and other ambulatory care providers
- Independent or freestanding laboratories

The Joint Commission also awards Disease-Specific Care Certification to health plans, disease management service companies, hospitals and other care delivery settings that provide disease management and chronic care services. The Joint Commission also has a Health Care Staffing Services Certification Program and is developing a certification program for transplant centers and health care services.

Improving America's Hospitals

Reports the overall performance of America's accredited hospitals on quality of care measures relating to the care provided to heart attack, heart failure, pneumonia and surgery patients - all common conditions for which Americans seek hospital based care.

Methodology

Quality measured identified jointly with clinicians, health care providers, hospital associations, performance measurement experts, and health care consumers.

Identified measures that reflect the best "evidence-based" treatments for heart attack, heart failure, pneumonia and surgical care patients. These measures are the product of The Joint Commission's Hospital Core Measure Initiative that sought to create

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a set of standard national measures that would permit comparisons across organizations. Subsequently, The Joint Commission collaborated with other organizations, including the Centers for Medicare and Medicaid Services (CMS) and the National Quality Forum (NQF), to align these measures with other measurement efforts to ease data collection efforts by hospitals and to ensure that the measure data were gathered and calculated in a consistent way in all organizations. These measures also are used for the "Hospital Quality Alliance (HQA): Improving Care through Information" initiative. In 2007, The Joint Commission required most hospitals to select three measure sets (in 2008, the requirement increased to four measure sets). Hospitals choose sets best reflecting their patient population and report on all the applicable measures in each of the sets they choose. Hospitals submit monthly data on all measures of performance within specific sets they choose to third-party vendors, which compile and provide data to The Joint Commission each quarter. Hospitals can obtain feedback reports through The Joint Commission's extranet.

For each of the three measure sets tracked continuously from 2002 to 2007 (heart attack care, heart failure care and pneumonia care), a composite measure was created. A composite measure is calculated by adding or "rolling up" the number of times recommended care was provided over all the process measures in the given measure set and dividing this sum by the total number of opportunities for providing this recommended care, determined by summing up all of the process measure populations for this same set of measures. The composite measure shows the percentage of the time that recommended care was provided. Composite performance measures are useful in integrating performance measure information in an easily understood format that gives a summary assessment of performance for a given area of care in a single rate. The three composite measures in this report are based on combining all of the process rate-based measures in the measure set. For a performance measure, each patient identified as falling in the measure population can be considered an opportunity to provide recommended care.

Results

Hospitals that performed well are those that consistently provide "evidence-based" treatments – practices demonstrated by scientific evidence to lead to the best outcomes

Publications

Improving America's Hospitals. The Joint Commission's Annual Report on Quality and Safety 2008
http://www.jointcommissionreport.org/pdf/JC_2008_Annual_Report-updated.pdf

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Organization	The Joint Commission (JCAHO)
Category	Accreditation/Certification
Source	http://www.jointcommission.org/
Measure	**National Hospital Quality Measures** (joint project between CMS and The Joint Commission) (refer also following entries for ORYX Initiative and Quality Check) http://www.qualitymeasures.ahrq.gov/summary/summary.aspx?ss=1&doc_id=6043&string http://www.jointcommission.org/AccreditationPrograms/Hospitals/ORYX/facts_oryx.htm

Summary

An independent, not-for-profit organization that accredits and certifies more than 16,000 health care organizations and programs in the United States. Joint Commission accreditation and certification is recognized nationwide as a symbol of quality that reflects an organization's commitment to meeting certain performance standards. An organization's compliance with these standards and other accreditation or certification requirements is measured via a comprehensive evaluation process including an on-site survey at least every three years. Joint Commission standards address the organization's level of performance in key functional areas, such as patient rights, patient treatment, and infection control.

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National Hospital Quality Measures

On July 1, 2002, accredited hospitals began collecting data on standardized—or "core"—performance measures. In September 2004, The Joint Commission and the Centers for Medicare and Medicaid Services announced that they are working together to precisely align current and future measures common to both organizations. These standardized common measures are referred to as **National Hospital Quality Measures**.

The public availability of performance measurement data permits user comparisons of hospital performance at the state and national levels.

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- set of process and/or outcome measures of performance;
- processes for collecting, analyzing and disseminating these measures from multiple organizations; and
- an automated database

National Hospital Quality Measures are considered to be integral to improving the quality of care provided to hospital patients and bringing value to stakeholders by focusing on the actual results of care. Measure alignment benefits hospitals by making it easier and less costly to collect and report data because the same data set can be used to satisfy CMS initiatives, the Hospital Quality Alliance (HQA), legislative, and Joint Commission requirements.

All of the National Hospital Quality Measures common to The Joint Commission and CMS are endorsed by the National Quality Forum (NQF) and are also used for the “Hospital Quality Alliance (HQA): Improving Care through Information” initiative. The Joint Commission intends to remain in alignment with CMS so that the data collection efforts for hospitals can continue to be consolidated and minimized. These measures are incorporated into the ORYX Initiative and reported on the Quality Check website of The Joint Commission.

Methodology

The framework currently incorporates five broad attributes for listed systems, and identifies specific criteria relating to each attribute. The attributes are:

- Performance measure characteristics
- Data collection and receipt
- Data quality
- Risk adjustment
- Technical reporting requirements

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Organization	**The Joint Commission (JCAHO)**
Category	Accreditation/Certification
Source	http://www.jointcommission.org/
Measure	**ORYX Initiative** http://www.jointcommission.org/AccreditationPrograms/Hospitals/ORYX/oryx_facts.htm http://www.jointcommission.org/AboutUs/Fact_Sheets/oryx_facts.htm **Quality Check** www.qualitycheck.org.

Summary

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ORYX Initiative

Introduced in February 1997, The Joint Commission's ORYX initiative integrates outcomes and other performance measurement data into the accreditation process. ORYX measurement requirements were originally intended to support Joint Commission accredited organizations in their internal quality improvement efforts as assessed through the onsite survey process. Expanded over time to embrace enhanced public reporting and accountability. Data publicly reported on The Joint Commission's Quality Check website facilitates user comparisons of hospital-specific performance and permits comparisons against overall state and national rates.

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The measures supplement and help guide the standards-based survey process by providing a more targeted basis for the regular accreditation survey, for continuously monitoring actual performance, and for guiding and stimulating continuous improvement in healthcare organizations. Some accredited organizations are required to submit performance measurement data on a specified minimum number of measure sets or non-core measures, as appropriate, to The Joint Commission through a Joint Commission listed ORYX vendor (also known as performance measurement systems). Data collected or submitted to The Joint Commission is reviewed during the on-site survey.

The ORYX initiative seeks to focus the accreditation process on patient care, treatment, and service issues. It is a key component used to change the accreditation process from a triennial snapshot of performance to one that reflects an ongoing picture of performance and continuous quality improvement. Primary focus is hospitals however behavioral health care, home care and long term care accredited organizations are encouraged to participate and submit ORYX performance measure data to The Joint Commission. For 2008, hospitals are required to collect and transmit data to The Joint Commission for a minimum of four core measure sets or a combination of applicable core measure sets and non-core measures from

- Acute myocardial infarction (AMI)
- Heart failure (HF)
- Pneumonia (PN)
- Pregnancy and related conditions (PR)
- Hospital-based inpatient psychiatric services (HBIPS) (Starting with October 1, 2008 discharges)
- Children's asthma care (CAC)
- Surgical Care Improvement project (SCIP)
- Hospital outpatient measures (HOP)

Quality Check

The Joint Commission's Quality Check® Web site is a comprehensive guide to health care organizations in the United States. Joint Commission accredited and certified organizations are easily identified by The Joint Commission's Gold Seal of Approval™. Quality Check includes each accredited organization's most recent Quality Report. This report provides: detailed information about an organization's performance and how it compares to similar organizations; the organization's accreditation or certification decision and the effective dates of the decision; programs accredited and certified by The Joint Commission, and programs or services recognized by other organizations; compliance with The Joint Commission's National Patient Safety Goals; special quality awards; and, for hospitals, performance on National Quality Improvement Goals.

Introduced in 1996, Quality Check is a web based search engine and comprehensive directory of around 15,000 health care organizations. Joint Commission-accredited, Joint Commission certified and organizations not accredited by the Joint Commission are listed. Searchable by city, state, name or zip code, up to six hospitals can be compared at the one time. Organizations displaying the Gold Seal of Approval are accredited by The Joint Commission. Quality Check is updated on a daily basis as necessary. Quality Reports were introduced in 2004. In 2008, Quality Reports for Joint Commission certified disease-specific care programs and certified health care staffing firms were made available on Quality Check.

Hospital performance measure data is available to any external third party for free via Quality Check. Two types of quality reports are available for organizations that are accredited or certified by The Joint Commission

- **Accreditation Quality Report** - information about an organization's performance and how it compares to similar organizations; the organization's accreditation decision and the effective dates of the accreditation award; survey dates,

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programs accredited by The Joint Commission, and programs or services accredited by other accrediting bodies; compliance with National Patient Safety Goals; special quality awards; and, for hospitals, performance on National Quality Improvement Goals.

- **Certification Quality Report** - provides information on a program's certification decision and the effective date, review dates; programs certified by The Joint Commission; certified locations of care; and compliance with National Patient Safety Goals (as applicable to disease-specific care certifications).

Publications

A Comprehensive Review of Development and Testing for National Implementation of Hospital Core Measures. http://www.jointcommission.org/NR/rdonlyres/48DFC95A-9C05-4A44-AB05-1769D5253014/0/AComprehensiveReviewofDevelopmentforCoreMeasures.pdf

Attributes of Core Performance Measures and Associated Evaluation Criteria http://www.jointcommission.org/NR/rdonlyres/7DF24897-A700-4013-A0BD-154881FB2321/0/AttributesofCorePerformanceMeasuresandAssociatedEvaluationCriteria.pdf

2009 Health Care Professional Quality Report User Guide http://www.jointcommission.org/NR/rdonlyres/EE7A17FB-2AB3-4B20-A343-7D2B7CBEF9CC/0/QC_Hospital_Prof_UG_012109.pdf

2008 General Public Quality Report User Guide http://www.jointcommission.org/NR/rdonlyres/4E452BCB-C4C1-415A-9792-ED676F19567C/0/QC_UserGuide_HAP_General_Public_73108.pdf

2008 Quality Report User Guide (General Public) http://www.jointcommission.org/NR/rdonlyres/8549BB32-D2EF-4E40-A3EE-2F9774E3F370/0/QC_User_Guide_Gen.pdf

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Organization	**The Joint Commission (JCAHO)**
Category	Accreditation/Certification
Source	http://www.jointcommission.org/
Measure	**Strategic Surveillance System (S3)** www.jointcommission.org/AccreditationPrograms/Hospitals/AccreditationProcess

Summary

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Strategic Surveillance System (S3)

Launched mid 2007 as complementary to Oryx. Software tool that helps accredited organizations identify and prioritize areas for improvement. S3 uses data The Joint Commission currently has, including:

- past survey findings
- ORYX® core measure data (for hospitals) integrate outcomes and other performance measurement data into the accreditation process.
- data from the Office of Quality Monitoring (complaints and non-self reported sentinel events)
- data from an organization's electronic application
- CMS MedPAR data (for hospitals)

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Currently, has one defined tool within S3™. The first tool available through S3 is the Performance Risk Assessment, which provides:

- Comparative performance data at the state and national levels
- Industry benchmarks that can be used to compare and set organization performance levels
- Performance measurement reports that can help support quality and safety improvement efforts (for hospitals)

Methodology

Tool 1 – Performance Risk Assessment – This tool assesses potential internal system risks by utilizing Priority Focus Process comparisons; rating comparative performance for all Priority Focus Areas and Clinical/Service Groups; and identifying specific data and findings that are contributing to specific results. Organizations will be able to analyze comparative performance against national, state and other comparative benchmarks by Priority Focus Area and Clinical/Service Groups and trend historical data to identify risks, set priorities for attention, and undertake appropriate improvements.

Results

Resulting data and information to drive quality and safety improvements, quarterly reports.

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Organization	**Leapfrog Group**
Category	Performance Ratings/Reports/Scorecards/Databases/Benchmarking
Source	http://www.leapfroggroup.org
Measure	**Hospital Quality and Safety Survey** • **Top Hospitals Survey** • **Highest Value Hospitals Award**

Summary

The Leapfrog Group is a voluntary program aimed at mobilizing employer purchasing power to alert America's health industry that big leaps in health care safety, quality and customer value will be recognized and rewarded. Among other initiatives, Leapfrog works with its employer members to encourage transparency and easy access to health care information as well as rewards for hospitals that have a proven record of high quality care.

The Leapfrog Hospital Survey. Public reporting initiative. Launched in 2001 and is in its fifth version. Annual, but hospitals expected to update throughout the year. Survey participants include acute-care, short-term general and children's hospitals. Leapfrog Group's efforts are national, but focused on a select set of 37 'roll-out' regions around the country.

Annually invites over 2,000 hospitals to participate. Leapfrog rates over 1,300 hospitals that together serve over half the US population. The results of individual hospitals on an array of quality, safety and efficiency measures endorsed by the National Quality Forum are available for free to the public.

Survey assesses hospital performance based on four quality and safety practices that are proven to reduce preventable medical mistakes.

1. **CPOE** – Computerized Physician Order Entry – computerized ordering of medications, tests and procedures.
2. **ICU Staffing –** personnel with special training in critical care.
3. **High Risk Treatments** – Evidence Based Hospital Referral - high volume and bets results for specific procedures, surgeries or conditions.
4. **Leapfrog Safe Practices Score** – Implemented 27 procedures to reduce preventable medical mistakes.

Methodology

Top Hospitals Survey

Voluntary survey provides the most complete picture of hospital quality and safety available in the U.S., and asks hospitals about their performance in four crucial areas, or "leaps":

- Use of CPOE by physicians and regular testing alert capabilities of medication error prevention software.
- Performance of hospitals on seven complex high-risk procedures and care for high-risk deliveries. Including Coronary artery bypass graft, percutaneous coronary intervention, abdominal aortic aneurysm repair, aortic valve replacement, pancreatic resection, esophagectomy, bariatric surgery.

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• Staffing of hospital intensive care units (ICUs) staffed by qualified specialists.

•Adoption of safety practices and policies advocated by the National Quality Forum to reduce harm and errors.

Additionally, the Leapfrog Hospital Survey asks hospitals to report progress on other important patient safety areas:

• Participating in other public reporting initiatives;

• Adhering to the Leapfrog "Never Events" policy;

• Measuring how efficiently resources are used for coronary artery bypass graft (CABG), percutaneous coronary interventions (PCI), acute myocardial infarction (AMI), and pneumonia;

• Helping patients avoid pressure ulcers and other hospital-related injuries.

Highest Value Hospitals

Based on a review of over 1,220 hospitals participating in the annual Leapfrog Hospital Survey. The Leapfrog Group is the first national quality organization to evaluate and identify hospitals providing excellent quality and at the same time demonstrating an appropriate use of resources for specific procedures.

Hospitals attracting this award are deemed "highest value" based on their efficiency scores – a combination of their quality and resource utilization scores - for coronary artery bypass graft (CABG), percutaneous coronary interventions (PCI), treatment of acute myocardial infarction (AMI), and pneumonia care. To make Leapfrog's Highest Value list, a hospital had to have a top efficiency of care score for at least three of these four procedures and conditions. Resource use was measured by the hospital's severity-adjusted average length of stay for that procedure, inflated by the readmission rate. Quality scores are based on meeting appropriate processes of care measures, and (for CABG and PCI) hospital volume and risk-adjusted mortality.

Results

Top Hospitals

Harvard study published June 2008 found that hospitals that perform well on the Leapfrog Hospital Survey have lower mortality and better quality of care than those who either didn't perform as well on the survey or who chose not to complete the survey (refer reference below).

Publications

Highest Value Hospitals Press Release - http://www.leapfroggroup.org/media/file/HVhospitals_final2.pdf

Top Hospitals Press Release - http://www.leapfroggroup.org/media/file/2008_Top_Hospital_Release.pdf

2008 Leapfrog Top Hospitals Description and Methodology.
http://www.leapfroggroup.org/media/file/2008_Top_Hospital_Methodology.pdf

Does The Leapfrog Program Help Identify High-Quality Hospitals? Ashish K. Jha, E. John Orav, Abigail B. Ridgway Jie Zheng, Arnold M. Epstein. *Joint Commission Journal on Quality and Patient Safety.* June 2008 34(6):318–25 http://www.commonwealthfund.org/usr_doc/Jha_doesleapfroghelpidentify_1143_itl.pdf

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An abstract is available at: http://www.ingentaconnect.com/content/jcaho/jcjqs/2008/00000034/00000006/art00003

Composite Measures for Predicting Hospital Mortality with Surgery. White Paper 2008. http://www.leapfroggroup.org/media/file/SurvivalPredictorWhitepaper.pdf

Development of Severity-Adjustment Models for Hospital Resource Utilization Data. White Paper. 2008. http://www.leapfroggroup.org/media/file/Severity-Adjustment_Model_Whitepaper_Final_080421.pdf

Purchaser Guide Value Driven Healthcare 2007

http://www.leapfroggroup.org/media/file/Employer_Purchaser_Guide_05_11_07.pdf

Ensuring Quality Health Plans: A Purchaser's Toolkit for Using Incentives http://www.leapfroggroup.org/media/file/Leapfrog-Ensuring_Quality_Health_Plans.pdf

Provider Incentive Models for Improving Quality of Care http://www.leapfroggroup.org/media/file/Leapfrog-Provider_Incentive_Models.pdf

Communicating About Incentives And Rewards A Primer. 2005 http://www.leapfroggroup.org/for_members/members_resources/incentives_and_rewards/ir_tools

Assessing The Value Of Incentives And Rewards Programs: A Primer 2005. http://www.leapfroggroup.org/media/file/business_case_primer.pdf

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Organization	**The Leapfrog Group**
Category	Incentive/Reward Programs
Source	http://www.leapfroggroup.org
Measure	**Hospital Rewards Program (previously Hospital Insights)** http://www.leapfroggroup.org/media/file/Program_Bulletin.pdf

Summary

The Leapfrog Group is a voluntary program aimed at mobilizing employer purchasing power to alert America's health industry that big leaps in health care safety, quality and customer value will be recognized and rewarded. Among other initiatives, Leapfrog works with its employer members to encourage transparency and easy access to health care information as well as rewards for hospitals that have a proven record of high quality care.

A value-based purchasing initiative. In 2005, The Leapfrog Group launched its first rewards program for hospitals. The Leapfrog Hospital Rewards Pilot Program measured hospital performance on five conditions for quality and efficiency using data submitted by hospitals via the Leapfrog Hospital Survey and their data vendors. Hospitals that demonstrated excellence or showed improvement along both dimensions were rewarded. Program re-designed for 2009 to include program features such as: simplified data collection methods, resource utilization measures, and flexible implementation structures.

The Leapfrog **Hospital Rewards Program** continues to measure hospital performance on a national scale using quality, resource use, and patient safety measures included in the Leapfrog Hospital Survey. The survey now serves as the sole data collection tool in the Leapfrog Hospital Rewards Program to identify hospital performance and determine rewards for attainment or improvement results.

Leapfrog Hospital Rewards Program (LHRP), a nationally standardized performance program that rewards hospitals for improvements in quality and resource utilization. Developed by healthcare experts, the new LHRP includes a standardized measure set and scoring methodology, in addition to customizable program features, that purchasers can license and implement in local markets Leapfrog Hospital Rewards Program is a hospital pay-for-performance program. An employer or health plan must license the program from The Leapfrog Group and invite a hospital to participate. This program replaces the Hospital Insights program.

Key clinical areas covered

- Heart Attack- (AMI)
- Angioplasty- percutaneous coronary intervention (PCI)
- Bypass surgery-coronary artery bypass graft (CABG)
- Pneumonia- community acquired pneumonia (CAP)
- Deliveries/newborn care

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Methodology

Utilizes the publicly reported results from the Leapfrog Hospital Survey to incentivize hospitals to achieve quality and resource utilization performance goals derived from national performance benchmarks. Off-the-shelf nationally standardized hospital performance program. Uses the Leapfrog Survey as a sole data reporting source. Incorporates quality and resource utilization components and recognizes performance efforts through **Attainment** and **Improvement** categories. Purchasers can customize program aspects.

Focus is on several key clinical areas and care delivery components in the Leapfrog Hospital Survey for quality and resource utilization measures:

1. **Quality** indicators show the extent to which hospital care conforms to evidence-based guidelines and achieves the desired outcomes.
2. **Resource Utilization** indicators show the hospital's average length of stay, adjusted for risk and readmission rate, for selected clinical areas and procedures.
3. **Efficiency** is denoted by a hospital's Quality score and Resource Utilization score. The efficiency score represents the intersection of Quality and Resource Utilization and is used to determine a hospital's reward level.

The Quality score represents 65% of a hospital's overall Efficiency score. Included in Quality Score are:

- **Common Acute Conditions (CAC):** AMI and Pneumonia
- **Evidence-Based Hospital Referrals (EBHR):** CABG, PCI, AVR, AAA, Pancreatectomy, Esophagectomy, Bariatric surgery, High-risk newborn delivery
- **Hospital-Acquired Conditions (HAC):** Pressure ulcers and Injuries occurring during hospital stay
- **Computer Physician Order Entry (CPOE)**
- **ICU Physician Staffing (IPS)**
- **Safe Practices**
- **Never Events Policy**

Resource Use accounts for 35% of the hospital's overall Efficiency score. Included in resource use score are

- **Common Acute Conditions (CAC):** AMI and Pneumonia
- **Evidence-Based Hospital Referrals (EBHR):** CABG and PCI
- **Hospital-Acquired Conditions (HAC):** Pressure ulcers and Injuries occurring during hospital Stay

Overall Efficiency Score - A hospital's Quality and Resource Use scores contribute to the overall Efficiency score. The Efficiency score is used to determine whether a hospital is placed into the Attainment category or Improvement category.

The **Attainment category** is reserved for hospitals that are considered "top performers" when compared to other hospitals nationwide. Their excellent performance enables these hospitals to receive special recognition and rewards, which is determined by payers in their market.

The **Improvement category** is composed of hospitals that have not attained top-tier performance but demonstrate improvement in Quality and/or Resource Use compared to their previous performance levels. Payers in the market will determine the types and amounts of rewards for these hospitals to encourage further improvement.

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Results

Rewards Options include contract rate adjustment, patient shift, public recognition, pre-set dollar amount and shared savings dollar amount

Publications

Hospital Rewards Program Bulletin http://www.leapfroggroup.org/media/file/Program_Bulletin.pdf

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Organization	**Maine Health Management Coalition**
Category	State focus; Performance Ratings/Reports/Scorecards/Databases/Benchmarking
Source	http://www.mehmc.org/ www.mhmc.info.
Measure	**Pathways To Excellence Project** http://www.mhmc.info/about/faq.php

Summary

Maine Health Management Coalition (MHMC) is an employer-led partnership among multiple stakeholders working collaboratively to maximize improvement in the value of healthcare services delivered to MHMC members' employees and dependents. The Pathways to Excellence projects are focused on reporting credible and fair measures that are based on evidence based medicine, reflect best practice, and are under the control of the clinicians and organizational leaders. These measures are meant to be used to measure the safety practices in hospitals and the quality of primary care practices; recognize high quality practices and hospitals that have given patient safety a high priority; and serve as a basis for financial rewards from self-insured employers and health plans

Pathways to Excellence = three public reporting initiatives of the Maine Health Management Coalition (MHMC). MHMC currently publicly reports quality data on primary care practices and hospitals. Similar to Bridges to Excellence and Integrated Health Associates, California.

1. **The Pathways to Excellence - Primary Care Initiative** measures, reports, and improves the quality and value of healthcare in Maine at the adult and pediatric primary care level.
   Aims to:
   - Get information concerning the quality of care of primary care physician practices out to employees
   - Reward practices that demonstrate high quality care

2. **Pathways to Excellence - Hospital Measurement and Reporting Initiative**
   Measures and reports on the performance of Maine hospitals in the areas of patient experience, patient safety, and select clinical quality. Similar to Leapfrog, Hospital Compare, and the Joint Commission.
   Aims to:
   - Create a robust dashboard of measures comparing the performance of Maine hospitals with each other and, where available, with regional and national performance comparisons
   - Publicly report those measures to inform employer and employee healthcare decisions

Whenever possible, the hospital performance measures used are those that have been endorsed and are already being reported by leading national organizations such as the National Quality Forum, Leapfrog, CMS and The Joint Commission.

3. **Pathways to Excellence—Specialty Care Initiative -** commenced in 2007. Steering committees are developing measures for seven specialty areas:
   - Cardiology
   - Cardiothoracic Surgery
   - Gastroenterology
   - General Surgery

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- Neurosurgery
- Orthopedics
- Radiology/Pathology

MHMC will start to publicly report some specialist quality measures late in 2008.

Methodology

Receiving recognition from a national entity such as BTE or NCQA will be the only way to achieve a blue ribbon for PTE in 2009. Because of the considerable momentum nationally for comprehensive metrics and performance measures, the MHMC Board decided that the Coalition should be taking advantage of the national measures and reducing the reliance on "home-grown" metrics. Moving to national metrics is particularly appealing to multi-state employers and payors and will give physician practices an advantage in the market. Moving to national measures will also give practices an opportunity to submit for recognition on an ongoing basis rather than just once a year. Predict that adopting national measures will ultimately reduce duplicative reporting efforts and improve the standardization and efficiency of clinical performance measurement and public reporting efforts across the state.

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Organization	**Massachusetts Group Insurance Commission (GIC)**
Category	State focus; Incentive/Reward Programs
Source	http://www.commonwealthfund.org/usr_doc/1053_Alteras_value-driven_Massachusetts_case_study.pdf?section=4039
Measure	**Clinical Performance Improvement (CPI) Initiative** http://www.mass.gov/gic/annualreportb.htm#accelerate

Summary

The Group Insurance Commission provides high value health insurance and other benefits to state, housing and certain other authorities' employees, retirees, and their survivors/ dependents. The GIC also provides health-only benefits to participating municipalities' employees, retirees, and their survivors/ dependents.

CPI initiative - a tool to measure the performance of doctors and hospitals and to recognize doctor and hospital excellence via performance-based payments and/or plan redesigns that encourage selection of better performing providers. Quality-based system of care that integrates data, performance measures, plan design, technology and consumer information.

The GIC's CPI Initiative seeks to improve health care quality and promote cost-effectiveness through increased transparency. Participating health plans were required to provide their entire book of business claims (de-identified) to be aggregated and analyzed for relative provider efficiency and quality. Health plans used this information to develop benefit designs in which members are given modest co-pay incentives to use better performing doctors and, in some plans, hospitals.

Physician tiering was introduced in July, 2006. As of 2008, all of the GIC's Non-Medicare plans, including the Indemnity Basic plan have introduced physician tiering. All Massachusetts doctors in the Indemnity Basic plan were tiered. Additional specialists were tiered in two of the GIC's major PPO plans. Specialist tiering was added to one of the GIC's HMOs, and another HMO merged its two plans and introduced physician tiering.

Methodology

Tiered products by combining efficiency data with quality data. Data are run through Episode Treatment Group (ETG) software, which identifies and classifies an entire episode of care for each patient, including inpatient, ambulatory, outpatient, and pharmacy claims. Mercer provides efficiency scores to the plans. Resolution Health, Inc. provides quality indicator information to the plans. Efficiency and quality data were developed in 2005 using data from 3years of statewide BOB claims data, provider files, and member files from each of the six contracted health plans. RHI selected quality measures in concert with the specific provider types analyzed in the efficiency analysis. Currently, 79 quality measures, all based on nationally accepted guidelines, are involved in the analysis.

Chronic conditions - assign the episode and its attendant costs to the physician responsible for 25 percent or more of the episode's physician costs. Claims data are run through the Symmetry5 software grouper in order to group the claims into complete episodes for the members. The episodes allow the analytic team to review an entire set of treatments for a condition, as opposed to individual treatments. The episode costs are then re-priced to remove specific contract differences from the equation, allowing analysis to be conducted on relative *resource* utilization (as opposed to price). The episodes are then attributed to a specific physician. Finally, an Efficiency Index is created. The index reflects the relationship between actual and average costs for a provider. It is important to note that providers are compared to their peers—thus, like providers are

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compared to like providers. Costs are broken down into a number of different services, such as management, surgery, facility, pharmacy, etc., depending on the specialty.

Tiered hospital networks implemented in Fiscal Year 2004. Tiered physician networks were introduced in Fiscal Year 2007. Tiered physician networks evolved to a three-tier structure for Fiscal Year 2009. Physicians for whom there is not enough data and physicians who are in specialties that are not tiered by the plan are assigned the Tier 2 co-pay.

Results

This program identifies differences in care and rewards employees, through modest co-pay incentives, for using better performing doctors, and in some plans, hospitals.

The GIC's Clinical Performance Improvement Initiative, begun in the fall of 2003, seeks to:

- Maintain a comprehensive level of benefits
- Improve health care quality and safety
- Control cost increases for members and for the Commonwealth
- Maintain participants' choice of providers
- Educate members about differences in provider value and quality
- Encourage members to become informed health care consumers

In FY08, 150 million de-identified health claims representing 2.3 million lives and seven million complete episodes of care were analyzed, making this one of the largest multi-payer analytic databases of its kind being used in this manner.

Publications

Resolution Health, Inc.'s Physician Quality Measures For GIC Clinical Performance Improvement (CPI) Initiative. August 24, 2007 http://www.mass.gov/gic/annualenroll2008/RHI_Measures.pdf

Annual Report 2008 http://www.mass.gov/gic/pdf/ARFY08.pdf

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Organization	Massachusetts Health Care Quality and Cost Council (HCQCC)
Category	State focus; Summary for Public; Consumer; Infomediary
Source	http://hcqcc.hcf.state.ma.us/
Measure	**Myhealthcareoptions** www.mass.gov/myhealthcareoptions

Summary

Established in 2006 to develop and coordinate the implementation of health care quality improvement goals that are intended to lower or contain the growth in health care costs while improving the quality of care, including reductions in racial and ethnic health disparities.

Myhealthcareoptions

Interactive website designed to promote transparency in the health care industry launched in December 2008. Part of the ongoing, multipronged efforts to control rising health care costs and ensure that residents of Massachusetts can get the best care available. The first of its kind in the nation to offer consumers, providers, employers, and policymakers comparative cost and quality information about medical procedures performed at Massachusetts hospitals and outpatient facilities.

Methodology

Website created by taking ratings from other recognized organizations and by calculating some new ratings from our own Massachusetts health care database

The HCQCC gets some of its data from established health care organizations that perform data collection and analysis, including:

- US Centers for Medicare and Medicaid Services (CMS) for hospital quality ratings on heart attack, heart failure, pneumonia, and surgical care.
- The Leapfrog Group for ratings of patient safety and quality for certain services (aortic valve replacement, weight loss surgery, and neonatal ICU care). Hospitals complete Leapfrog's patient safety survey based on their assessment of their own practices. Leapfrog uses this survey information to assess the hospital's patient safety practices.
- The Massachusetts Division of Healthcare Finance and Policy for a complete database of all hospital admissions in MA.
- Massachusetts Department of Public Health's Data Acquisition Center (Mass-DAC) for angioplasty and bypass surgery death rate and volume.

The HCQCC uses **measures of quality** that have been created by established organizations and are widely used. They include:

- US Agency for Healthcare Research and Quality for standardized measures of mortality
- US Centers for Medicare and Medicaid Services (CMS) for "process of care" measures, such as whether patients are receiving all needed care for their condition.
- The National Quality Forum which endorses measures of quality, safety and efficiency of care.

Cost calculations:

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The Health Care Quality and Cost Council calculated costs per case from their database of commercial health plan claims. Cost is based on the actual price that health plans pay hospitals. These are median dollar amounts meaning that half of the cases at this hospital cost more and half cost less. Costs are adjusted for severity of illness (how sick patients are).

> To make fair comparisons among hospitals treating a variety of different patients, adjust inpatient costs for severity of illness. This is done by every patient claim in our database being rated for severity of illness on a scale of 1 (minor) to 4 (extreme). The claims are rated using APR-DRG (All Patient Refined-Diagnosis Related Groups) software by 3M Health Information Systems.
>
> Each inpatient claim in the database is assigned a severity level. The average cost of caring for patients at each of the four severity levels across all hospitals in Massachusetts is then calculated. Then, for each hospital, a predicted average cost for each severity level, based on the state-wide averages is calculated. The hospital's actual cost are compared to the predicted average cost, and adjusted for the difference.

Diagnostically Related Groups (DRGs). Inpatient claims are grouped using 3M's All Patient Refined (APR-DRG) grouper software, version 24.

Minimum Sample Size. Display cost data for hospitals that had 30 inpatient discharges or 30 outpatient visits for the condition or procedure. Display summary ratings using dollar signs ($$$) for conditions and procedures where at least 10 Massachusetts hospitals provided at least 30 discharges or 30 visits.

Hospital Systems. Some hospital systems provide hospital care at more than one campus. Shows measures for each campus when available.

Statistical Significance is tested the 0.05 significance level.

Publications

Analysis of Quality and Cost Measures and Display for the MyHealthCareOptions Website. Massachusetts Health Quality Partners 2009, Task 1 Final Report
http://www.mass.gov/Ihqcc/docs/2009_04_Website_Report.pdf

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Organization	**Massachusetts Health Quality Partners (MHQP)**
Category	State focus; Performance Ratings/Reports/Scorecards/Databases/Benchmarking
Source	http://www.mhqp.org/
Measure	**Quality Reports** http://www.mhqp.org/quality/clinical/cqMASumm.asp?nav=032400

Summary

Massachusetts Health Quality Partners (MHQP) is an independent agency that analyses the quality of healthcare in Massachusetts. MHQP aims to provide reliable information to help physicians improve the quality of care they provide their patients and help consumers take an active role in making informed decisions about their health care. Focus is on clinical data that compares side-by-side how different medical groups across Massachusetts treat the same type of illness or health condition and on the patient experience which is compared across the state.

The Massachusetts Health Quality Partners is a broad-based coalition of physicians, hospitals, health plans, purchasers, consumers, and government agencies working together to promote improvement in the quality of health care services in Massachusetts. MHQP was first established in 1995 by a group of Massachusetts health care leaders who identified the importance of valid, comparable measures to drive improvement.

MHQP quality healthcare data has been shared with doctors and health plans since 2004. Since 2005, MHQP has shared this data with patients, family members, and the general public. Database can be searched by geography, medical group or doctor's office. MHQP does not report on individual doctors.

Two types of quality healthcare data are analyzed:

1. **Clinical data for medical groups -** This looks at how patients are treated by doctors from all offices in a medical group. MHQP does not compare doctors side-by-side, as the numbers may be too small to be accurate.
2. **Patient experiences in doctors' offices -** This looks at how patients assess all (not just one) of the doctors working in the same office.

Methodology

Focus is on measuring frequency that primary care doctors provide patients preventive care services such as breast cancer screening, chronic disease care, and diabetes control. These measures are evidence-based and nationally recognized. Uses data is from the HEDIS measure set. Reports information on healthcare services received by members of five Massachusetts health plans: Blue Cross Blue Shield of Massachusetts, Fallon Community Health Plan, Harvard Pilgrim Health Care, Health New England, and Tufts Health Plan.

These members represent more than half of all Massachusetts residents who have commercial health insurance. Does not cover services received by patients without health insurance, or those with Medicaid, Medicare, or insurance companies not listed above.

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Data is sourced from health plans and utilizes doctors and pharmacies' claims for services given to the plan's members in 2006. Data is validated by external sources. State Performance Rate and National Performance Rates as benchmarks. Uses HEDIS measures of clinical performance. Measures. Quality Compass 2007 is the source for national scores. MHQP uses these rates because it is the only nationwide data on clinical HEDIS rates.

A star rating system is used to indicate performance - If a medical group had 30 or more patients eligible for the service being measured, the group received 1 star. If a medical group's performance was better than one of the three benchmarks, the group was awarded a second star; if better than 2 benchmarks, it was given 3 stars; and if better than all 3 benchmarks, the group received 4 stars.
MHQP measures performance at three different levels:

1. **Massachusetts Physician Networks**: defined as large networks that contract on behalf of multiple physicians groups, e.g., Partners Community Health Inc., Fallon Clinic, and Baystate Health System.
2. **Medical Groups**: defined as groups of 3 or more physicians that may be part of a Physician Network or fully independent. If independent, they may be a totally integrated group or may be composed of smaller practices that join together for a variety of purposes including administrative and contracting functions.
3. **Practice Sites**: defined as groups of 3 or more physicians that have one practice location and that are affiliated with an independent Medical Group or with a Medical Group that is part of a Physician Network.

Measurement

The HEDIS 2007 measures reported at the medical group level by MHQP include:

- Asthma Care:
- Depression Care for Adults (Age 18 and older):
- Diabetes Care for Adults (Ages 18-75):
- Diagnostic and Preventive Screenings:
- Heart Disease and Cholesterol Management:
- Pediatric Care:
- Women's Health:
- Diabetes Care for Adults (Ages 18-75):
- Adult Preventive Care
- Heart Disease and Cholesterol Management

Performance Measures

Each performance measure is calculated based on a "numerator" that represents the number of people who *actually received* a recommended health care service divided by a "denominator" that represents the number of people who *should have received* that health care service.

Data Sources and Measurement Methods

The five participating health plans provided the HEDIS data. The health plans aggregated their administrative data (combination of claims/billing information) at the individual physician level prior to submission to MHQP. All measurements were attributed to the enrollee's primary care physician (PCP) as of December 31st of the performance year; however, a numerator event delivered by any eligible health care provider was credited to the enrollee's PCP.

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Ninety-five percent confidence intervals were calculated for each measured rate. Statistical tests were used to assess whether a group's adjusted rate differed significantly from specific benchmarks.

- The national median (50th percentile) performance rate for the measure by all health plans reporting the measure to NCQA
- The national 90th percentile performance rate for the measure by all health plans reporting the measure to NCQA
- The Massachusetts statewide rate for all physicians for whom the participating health plans reported the measure to MHQP

Scoring Performance

For each measure where a medical group has a sufficient number of eligible patients (at least 30) the group received one star. For each measure where a group's performance was statistically significantly better than one or more of the three benchmarks, the group was awarded additional stars. If a medical group performed statistically better than all three benchmarks, that medical group received four stars, the maximum number.

Patient Experience

Between September and October of 2007, 51,000 adult patients and 20,000 parents of pediatric patients responded to an MHQP survey about their experiences with primary care during the preceding year. The survey asked patients about aspects of their health care experience that are closely linked to quality, the strength of the doctor-patient relationship and access to care.

Areas covered were:

- Care from Personal Doctors
- How Well Doctors Communicate with Patients
- How Well Doctors Coordinate Care
- How Well Doctors Know Their Patients
- How Well Doctors Give Preventive Care and Advice
- Care and Service from Others in the Doctor’s Office
- Getting Timely Appointments, Care, and Information
- Getting Quality Care from Other Doctors and Nurses in the Office
- Getting Quality Care from Staff in the Doctor’s Office

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Organization	**Med-Vantage**
Category	Proprietary/Analytics/Decision Support/Healthcare Data Technology
Source	http://www.medvantage.com/
Measure	**P4P Program Design, Measurement, Surveys** **HealthSmart Enhanced Provider Directory** **HealthSmart Exchange Physician Suite** **HealthSmart Designer Suite** http://www.medvantage.com/products.htm http://www.medvantage.com/services.htm

Summary

Founded in 2001, Med-Vantage is a consulting and healthcare informatics company specializing in balanced scorecard applications that improve health care cost and quality. The company delivers a full range of services, including strategic advice on program design, provider engagement strategies, quality and efficiency metrics and reporting systems for high performance networks, P4P payout models, public scorecards and decision support applications for health plan members. Clients include more than 20 health plans, integrated health care systems, and physician organizations.

Proprietary rules engine and software applications cover product design and cost of care, quality, and statistical scoring methods. Applications include

- Pay for Performance
- High Performance Networks
- Consumer Transparency
- Provider Profiling
- Care Management
- Performance Measure Creation and Publication

For Consumers

- **HealthSmart Enhanced Provider Directory** helps consumers find high quality, affordable providers for their specific treatment needs. Enables search by likely cost of conditions, surgeries and procedures and quality and search for physicians by condition, surgery, procedure or symptom and other search criteria like top rated, specialty, accepting new patients and board certification.
- **HealthSmart Summary Statement** summarizes and simplifies benefit usage while providing actionable personalized suggestions for future care choices. Uses technology that enables patients to search for physicians by condition, surgery and procedure, and to score physicians on quality and cost of care measures.

For Providers

HealthSmart Exchange Physician Suite is a web-based provider performance profiling, scoring and patient registry application that supports reduction in practice variation and transparency.

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- **Measures Exchange** collects vital feedback from physicians on measures and socializes the evidence for recommended practice.
- **Outcomes Exchange** collects patient level outcomes data and supports outcome based performance management. Web-based application that collects clinical values directly from physicians. Supports pay for performance programs and the collection of data for HEDIS Hybrid measures.
- **Insight Exchange.** A physician facing application that enables health plans to support quality and cost improvement among network physician practices by

    - Scoring and displaying physician practice performance on key metrics (cost and quality of care measures (national consensus sets), clinical IT adoption, patient experience) by specialty, provider group, business line and region.
    - Identifying non-adherent patients in patient registry for follow-up
    - Accessing claims based patient health records

For Payers

HealthSmart Designer Suite – a rules-based software application for transforming claims and other source data into evidence-based, quality of care and cost of care measures. HealthSmart Designer Suite includes a clinical measure library of ready to use clinical measures including HEDIS® measures and enables health plans to create custom measures or alerts. Based on technology that helps health plans and their members to select and evaluate physician performance based on clinical quality, cost of care, patient experience, clinical system usage, hospital affiliation and other criteria. This technology incorporates 250 copyrighted quality measures and cost indicators developed for 19 specialties.

P4P Program Design

Med-Vantage specializes in P4P program design, measure development, scorecard technology, and deployment for health plans and purchasers. Includes **Provider Performance Scorecard** systems for primary care physicians, specialists and hospitals. Published the largest national studies on P4P in 2003, 2004, 2005, and in 2006 with The Leapfrog Group in 2006.

Clinical Measure Development, Validation and Publication – Health Plans

Development of evidence-based measures based on national or internal standards of care for multiple conditions and specialties. Leverages existing administrative data as well as lab and chart results. Based upon recognized industry sources such NCQA, NQF, AQA, and major medical association clinical guidelines, IOM/Leapfrog patient safety measures and many others. Includes plan assistance with:

- Focusing on EBM measures with high impact, prevalent conditions specific to health plan’s population.
- Documenting EBM sources based on scientific soundness, relevance, and data feasibility for external stakeholder discussions.
- Assisting health plan in building, testing and validating measure specifications
- Producing quality of care adherence report sand patient registries for each measure for analytic review purposes.
- Interpreting statistical results at multiple performance levels and identifying care gaps and opportunities for intervention.

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- Reporting and interpretation service for health plans that wish to deploy performance scorecards for providers. The services includes cost and quality of care libraries with multiple levels of reporting (Region, Network, Specialty, Provider Entity, individual provider, etc.).

Publications

Pay for Performance: National Perspective 2006 Longitudinal Survey Results with 2007 Market Updates. Baker, G., and S. Delbanco. http://www.medvantage.com/Pdf/2006NationalP4PStudy.pdf

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Organization	**Milliman**
Category	Proprietary/Analytics/Decision Support/Healthcare Data Technology Benchmarking
Source	http://www.milliman.com/home/
Measure	**Milliman Care Guidelines** http://www.milliman.com/expertise/healthcare/products-tools/milliman-care-guidelines/index.php http://www.careguidelines.com/ **Milliman Hospital Efficiency Index** http://www.milliman.com/expertise/healthcare/products-tools/hospital-efficiency-index/ http://www.hospitalefficiencybenchmarks.com/

Summary

One of the world's largest independent actuarial and consulting firms. Founded in Seattle in 1947 the company has 49 offices in key locations worldwide. Milliman employs more than 2,000 people, with a professional staff of more than 1,000 qualified consultants and actuaries, including specialists ranging from clinicians to economists. The firm has consulting practices in healthcare, employee benefits, property and casualty insurance, life insurance and financial services. Milliman serves the full spectrum of business, financial, government, union, education and nonprofit organizations

Care Guidelines

Milliman Care Guidelines, LLC independently develops and produces evidence-based clinical guidelines and software used by more than 1,000 clients, including hospitals, providers and seven of the eight largest US health plans. Covering the continuum of care, the seven-product *Care Guidelines* series is updated annually by an experienced team of clinicians, and is used to support the care of nearly two-thirds of US health plan members.

Milliman Care Guidelines are evidence-based clinical guidelines that span the continuum of care, including chronic care and behavioral health management. Providing much more than authorization criteria, they drive high-quality care through such tools as care pathway tables, flagged quality measures, and integrated medical evidence.

Care Guidelines Products:

1. **Ambulatory Care**
   Tool for authorizing established and emerging technologies, outpatient procedures, diagnostic tests, imaging, rehabilitation services, DME, injectables and more.
2. **Inpatient and Surgical Care**
   Evidence-based resource for proactive inpatient care management, including criteria, goals, care pathways and other decision-support tools.
3. **General Recovery Guidelines**
   Ideal when there isn't a guideline for the diagnosis, or when the clinical situation is so complex that a guideline is not easily applied.
4. **Recovery Facility Care**
   A detailed and comprehensive means to develop effective plans for recovery facility admission, care and discharge.
5. **Home Care**
   A comprehensive planning resource to smoothly move patients through home healthcare.
6. **Chronic Care Guidelines**
   A tool to facilitate outpatient care for chronic or complex diagnoses.

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7. **Behavioral Health Guidelines**
   Reliable, evidence-based tools and criteria that address appropriateness of specific psychological, behavioral and pharmacologic therapies.

Care Guidelines are incorporated into either client-hosted or Web-based software that readily interfaces with many medical management and clinical information systems. Interactive version CareWebQI® enables quality improvement and cost efficiency through targeting and reducing inappropriate care. This progressive workflow tool not only identifies potential gaps in care, but also provides information about why variances are occurring—and thus, how they can be reduced.

***CareWebQI*® Interactive Software** Interactive workflow tool captures and reports on user interactions and on variances from best practice. Able to be customized eg user-defined fields; configurable time zones; and date and time formats.

- Clinical Variance Tracking
- Real-time Reporting
- Customizable
- Quality Measure Tracking
- Guideline Modification
- Integration with Other Systems

Methodology

Clinical team of doctors, nurses, and other clinicians reviewed more than 100,000 abstracts, articles, and other sources of evidence and chose more than 14,000 unique citations. Findings are used to build evidence-based authorization criteria, care pathways, and other care management tools. These decision-support resources enable payors, care providers, and facilities to efficiently and consistently make care decisions grounded in rigorous, up-to-date research. They also assist clients in evaluating current practices and finding opportunities to improve both quality of care and care management.

13th Edition of the *Care Guidelines* released 2009. Features include

- **Authorization Guidelines** – 2009 release included 42 new *Ambulatory Care* guidelines
- **Mapping to Quality Standards** – Crosswalk documents outline exactly how the *Care Guidelines* support the accreditation requirements and quality improvement activities of national agencies, including NCQA, URAC, CMS, IHI and NQF.
- **Strategic Alliances** – The *Care Guidelines* are integrated with 30 care management programs from 25 Strategic Alliance Partners. In addition to established alliances with ACS MIDAS+, Allscripts, Landacorp®/SHPS®, MEDecision® and TriZetto®, integrations are on the way with programs from Altruista Health, CaseNet®, Click4Care, Gaudette International Corporation, IMA Technologies, Pegasystems and ZeOmega.
- **Neonatal Care Guidelines** –Neonatal level of care guidelines add to coverage of Medicaid-specific issues.
- **Patient Discharge Handouts** - Provide information in simple layperson language about nutrition, activity level, self-care, problems to report, information sources and more.
- **Problem Oriented Coverage** – The *Recovery Facility Care* product adds coverage of children with special healthcare needs and medical oncology, while *Home Care* now includes infusion therapy and wound management.

Hospital Efficiency Index

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Combines actuarial insight and detailed information for thousands of hospitals to enable clients to evaluate the relative efficiency of hospitals. Gives access to three years of data routinely, as well as older data for special studies, through printed editions of the report or in browser software.

The Index is built on data from inpatient admissions and lengths of stays and adjusted for case mix, case severity, and other factors. These adjustments allow insurers and providers to measure the relative efficiency of hospitals within regions or across the country. Reports focus on potentially avoidable admissions and days of stay, as determined through comparison with similar hospitals. The Index also provides clients with the option to balance efficiency measures against healthcare quality measures, such as those developed by the Agency for Healthcare Research and Quality. Index versions using Medicare data, which covers nearly all hospitals and states, and commercial data, which covers approximately 20 states, also are available.

Hospital Efficiency Index is a key tool for insurers in selecting and evaluating provider networks, determining charge and reimbursement levels, and negotiating provider contracts. For hospitals, it pinpoints specific specialty areas where efficiency improvements can be made and provides meaningful benchmarks for measuring the success of re-engineering and cost-cutting efforts.

Applications of the Hospital Efficiency Index

For providers, the Hospital Efficiency Index can be applied in the following areas:

- Risk or capitation evaluation
- Cost cutting/reengineering focus
- Long-term strategic planning
- Profitability of Medicare DRGs
- Acquisition/Integration/Consolidation
- Identification of most efficient practice facilities
- Determination of reasons why days are potentially avoidable

For risk takers and carriers the Hospital Efficiency Index can be used for:

- Selection/evaluation/integration of networks
- Determination of hospital efficiency adjusted charge or reimbursement levels
- Development of new reimbursement structures
- UR focus
- Negotiation of provider contracts
- Avoiding medical malpractice risk
- Determination of reasons why days are potentially avoidable
- Identification of benchmarks by DRG or specialty
- Identification of most efficient practice facilities

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Methodology

The Hospital Efficiency Index represents statistical/actuarial methodologies for analyzing hospital inpatient admissions, length of stay and days, as compared to benchmark most efficient practice, in order to estimate potentially avoidable admissions and days. The primary objective of the HEI is to compare any set of given hospital inpatient experience to the equivalent case-mix/severity adjusted most efficient practice found anywhere in the US. The results are all indexed to this common benchmark (most efficient practice) to determine potentially avoidable days and admissions and to readily allow direct comparisons on a consistent basis.

Hospital Efficiency Index Reports are sold by hospital in a four report package. The first compares summary data for all hospitals in an MSA (Metropolitan Statistical Area). The second identifies potential days and admissions saved by specialty (MDC). The third ranks the potential days saved by MDC and APR-DRG** within MDC. The fourth summarizes potential days saved by APR-DRG** and severity. The Hospital Efficiency Index is available in two formats: 1) the Analysis Browser or 2) Hard Copy Reports. In addition customized data analysis can be performed on any carrier or facility data. Separate Hospital Efficiency models are developed for Medicare inpatient care (Medpar data based on UB-92 information) and Commercial (HMO, PPO, indemnity) and Medicaid admissions using public data from 20 states.

Other Measures

- **Severity Ratio**
  Using the severity definitions defined by 3M in the APR-DRGs, the Severity Ratio Index measures the level of complications and comorbidities of admissions in a given hospital—the higher the Index the more complex the admissions treated by the hospital, relative to the other hospitals with the same 3M APR-DRG mix.

- **Relative Case-Mix Ratio**
  The Relative Case-Mix Ratio represents the relative weighted average case-mix using the most efficient practice expected LOS as the weights. The Ratio is relative to all admissions within the given category being shown (admission type or specialty, etc.). Those hospitals with a higher Ratio have a higher expected resource consumption per admission compared to the average hospital.

Publications

Imagining 16% to 12%. A Vision for Cost Efficiency, Improving Healthcare Quality and Covering the Uninsured. Bruce Pyenson, Kate Fitch, Sara Goldberg. Feb. 2009. http://www.milliman.com/expertise/healthcare/publications/rr/pdfs/imagining-16-12-RR02-01-09.pdf

Using Evidence-based Guidelines Produces Significant ROI for Health Plan
http://www.careguidelines.com/brochures/roi/MCG_Cox_HealthPlans_Case_Study.pdf

Evidence Based Medicine brochure - http://www.careguidelines.com/brochures/ebm/EBMebrochure.pdf

CAREWEBQI brochure http://www.careguidelines.com/brochures/cwqi/CWQIebrochure.pdf

Hospital Charges Become A Significant Issue Again. Originally published in the Health Section News of the Society of Actuaries.
By: John P. Cookson, F.S.A.
http://www.hospitalefficiencybenchmarks.com/newsDetail.asp?ID=2

Hospital Efficiency Index brochure. http://www.hospitalefficiencybenchmarks.com/PDFs/ebrochure_new.pdf

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Organization	**Minnesota Hospital Quality Partnership**
Category	State focus; Performance Ratings/Reports/Scorecards/Databases/Benchmarking
Source	http://www.mnhospitalquality.org/
Measure	**Minnesota Hospital Quality Report** http://www.mnhospitalquality.org/

Summary

The Minnesota Hospital Quality Report is a web resource for health care consumers about hospital quality of care and patient's experiences, launched in April 2006. Intended to support and assist consumers, and providers, by making information available about the quality and safety of care in Minnesota hospitals.

Developed by the Minnesota Hospital Quality Partnership (a partnership with the Minnesota Hospital Association and Stratis Health, Minnesota's Quality Improvement Organization), and a steering committee comprised of Minnesota hospital representatives.

The site includes two different types of information:

1. Hospital Quality
Quality of care measures in five key areas**:**

1. heart attack
2. heart failure
3. pneumonia
4. infection reporting
5. surgical care

Two types of quality measures are used:

- Quality of care measures such as frequency are used to broadly describe the care provided by a hospital.
- Appropriate Care Measure (ACM) showing whether a patient received all of the "appropriate or right care" (recommended treatments) that they should have received, based on their clinical condition are also used.

2. Patients Care Ratings

Comparable ratings on patients' hospital experiences are publicly available. HCHAPS national survey, used to measure the frequency of important aspects of care, such as communication with nurses and doctors as well as pain management.

Methodology

The best practice quality measures reported are tied to three conditions: heart attack, heart failure, pneumonia and to surgical care. Based upon Hospital Compare data. Data is sourced from Centers for Medicare & Medicaid Services, the Joint Commission on Accreditation of Healthcare Organizations, and state databases.

Patients' data rating of their hospital care is drawn from the Hospital Consumer Assessment of Healthcare Providers and Systems, or HCAHPS. The HCAHPS survey is administered 48 hours to six weeks after discharge to a random sample of adult

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patients across medical conditions. Participating hospitals may either use an approved survey vendor, or collect their own HCAHPS data (if approved by CMS to do so). Patients identify the frequency by which important elements of care occurred. These include

- Communication with doctors
- Communication with nurses
- Responsiveness of hospital staff
- Pain control
- Communication about medicines
- Cleanliness of hospital environment
- Quietness of hospital environment
- Discharge Instructions

The data will also include patients overall rating of the hospital and their willingness to recommend the hospital to others.

Results

Statistical data is available in spreadsheet form for research or other purposes.

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Organization	National Business Group on Health
Category	Standards Setting, Industry Organizations
Source	http://www.businessgrouphealth.org/
Measure	**ToolKits** http://www.businessgrouphealth.org/publications/index.cfm

Summary

A non-profit membership organization formed in 1974 and devoted exclusively to representing large employers' perspective on national health policy issues and providing practical solutions to its members' most important health care problems. The National Business Group on Health members are primarily Fortune 500 companies and large public sector employers - including the nation's most innovative health care purchasers - who provide health coverage for more than 50 million U.S. workers, retirees, and their families. The Business Group fosters the development of a safe, high quality health care delivery system and treatments based on scientific evidence of effectiveness. The NBGH's objective include achieving transparency, expand the use of technology assessment to ensure access to superior new technology and the elimination of ineffective technology, and make scientific evidence of effectiveness the standard for care.

The NBGH publishes a number of 'toolkits' to assist in decision making regarding quality services – the majority of these toolkits are available only to members of NBGH. These include a toolkit to help employee's choose a hospital; a patient safety toolkit; and, a toolkit about using information to get quality care. NBGH also publishes detailed position statements on a variety of issues including quality; comparative effectiveness; evidence-based medicine; HIT; pay for performance' preventive care; quality and safety (link below); and, transparency.

- Quality and Safety —Employers and government payers should take essential actions to improve the quality and safety of health care, including not paying for "never events" and requiring that all hospitals in their preferred networks have leadership and boards committed to quality and safety and participate in specific quality and safety initiatives.

Publications

http://www.businessgrouphealth.org/pdfs/qualityandsafetypositionsoverview101106.pdf

[entry updated 2010]

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Organization	National Cardiovascular Data Registry (NCDR)
Category	Performance Ratings/Reports/Scorecards/Databases/Benchmarking
Source	http://www.ncdr.com/webncdr/common/
Measure	**CathPCI™ Registry** https://www.ncdr.com/webncdr/DefaultCathPCI.aspx **ACTION Regist^ry®-GWTG™** http://www.ncdr.com/webncdr/ACTION/Default.aspx **CARE Registry™** http://www.ncdr.com/webncdr/CarotidStent/default.aspx **IMPACT Registry™** http://www.impact.ncdr.com/Pages/Homepage.aspx **IC3** https://www.improvingcardiaccare.org/Documents/B09023_v%201_IC3%20FactSheet.pdf

Summary

The National Cardiovascular Data Registry (NCDR™) is the preeminent cardiovascular data repository for measures of care in the United States. Aims to improve the quality of cardiovascular care through the collection, analysis, and reporting of data and providing educational and research activities. Focus is providing resources for measuring and quantifying outcomes and identifying gaps in the delivery of quality cardiovascular patient care in the United States. NCDR® is an initiative of the American College of Cardiology Foundation with partnering support from a range of clinical specialty organizations.

The NCDR provides evidence-based quality improvement solutions for cardiologists and other medical professionals committed to measurement, improvement, and excellence in cardiovascular care. The NCDR has developed clinical modules, programs, and information solutions to support quality measurement and benchmarking. The NCDR suite of cardiovascular data registries includes the following hospital-based registries:

- **CathPCI Registry®** national, voluntary cardiac catheterization laboratory registry for cardiac catheterization and percutaneous coronary intervention procedures.
- **ICD Registry™** for tracking implantable cardioverter defibrillator procedures.
- **CARE Registry®** for carotid artery stenting and endarterectomy procedures.
- **ACTION Regist^ry®-GWTG™** for high-risk STEMI/NSTEMI myocardial infarction patients.
- **IMPACT Registry™** for adult and pediatric congenital heart conditions.
- **IC^3 Program** A practice-based registry.

Methodology

Each registry includes a standardized set of data elements and definitions, systematic data entry and transmission procedures, and rigorous data quality assurance standards. Data are collected retrospectively and/or concurrently and represent consecutive patients treated at each institution. Participants obtain software from vendors certified by the ACC as compliant with clinical and coding data standards. Risk-adjustment protocols are embedded and data elements link to clinical practice guidelines and JCAHO core measures to track performance. Confidential institutional reports are published for all enrolled participants on a quarterly and annual basis. The reports compare each institution's outcomes, including risk-adjusted mortality, with the overall experience of the registry and a comparison group.

Patient data is submitted quarterly using ACC-certified software programs. Participants receive quarterly Data Quality Reports that provide data completeness and consistency statistics that facilitate data cleaning efforts. All data reported in the NCDR™ comparative national results pass stringent completeness thresholds. Confidential Institutional Outcome Reports are distributed

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on a quarterly and annual basis and include NCDR™ and peer group comparisons. In addition, the NCDR™ data quality program includes nationwide onsite audits to confirm data accuracy. A random sample of submitting facilities are selected each year.

- **CathPCI™ Registry.** The initial database that commenced in 1998 and includes data collection and reporting for diagnostic and interventional cardiac catheterization and percutaneous coronary intervention (PCI) procedures. The CathPCI Registry™ has since become the gold standard for cardiac data collection, reporting and benchmarking. The CathPCI Registry™ consists of data of over 6 million patient records including over 1 million PCI procedures representing 7 years of data and more than 700 institutions, including hospitals, free-standing laboratories, and adult cardiology practices. The PCI mortality rate is risk-adjusted. Results provide institutions with the ability to understand, measure, and improve quality of cardiovascular care through a comprehensive measurement system linked to ACC clinical practice guidelines and performance measures that rely on a set of nationally recognized standardized data elements and definitions. The National Quality Forum and the Leapfrog Group have adopted the CathPCI Registry™ PCI risk-adjusted mortality rate measure as a standard of quality in lieu of procedure volume requirements.

- **ICD Registry™.** Outcomes-based, national quality improvement program that helps participating facilities measure and improve care for patients receiving implantable cardioverter defibrillators (ICDs). Began data collection in June 2005 and was developed in partnership with the Heart Rhythm Society. The ICD Registry™ includes all required data fields for the Centers for Medicare and Medicaid Services (CMS), as well as optional extended information. In addition to meeting CMS data collection requirements for ICD implantation, national ICD Registry™ participants receive quarterly benchmark reports that can be used to measure patient outcomes, volume and utilization. As of November 1, 2006, the ICD Registry™ contained over 1389 sites and 68,000 patient records. Enrolled hospitals measure their performance in diagnosing and treating their ICD recipients against national benchmarks. Measures include patient demographics, provider and facility characteristics; device type and characteristics; adverse event rates and compliance with ACC/AHA/HRS Clinical Guidelines recommendations.

- **CARE Registry™.** Launched in September 2006, this is the first national vascular data registry to support multiple disciplines of medicine (cardiology, neurology, radiology and vascular surgery) with the collection, reporting, and benchmarking of carotid stenting procedures. Focus is on measurement and improvement of care for patients receiving carotid artery stenting (CAS) or carotid endarterectomy (CEA) procedures, including 30-day neurologic follow-up. The CARE Registry™ meets CMS requirements for data collection and reporting. The CARE Registry™ was designed in partnership with the Society for Cardiovascular Angiography and Interventions, the Society of Interventional Radiology, and the American Academy of Neurology. Measures patient demographics, provider and facility characteristics, the use of balloons, stents, and embolic protection devices, medications and neurological status and adverse event rates.

- **ACTION Registry®-GWTG™**. Outcomes-based quality improvement program that helps participating facilities measure and improve care for high-risk myocardial infarction (MI) patients with STEMI or NSTEMI. Collects a comprehensive set of data elements necessary to monitor and improve adherence to the most current, science-based ACC/AHA treatment guidelines. Unites myocardial infarction data from hundreds of hospitals across the country into one unified platform with standardized clinical data elements to facilitate benchmark outcomes, analyze treatment regimens. ACTION Registry–GWTG measures patient demographics, provider and facility characteristics; transfer facility therapies and reperfusion strategies; adverse event rates and compliance with ACC/AHA Clinical Guidelines recommendations.

- **IMPACT Registry™**. A new, national clinical data registry. The IMPACT Registry™ (**IM**proving**P**ediatric and **A**dult **C**ongenital **T**reatment) will assess the prevalence, demographics, management and outcomes of pediatric and adult patients with congenital heart disease who are undergoing diagnostic catheterizations and catheter-based

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interventions. Improved diagnosis, treatment, and survival have meant that the population of patients with congenital heart disease (CHD) is growing. Seeking to address knowledge gaps about the population of patients with congenital heart disease, particularly with respect to the use and outcomes of catheterization and interventional procedures.

- **IC^3 Program**®. National quality improvement program targeting office settings. Focus is on systematic practice, assessment, and improvement of quality care. Facilitates adherence to ACC/AHA performance measures of practice evidence-based medicine. Shares tools and strategies to facilitate coordination and continuity of care, training and educational opportunities and potential to participate in office-based registry to enable benchmarking.

Results

NCDR™ promotes research activities geared toward informing cardiovascular evidence-based medicine. The NCDR™ encourages original contributions that potentially can impact patient care. Individuals or organizations can submit proposals to use NCDR™ data for research projects. The oldest of the four NCDR registries, the CathPCI Registry, is available for research on percutaneous intervention outcomes. PCI researchers have produced 15 peer-reviewed journal articles and over 80 abstracts presented as posters and panel talks at major cardiovascular meetings.

Extensive lists of research projects, manuscripts and abstracts.

Publications

Approved Research Projects http://www.ncdr.com/WebNCDR/NCDRDocuments/CURRENT_MASTER_PROJ_LIST_5-20-09.pdf
Registry Research Manuscripts http://www.ncdr.com/WebNCDR/NCDRDocuments/CURRENT_NCDR_MANSCRPTS_FINAL_05-19-2009.pdf
Registry Research Abstracts http://www.ncdr.com/WebNCDR/NCDRDocuments/CURRENT_NCDR_ABSTRCTS_WEB_05-15-2009.pdf
Understanding Risk Adjusted Mortality (RAM) In the CathPCI Registry
http://www.ncdr.com/WebNCDR/NCDRDOCUMENTS/CathPCI_RiskAdjustmentTechNotes_051509.pdf

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Organization	**National Committee for Quality Assurance (NCQA)**
Category	Accreditation/Certification
Source	http://www.ncqa.org/
Measure	**HEDIS - Healthcare Effectiveness Data and Information Set** http://www.ncqa.org/tabid/187/Default.aspx

Summary

The National Committee for Quality Assurance is a private, not-for-profit organization dedicated to improving health care quality. Since its founding in 1990, NCQA has been a central figure in driving improvement throughout the health care system, helping to elevate the issue of health care quality to the top of the national agenda. NCQA has helped to build consensus around important health care quality issues by working with large employers, policymakers, doctors, patients and health plans to decide what's important, how to measure it, and how to promote improvement. NCQA programs cover accreditation, certification and physician recognition.

Healthcare Effectiveness Data and Information Set

HEDIS is a tool used by health insurance plans to measure performance on important dimensions of care and service. It is offered by the National Committee for Quality Assurance (NCQA) which adapted and refined the first set of measures initially developed by a coalition of health plans and employer groups. The Healthcare Effectiveness Data and Information Set (HEDIS) was first released in 1993. It is a tool used by more than 90% of America's managed health care plans--and a growing number of PPO plans--to measure performance on important dimensions of care and service. Employers, consultants and consumers use HEDIS data, along with accreditation information, to help select the best health plan for their needs. Health plans seeking accreditation by NCQA are required to report on HEDIS measures, and their performance scores on these measures are factored into the accreditation process. CMS requires health plans participating in the Medicare program to submit data on HEDIS-developed measures of health care quality. These are contained in the comparative quality reports available on the CMS website. Many state governments also require plans participating in Medicaid to report HEDIS data. Additionally, HEDIS measures are frequently used in pay for performance programs sponsored by private purchasers.

HEDIS consists of 71 measures across 8 domains of care. Because so many plans collect HEDIS data, and because the measures are so specifically defined, HEDIS makes it possible to compare the performance of health plans on an "apples-to-apples" basis.

HEDIS measures are divided into eight categories:

1. Effectiveness of Care
2. Access/Availability of Care
3. Satisfaction With the Experience of Care
4. Health Plan Stability
5. Use of Services
6. Cost of Care
7. Informed Choices
8. Health Plan Descriptive Information.

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Measures are added, deleted, and revised annually. Included in HEDIS is the CAHPS 4.0 survey (refer CMS HCAHPS entry), which measures members' satisfaction with their care in areas such as claims processing, customer service, and getting needed care quickly.

Methodology

Provides objective clinical performance data measured against a detailed set of measure criteria. Address a broad range of important health issues, including:

- Use of Appropriate Medications for People with Asthma
- Cholesterol Management for Patients with Cardiovascular Conditions
- Controlling High Blood Pressure
- Antidepressant Medication Management
- Breast, Cervical and Colorectal Cancers
- Comprehensive Diabetes Care

To ensure the validity of HEDIS results, all data are rigorously audited by certified auditors, using a process designed by NCQA. HEDIS data are collected through surveys, medical charts and insurance claims for hospitalizations, medical office visits and procedures. Surveys must be conducted by an NCQA-approved external survey organization. Clinical measures use the administrative or hybrid data collection methodology, as specified by NCQA. Administrative data are electronic records of services, including insurance claims and registration systems from hospitals, clinics, medical offices, pharmacies and labs.

Results

Physician-specific measurement is currently conducted using a wide array of different methods and measures. A single, nationally standardized set of performance measures and detailed implementation rules would provide physicians with actionable feedback and allow benchmarking across health plans or geographic regions. Joint efforts to develop standardized measures have recently matured; notable among them is NCQA's work with the AQA and the National Quality Forum (NQF) on standardized measures, and its work with several physician specialty societies to encourage quality measurement. NCQA has collaborated with leading software vendors to develop standards for cost-of-care physician measurement. With the increasing use of episode grouping and population risk adjustment software for applications such as physician cost-of-care evaluation and network tiering, software vendors and users of these technology solutions agree that method standardization represents an important step toward reducing confusion in the marketplace about multiple measurement approaches.

NCQA believes that cost of care measurement must be linked to quality of care measurement in order to estimate a physician's efficiency at providing care.

Publications

Benchmarking Physician Performance: Reliability of Individual and Composite Measures. Sarah Hudson Scholle, Joachim Roski, John L. Adams, Daniel L. Dunn, Eve A. Kerr, Donna Pillittere Dugan, Roxanne E. Jensen. Am J Managed Care. Dec 2008, Volume 14, No. 12, pp833-838 http://www.ajmc.com/files/articlefiles/AJMC_08decScholle_829to838.pdf

HEDIS 2007 Technical Specifications for Physician Measurement
http://www.ncqa.org/Portals/0/Publications/Tech_Spec_MD_Executive_Summary.pdf
HEDIS 2009 Measures http://www.ncqa.org/Portals/0/HEDISQM/HEDIS2009/2009_Measures.pdf
State of Health Care Quality 2008 http://www.ncqa.org/Portals/0/Newsroom/SOHC/SOHC_08.pdf

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Organization	National Committee for Quality Assurance (NCQA)
Category	Payment Reform
Source	http://www.ncqa.org/
Measure	**Physician Practice Connections - Patient-Centered Medical Home (PPC-PCMH)** http://www.ncqa.org/tabid/631/Default.aspx

Summary

The National Committee for Quality Assurance is a private, not-for-profit organization dedicated to improving health care quality. Since its founding in 1990, NCQA has been a central figure in driving improvement throughout the health care system, helping to elevate the issue of health care quality to the top of the national agenda. NCQA has helped to build consensus around important health care quality issues by working with large employers, policymakers, doctors, patients and health plans to decide what's important, how to measure it, and how to promote improvement. NCQA programs cover accreditation, certification and physician recognition.

Physician Practice Connections - Patient-Centered Medical Home assesses whether physician practices are functioning as medical homes. Building on the joint principles developed by the primary care specialty societies, the PPC®-PCMH™ standards emphasize the use of systematic, patient-centered, coordinated care management processes.

The Patient Centered Medical Home is a health care setting that facilitates partnerships between individual patients, and their personal physicians, and when appropriate, the patient's family. Care is facilitated by registries, information technology, health information exchange and other means to assure that patients get the indicated care when and where they need and want it in a culturally and linguistically appropriate manner.

Methodology

There are nine PPC® standards, including 10 'must pass' elements, which can result in one of three levels of recognition. Practices seeking PPC®-PCMH™ complete a Web-based data collection tool and provide documentation that validates responses. Among the aspects of care measured by PPC-PCMH:

Access and Communication
Patient Tracking and Registry Functions
Care Management
Patient Self-Management Support
Electronic Prescribing
Test Tracking
Referral Tracking
Performance Reporting and Improvement
Advanced Electronic Communications

Must Pass Elements are:

ELEMENT 1A: Access and communication processes	The practice has written processes for scheduling appointments and communicating with patients.
ELEMENT 1B: Access and communication results	The practice has data showing that it meets the standards in PPC1A for scheduling and communicating with patients.

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ELEMENT 2D: Organizing clinical data	The practice uses electronic or paper-based charting tools to organize and document clinical information in the medical record.
ELEMENT 2E: Identifying important conditions	The practice uses an electronic or paper-based system to identify the following in the practice's patient population: • Most frequently seen diagnoses • Most important risk factors • Three clinically important conditions
ELEMENT 3A: Guidelines for important conditions	The practice implements evidence-based guidelines for the three identified clinically important conditions
ELEMENT 4B: Self management support	The practice works to facilitate self-management of care for patients with one of the three clinically important conditions
ELEMENT 6A: Test tracking and follow-up	The practice works to improve effectiveness of care by managing the timely receipt of information on all tests and results.
ELEMENT 7A: Referral tracking	The practice seeks to improve effectiveness, timeliness and coordination of care by following through on critical consultations with other practitioners
ELEMENT 8C: Reporting to physicians	The practice reports on its performance on the factors in Elements 8A and 8B (measures of performance and patient experience data).

Publications

Physician Practice Connections— Patient Centered Medical Home
http://www.ncqa.org/Portals/0/Programs/Recognition/Companion_Guide/PPC-PCMH_Companion_Guide.pdf

American College of Physicians PCMH page: http://www.acponline.org/running_practice/pcmh/

American Academy of Family Physicians PCMH page: http://www.aafp.org/online/en/home/membership/initiatives/pcmh.html

American Academy of Pediatrics Medical Home Resource page:
http://www.medicalhomeinfo.org/tools/providerindex.html

American Osteopathic Association Home page: http://www.osteopathic.org/index.cfm

ORDER PPC-PCMH Standards and Survey Tool: www.ncqa.org/ppcpubs.aspx

Standards and Guidelines for Physician Practice Connections®— Patient-Centered Medical Home (PPC-PCMH)
Link available on http://www.ncqa.org/tabid/631/Default.aspx

Solberg LI, Asche SE, Shortell SM, Gillies RR, Taylor N, Pawlson LG, Scholle SH, Young MR. Is Integration in Large Medical Groups Associated with Quality? Am J Managed Care, 2009 June; 15(6):e34-e41.

Solberg LI, Asche SE, Pawlson LG, Scholle SH, Shih SC. Practice Systems are Associated with High Quality Care for Diabetes Am J Managed Care, 2008 Feb;14(2):85-92.

Scholle SH, Pawlson LG, Solberg LI, Shih SC, Asche SE, Chou A, Thoele MJ. Measurement of Practice Systems for Chronic Illness Care: Accuracy of Self-Reports from Clinical Personnel. Joint Commission Journal on Quality Improvement, 2008; 37 (7) 407-416.

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Solberg LI. Scholle SH. Asche SE. Shih SC. Pawlson LG. Thoele MJ. Murphy AL. Practice systems for chronic care: frequency and dependence on an electronic medical record. American Journal of Managed Care 2005; 11(12):789-96.

Patient-Centered Care http://www.commonwealthfund.org/Topics/Patient-Centered-Care.aspx

National Center for Medical Home Implementation http://www.medicalhomeinfo.org/

[entry updated 2010]

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Organization	**National Committee for Quality Assurance (NCQA)**
Category	Accreditation/Certification
Source	http://www.ncqa.org/
Measure	**Physician and Hospital Quality (PHQ) certification program** http://www.ncqa.org/tabid/753/Default.aspx

Summary

The National Committee for Quality Assurance is a private, not-for-profit organization dedicated to improving health care quality. Since its founding in 1990, NCQA has been a central figure in driving improvement throughout the health care system, helping to elevate the issue of health care quality to the top of the national agenda. NCQA has helped to build consensus around important health care quality issues by working with large employers, policymakers, doctors, patients and health plans to decide what's important, how to measure it, and how to promote improvement. NCQA programs cover accreditation, certification and physician recognition.

Physician and Hospital Quality (PHQ) certification program

NCQA's Physician and Hospital Quality (PHQ) certification program evaluates how well health plans measure and report the quality and cost of physicians and hospitals. The PHQ seal represents an impartial third-party certification of provider measurement programs, and provides assurance that such efforts use valid, transparent methodologies, and measure on quality—not cost alone.

In 2008, NCQA introduced Physician and Hospital Quality Certification, which replaced a previous program. The revised standards represent a more comprehensive review of organizations' programs to measure and report quality and cost of physicians and hospitals. The standards also reflect changes in physician measurement since 2006. More than 60 health plans have achieved Distinction in Physician and Hospital Quality through the 2006 version of the program.

In 2008, NCQA released a PHQ Certification program reflecting changes in the provider measurement field and demand from purchasers and regulators. This program is open to any organization conducting functions evaluated by the standards, whether a health plan, a measurement collaborative, a provider network or an information provider such as a Web site.

Four key principles serve as the foundation of PHQ Certification:

- **Standardization and sound methodology**, allowing results to be compared across organizations.
- **Transparency.** Organizations should offer physicians the opportunity to provide input on measurement programs. Organizations should also provide clear, understandable information about how the results will be used.
- **Collaboration.** Where possible, organizations should pool their data on standardized measures to produce results with greater statistical reliability.
- **Action on quality and cost.** Organizations should not sacrifice quality for cost reduction. Organizations must not use results of cost measurement alone.

Methodology

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The program is open to any organization conducting functions evaluated by the standards, whether a health plan, a measurement collaborative, a provider network or an information provider such as a Web site. NCQA's experience in physician measurement ensures that measurement and reporting efforts are valid. The program requires the use of standardized, third-party measures, the involvement of providers during the program development process, the use of quality measures when acting on measurement results.

NCQA offers six types of surveys to organizations seeking certification.

- **Certification Survey:** During a Certification Survey, NCQA evaluates the organization's programs for provider measurement and action against the relevant standards. This type of Certification is for any entity seeking a decision independently.

- **Corporate Survey:** NCQA offers a Corporate survey option to national or regional organizations that provide centralized functions for local plans or local operating units.

- **Corporate Affiliated Organization Survey:** This survey type is available for organizations that use results from a Corporate survey.

- **Collaborative Survey:** A Collaborative survey is conducted in a manner similar to that of a Corporate survey, where the collaborative provides centralized functions related to the standards on behalf of organizations that participate in the collaborative measurement initiative.

- **Collaborative Participant Survey:** This survey type is available for organizations that use results from a Collaborative survey.

Results

PHQ Certification Options

Organizations that are certifiable entities may seek any of the following certifications. Certification is effective for two years with the exception of Provisional Certification for Physician Quality.

- **Certification for Physician and Hospital Quality (PHQ Certification):** The organization passed both *PHQ 1: Measuring Physician Performance* and *PHQ 2: Hospital Performance*, scored together.
- **Certification for Physician Quality (PQ Certification):** The organization passed PHQ 1 only.
- **Certification for Hospital Quality (HQ Certification):** The organization passed PHQ 2 only.
- **Provisional Certification for Physician Quality (Provisional PQ Certification):** The organization with an ongoing program passed a subset of PQ 1 elements. Provisional PQ Certification indicates that the organization passes some key elements and is in the process of revising its program to pass the entire PHQ 1 standard. Organizations seeking Provisional PQ Certification must undergo a survey against all PHQ 1 elements within 12 months of achieving Provisional PQ Certification.

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Organization	**National Committee for Quality Assurance (NCQA)**
Category	Performance Ratings/Reports/Scorecards/Databases/Benchmarking
Source	http://www.ncqa.org/
Measure	**Physician Recognition Program** http://www.ncqa.org/tabid/74/Default.aspx

Summary

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Physician Recognition Program

A number of different physician recognition programs assess physician performance against nationally recognized evidence-based clinical standards. Distinction has been earned by over 10,000 physicians. Recognition includes identification by health plans (and potentially participate in any P4P remuneration programs) and directory websites.

Methodology

Specific recognition programs available in key areas of

1. **Diabetes** - 10 measures which cover areas such as: HbA1c control, Blood Pressure control, LDL control, Eye examinations, Nephropathy Assessment, Smoking status and cessation advice or treatment
2. **Back Pain** - 13 clinical measures and three structural standards such as the elements of the physical exam and advice for the return to normal activities.
3. **Heart/Stroke**. Program measures include: Blood pressure control, complete lipid profile, Cholesterol control, Use of aspirin or another antithrombotic, Smoking status and cessation advice or treatment
4. **Physician Practice** - use of systematic processes and information technology to enhance the quality of patient care, know and use patient histories, follow up with patients and other providers, manage patient populations and use evidence – based care, employ electronic tools to prevent medical errors. There are nine PPC® standards and three levels of recognition.
5. **Patient-Centered Medical Home.** Nine PPC® standards, including 10 must pass elements, which can result in one of three levels of recognition
6. **Physician Recognition Software Certification**. Evaluates compliance and compatibility with the data collection and reporting requirements of the NCQA/American Diabetes Association Diabetes Physician Recognition Program (DPRP).

Eligible physicians will abstract data from the charts of appropriate patients and submit this information to NCQA for review along with documentation of patient education and evaluation of patient experience. Uses both process measures and clinical outcomes measures and requires that performance thresholds be met (set between mean and national best practices – 90th percentile).

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Results

Research (Towers Perrin 2003 and 2005) suggests that annual savings for care of patients who see physicians with NCQA recognition are:

- Diabetes Recognition–10-15% savings per patient per year ($421 to $1059 depending on measures achieved)1
- Heart/Stroke Recognition –$271 to $547 savings per patient per year, depending on the measure(s) achieved2

Publications

Physician Recognition Program Brochure 2008
http://www.ncqa.org/Portals/0/Programs/Recognition/recognition_brochure_main2008.pdf

National Committee for Quality Assurance (NCQA). Physician Recognition Programs MAKING THE CASE - A Powerful Change Agent to Improve Quality and Affordability. Colette Rush.
www.pugetsoundhealthalliance.org/Resources/documents/Alliance_NCQA_TargetedMarketing.ppt

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Organization	**National Committee for Quality Assurance (NCQA)**
Category	Accreditation/Certification
Source	http://www.ncqa.org/
Measure	**Relative Resource Use (RRU)**

Summary

The National Committee for Quality Assurance is a private, not-for-profit organization dedicated to improving health care quality. Since its founding in 1990, NCQA has been a central figure in driving improvement throughout the health care system, helping to elevate the issue of health care quality to the top of the national agenda. NCQA has helped to build consensus around important health care quality issues by working with large employers, policymakers, doctors, patients and health plans to decide what's important, how to measure it, and how to promote improvement. NCQA programs cover accreditation, certification and physician recognition.

NCQA assesses efficiency in two ways.

1. Systems level, including HMOs, PPOs, integrated delivery systems (IDSs). Resource use was incorporated into the updated HEDIS measure for 2007 to assess quality and cost of care at the health plan level.
2. Individual physician level—to assess quality and cost of care by physicians, adjusting for risk.

In 2006, in an effort to help consumers and purchasers assess the value plans add, NCQA fielded a new set of standardized measures of **Relative Resource Use** (RRU) focused on six costly chronic conditions: diabetes, acute low back pain, asthma, COPD, uncomplicated hypertension, and cardiovascular conditions.

RRU measures are being phased in over two years. To determine value, NCQA used a composite of HEDIS measures for each condition including process and intermediate outcome measures across four categories of service:

- inpatient facility costs, exclusive of surgery and other procedures;
- evaluation and management costs (i.e., office visits with a primary care physician or specialist);
- inpatient and outpatient surgery costs;
- ambulatory pharmacy costs.

Methodology

Population based. The RRU measures report the average relative resource use for health plan members with a particular condition compared to their risk-adjusted peers. Standardized prices are used to focus on the quantities of resources used. Quality measures for the same conditions are reported concurrently. These measures assess resource consumption using a standardized table of prices to eliminate the often short-term impact of discounts and other factors.

Coupled with HEDIS quality measures, RRUs yield information that allows comparison of plans based on value. Using standardized price tables, health plans calculate and report total standardized costs and utilization rates across several categories. NCQA then calculates an expected total standard cost for each chronic condition by plan type and product line (e.g., commercial, Medicare, Medicaid.) Resource use is adjusted for a plan's population composition (age, gender and presence of

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comorbidities) so that plans that serve patients that are older or with a greater burden of illness are not at a disadvantage. A ratio of observed-to-expected resource use is then calculated within each clinical condition.

Quality Measures coupled with new Relative Resource Use (RRU) Measures for People with

- Diabetes, Asthma, Acute Low Back Pain - First year RRU collection in HEDIS 2007
- Uncomplicated Hypertension, Cardiac Conditions - First year RRU collection in HEDIS 2008
- Reports the relative resource use for a health plan members with a particular condition when compared to their risk adjusted peers
  - Standard price table provided by NCQA to appropriately weight units of services rendered to members.
  - DOES NOT use episode groupers
- When coupled with the related HEDIS quality measures, the RRU ratios provide a better understanding of the efficiency or *value* of services rendered by the plan
- Costs are risk adjusted for:
  - Age, Gender, Presence of co-morbidities
  - Exclusions of other dominant conditions - Active cancer, HIV/AIDS, ESRD, etc.
- Member cost capped if exceeds specified amount
- Adjusted for enrollment and pharmacy benefit status (medical and pharmacy member months)
- HEDIS RRU measures may be applicable to integrated delivery systems (real or virtual) with responsibility for *total care*: Medical groups, tiered networks, Physician-Hospital Organizations

Publications

Measurement of Resource Efficiency and Use. Pawlson et al
www.academyhealth.org/2007/tuesday/southernhemisphere1/pawlsong.ppt

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Organization	**National Institute of Health and Clinical Excellence – NICE. United Kingdom**
Category	International; Standards Setting, Industry Organizations
Source	http://www.nice.org.uk/
Measure	**Evidence-Based Clinical Guidelines, Technical Guidelines**

Summary

An independent organization responsible for providing national guidance on promoting good health and preventing and treating ill health. Publishes evidence-based clinical guidelines, technical guidelines and NHS funded organizations are required to incorporate them into practice. NICE guidance is developed by a number of independent advisory groups made up of health professionals, those working in the NHS, patients, their carers and the public.

NICE produces guidance in three areas of health:

- **public health** - guidance on the promotion of good health and the prevention of ill health for those working in the NHS, local authorities and the wider public and voluntary sector
- **health technologies** - guidance on the use of new and existing medicines, treatments and procedures within the NHS
- **clinical practice** - guidance on the appropriate treatment and care of people with specific diseases and conditions within the NHS.

Focus of guidelines is

- improve the quality of clinical care
- assess the clinical and cost effectiveness of treatments or management approaches
- advisory, but are expected to be taken into account by clinicians
- evidence based on the best possible research evidence and expert consensus

Methodology

Guidelines are developed through a process that takes account of the views of those who might be affected by the guideline (usually including healthcare professionals, patients and their carers, service managers, NHS trusts, the wider public, government and the healthcare industries).

NICE also produces tools to support implementation of the guideline in the NHS. These include:

- **costing report** and **costing template** to estimate the savings and costs associated with implementation
- educational **slide sets**
- **implementation advice** on how to put the guidance into practice and national initiatives that support this locally
- **audit criteria** to monitor local practice.

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Organization	NQF – National Priorities Partnership
Category	Standards Setting, Industry Organizations
Source	http://www.nationalprioritiespartnership.org/
Quality Measure	**Efficiency of Care Framework** **NQF Care Coordination Framework**

Summary

In 2008 NQF convened the **National Priorities Partnership**, a collaborative effort of 32 major national organizations that collectively influence every part of the healthcare system. By focusing on high-leverage Priorities and Goals and taking collective action to reach them, the Partners aim to transform healthcare from the inside out.

The priorities targeted for improvement are proven ways to eliminate harm, waste, and disparities. The Partners in this coalition have agreed to a core set of National Priorities and Goals and set out actions to achieve specific, measurable progress—including action in the areas of payment, public reporting, quality improvement, and consumer engagement. The Partnership has identified the following six Priorities as those with the greatest potential to eradicate disparities, reduce harm, and remove waste from the American healthcare system:

- **Patient and Family Engagement** in managing their health and making decisions about their care
- **Population Health** - health and wellness as well as national, state, and local systems of care fully invested in the prevention of disease, injury, and disability
- **Safety** - continually reducing the risks of injury from care
- **Care Coordination** - guides patients and families through their healthcare experience, while respecting patient choice, offering physical and psychological supports, and encouraging strong relationships between patients and the healthcare professionals accountable for their care.
- **Palliative and End-of-Life Care** - dignity, comfort, companionship, and spiritual support to patients and families facing advanced illness or dying.
- **Overuse** - promotes better health and more affordable care by continually and safely reducing the burden of unscientific, inappropriate, and excessive care, including tests, drugs, procedures, visits, and hospital stays.

1. Providing Efficient and Effective Care

National Quality Forum committee is developing recommendations for a national framework for measuring and improving the efficiency of U.S. health care. Objective is to develop a comprehensive measurement framework to assess efficiency—quality and costs—across extended health care episodes. Features include:

- Generic episode framework adapted to specific conditions
- Extended Episodes of Care

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- Patient-focused way of thinking
- Directed at value, quality, costs & patient preferences
- Addresses care coordination, care transitions & hand-offs
- Antidote to current encounter-driven finance system
- Common Language: Terminology Quality of care", IOM – safe, effective, patient-centered, timely, equitable
- "Cost of care" - Resource use: price + volume
- "Efficiency of care" - Quality + cost
- "Value of care" - Quality + costs + preferences

2. NQF Care Coordination Framework

- Healthcare "Home"
- Proactive Plan of Care and Follow-up
- Communication
- Information Systems
- Transitions or Hand-offs

Publications

NQF National Priorities Partnership: *Leveraging Our Collective Efforts.* Janet M. Corrigan

http://www.google.com/url?sa=t&source=web&cd=4&ved=0CB0QFjAD&url=http%3A%2F%2Fwww.ehcca.com%2Fpresentations%2Fpfpsummit3%2Fcorrigan_2.ppt&rct=j&q=nqf%20research%20efficiency%20project&ei=8-1mTNT1O8WqlAe-zN2eBQ&usg=AFQjCNFm-OJ5umdTDpkl7TtqxlFknoXl5w

National Priorities Partnership. *National Priorities and Goals: Aligning Our Efforts to Transform America's Healthcare*. Washington, DC: National Quality Forum; 2008. www.nationalprioritiespartnership.org

Baker N, Whittington JW, Resar RK, Griffin FA, Nolan KM. *Reducing Costs Through the Appropriate Use of Specialty Services*. IHI Innovation Series white paper. Cambridge, Massachusetts: Institute for Healthcare Improvement; 2010. (Available on www.IHI.org)

Measurement Framework: Evaluating Efficiency Across Patient-Focused Episodes of Care
http://www.qualityforum.org/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=25912

The National Quality Forum (NQF) convened a Steering Committee to develop a framework for evaluating the efficiency of care over time, including clear definitions and a shared vision of what can be achieved around quality, cost, and value, serving as a foundation for the work of larger performance improvement efforts. This report presents the NQF-endorsed® measurement framework for assessing efficiency, and ultimately value, associated with the care over the course of an episode of illness and sets forth a vision to guide ongoing and future efforts.

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Organization	**National Quality Forum (NQF)**
Category	Standards Setting, Industry Organizations
Source	http://www.qualityforum.org/
Measure	**National Voluntary Consensus Standards for Hospital Care** http://www.qualityforum.org/projects/ongoing/hosp-priorities2007/ **National Voluntary Consensus Standards for Hospital Care: Outcomes and Efficiency** http://www.qualityforum.org/projects/ongoing/hospitaleff/index.asp **Pay for Performance** http://www.qualityforum.org/projects/completed/p4p.asp **Safe Practices for Better Healthcare** http://www.qualityforum.org/projects/ongoing/safe-practices/ **Serious Reportable Events** http://www.qualityforum.org/projects/completed/sre/

Summary

The National Quality Forum is a private, not-for-profit membership organization created to develop and implement a national strategy for healthcare quality measurement and reporting. a public-private partnership, the NQF has broad participation from all parts of the health care system, including national, state, regional, and local groups representing consumers, public and private purchasers, employers, health care professionals, provider organizations, health plans, accrediting bodies, labor unions, supporting industries, and organizations involved in health care research or quality improvement. Together, the organizational members of the NQF will work to promote a common approach to measuring health care quality and fostering system-wide capacity for quality improvement.

Following a 1998 Presidential Commission recommendation, the NQF was created in 1999 to find ways to improve the quality and safety of American healthcare and to standardize healthcare quality measurement and reporting. To date, NQF has endorsed more than 200 consensus standards.

1. **National Voluntary Consensus Standards for Hospital Care**. Seeks to identify and endorse measures suitable for public accountability and quality improvement related to outcomes and efficiency of hospital care.

   Focus is on the six domains of healthcare quality: safety, effectiveness, efficiency, timeliness, equity, and patient-centered care. There is a growing set of measures on safety and effectiveness, though usually more oriented to process. As move towards a broader view of hospital-based care, there is a need for measures that specifically address the outcomes and efficiency of care. Further, the growing recognition of the critical role that the hospital plays as the focal point for coordination to ambulatory care, home care, and skilled nursing facilities necessitates measures that take the broader view of care beyond the walls of the hospital.

2. **National Voluntary Consensus Standards for Hospital Care: Outcomes and Efficiency**

   A NQF project that seeks to identify and endorse measures suitable for both public accountability and quality improvement related to outcomes and efficiency of hospital care. To achieve quality care in hospitals and across the continuum, there is a need to focus on the six domains of healthcare quality: safety, effectiveness, efficiency, timeliness, equity, and patient-

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centered care. There is a growing set of measures on safety and effectiveness, though usually more oriented to process. As we move towards a broader view of hospital-based care, there is a need for measures that specifically address the outcomes and efficiency of care. Further, the growing recognition of the critical role that the hospital plays as the focal point for coordination to ambulatory care, home care, and skilled nursing facilities necessitates measures that take the broader view of care beyond the walls of the hospital.

3. Physician Performance – Pay for Performance

Assessed the various types and prevalence of healthcare initiatives in which payment is used as a mechanism to incentivize or reward higher quality of care – i.e., so-called "pay for performance" programs – and determine what design strategies or other characteristics of these programs. Established evidence-based performance measures that are endorsed by NQF through multi-stakeholder consensus gives healthcare purchasers a common mechanism for evaluating providers and linking their performance to reimbursement

4. Safe Practices for Better Healthcare

In 2003, the National Quality Forum (NQF) endorsed a set of 30 safe practices that should be universally utilized in applicable clinical care settings to reduce the risk of harm to patients. Updated in 2010. The NQF-endorsed Safe Practices are a set of voluntary consensus standards that serve as a tool for healthcare providers, purchasers, and consumers to identify and encourage practices that will reduce errors and improve care. These practices were not intended to capture all activities that might reduce adverse healthcare events; rather they focus on practices that: 1) have strong evidence that they are effective in reducing the likelihood of harming a patient; 2) are generalizable (i.e. they may be applied in multiple clinical care settings and/or multiple types of patients); 3) are likely to have a significant benefit to patient safety if fully implemented; and 4) have knowledge about them that is usable by consumers, purchasers, providers, and researchers. A recently released update report, *Safe Practices for Better Healthcare—2009 Update* presents updated 34 practices that have been demonstrated to be effective in reducing the occurrence of adverse healthcare events.

5. Serious Reportable Events

In 2002, the National Quality Forum (NQF) published a report, *Serious Reportable Events in Healthcare*, which identified 27 adverse events that are serious, largely preventable, and of concern to both the public and healthcare providers. In 2006, NQF endorsed 28 serious reportable events in healthcare that should be reported by all licensed healthcare facilities. As of November 2006, 25 states required licensed healthcare facilities to report at least some kinds of adverse events related to healthcare. The events on the list are identifiable and measurable, and the risk of occurrence of these events is significantly influenced by the policies and procedures of healthcare organizations. The list updates the original 27 events—with material changes to 3 of the events and to the specifications of 4 events—and adds 1 new event. The events remain grouped into six categories: surgical, product or device, patient protection, care management, environmental, and criminal events.

Publications

Safe Practices for Better Healthcare– 2010 Update.
http://www.qualityforum.org/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=25690

Patient Focused Episodes Of Care . Measurement Framework: Evaluating Efficiency Across Patient-Focused Episodes of Care.
http://www.qualityforum.org/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=25912

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National Voluntary Consensus Standards for Clinicians—Additional Performance Measures 2008
http://www.qualityforum.org/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=17698

Identifying Gaps in Specialty Physician Performance Measurement .
http://www.qualityforum.org/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=22017

National Voluntary Consensus Standards for Hospital Care2007: Performance Measures
http://www.qualityforum.org/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=19958

Reaching the Tipping Point: Measuring and Reporting Quality Using the NQF-Endorsed Hospital Care Measures. 2003
http://www.qualityforum.org/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=22099

National Quality Forum (NQF). *Safe Practices for Better Healthcare–2009 Update: A Consensus Report.* Washington, DC: NQF; 2009.
http://www.qualityforum.org/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=17653

Serious Reportable Events in Healthcare 2006 Update. *A Consensus Report* Washington, DC: NQF 2007
http://www.qualityforum.org/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=20091

[entry updated 2010]

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Organization	**New York State Department of Health**
Category	State; Performance Ratings, Reports, Scorecards, Benchmarking (report actual performance)
Source	http://www.health.state.ny.us/statistics/diseases/cardiovascular/
Measure	**Cardiac Surgery Reporting System (CSRS)** http://www.health.state.ny.us/diseases/cardiovascular/heart_disease/docs/2003-2005_adult_cardiac_surgery.pdf http://www.cga.ct.gov/2006/rpt/2006-R-0741.htm

Summary

New York State has a Cardiac Surgery Reporting System (CSRS), which contains information about cardiac preoperative risk factors, postoperative complications, and hospital discharge. Reports information on coronary artery bypass graft surgery, valve surgery, and the two procedures done in combination at hospitals in New York State where these procedures are performed. Provides data on risk factors associated with death following coronary artery bypass and heart valve surgery and lists hospital and physician-specific mortality rates which have been risk-adjusted to account for differences in patient severity of illness.

Reporting system was designed via collaboration between hospitals and doctors involved in cardiac care and the Department of Health and the Cardiac Advisory Committee to compile accurate and meaningful data that can be used to enhance quality of care. Since 1989, the New York Department of Health (DOH) has published annual data on risk-adjusted mortality following coronary artery bypass surgery by hospital and surgeon. The state's Cardiac Surgery Reporting System (CSRS) was the first program in the country to produce public data on outcomes for cardiac surgery and is the nation's longest running program of its kind. DOH is advised in its activities by the Cardiac Advisory Committee (CAC), a group of independent, practicing cardiac surgeons, cardiologists and other professionals in related fields.

The goal is to improve the quality of care related to cardiac surgery in the state. Providing hospitals and cardiac surgeons in New York with data about their own outcomes for these procedures allows them to examine the quality of care they provide and to identify areas needing improvement.

The CSRS results have been used to create a cardiac profile system that assesses the performance of hospitals and surgeons over time, independent of the severity of individuals' pre-operative conditions. The program is aimed at:

1. understanding the health risks of patients that adversely affect how they will fare in coronary artery bypass surgery and valve surgery,
2. improving the results of different heart disease treatments,
3. improving cardiac care, and
4. providing information to help patients make better decisions about their own care.

Data on cardiac surgery and care is published annually in the “Adult Cardiac Surgery” report.

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Methodology

The primary source of data is the New York State Cardiac Surgery Reporting System, which gathers information on each patient's demographic and clinical characteristics, the procedure performed, and the outcomes.

All analyses (cardiac bypass surgery, valve surgery, combined bypass/valve surgery, and physician-specific data) use the outcome of combined in-hospital/30-day mortality. These mortalities include any death occurring in the same hospital stay in which a patient underwent cardiac surgery and any death that occurs after hospital discharge but within 30 days of the surgery.

Data is adjusted to account for

- patient risk – 40+ risk factors are combined to create risk profile of patient
- hospital/30-day deaths risk adjusted mortality analysis
- patient mortality rates for providers - predict mortality rate for each hospital and surgeon

CAC reviews the data collected and analyzed. Committee members assist with interpretation and advise DOH regarding hospitals and surgeons that may need special attention. The CAC has also visited particular hospitals and has recommended that some facilities use outside consultants to design improvements for their programs.

Results

In response to the program's results for surgery, facilities have refined patient criteria, evaluated patients more closely for pre–operative risks and directed them to the appropriate surgeon. Many hospitals have identified medical care process problems that have led to less than optimal outcomes.

2003 - 2005 report highlights include:

- The 2005 in-hospital mortality rate for cardiac bypass surgery – at 1.56 percent –the lowest since reporting began in 1989 and slightly down from 1.61 percent in 2004.
- The 2005 combined in-hospital/30-day mortality rate of 2.07 percent for cardiac bypass surgery decreased slightly from the 2004 rate of 2.09 percent.
- The 2003-2005 in-hospital mortality rate for valve and combined valve and bypass surgeries was 5.59 percent, down from 6.04 percent for 2002-2004. The combined in-hospital/30-day mortality rate was 6.26 percent for these procedures in 2003-2005 (comparison data for 2002-2004 not available).
- In 2005, there were 12,146 cardiac bypass surgeries performed in New York State compared to a high of 20,220 performed in 1997. Cardiac bypass surgeries have decreased because many patients who would have received this surgery a few years ago are now undergoing percutaneous coronary interventions (PCI), a procedure used to clear blocked coronary arteries and referred to as "angioplasty" or "coronary stenting."
- For 2003-2005, there were 20,627 valve and combined valve/bypass surgeries performed, slightly above the 20,309 performed for 2002-2004.

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Publications

Adult Cardiac Surgery in New York State 2003 – 2005. New York State Department of Health. March 2008 http://www.health.state.ny.us/diseases/cardiovascular/heart_disease/docs/2003-2005_adult_cardiac_surgery.pdf

Bridgewater. B et al Surgeon Specific Mortality in Adult Cardiac Surgery: Comparison Between Crude and Risk Stratified Data. *BMJ* 2003;327:13-17 (5 July) http://www.bmj.com/cgi/content/abstract/327/7405/13.

Hannan E. L et al. Adult Open Heart Surgery in New York State. An Analysis of Risk Factors and Hospital Mortality Rates. *JAMA* Vol. 264 No. 21, December 5, 1990

Halpin et al. Public Health Reporting: The United States Perspective. *Semin Cardiothorac Vasc Anesth.*2008; 12:3 191-202

Steinbrook Robert. Public Report Cards — Cardiac Surgery and Beyond. *NEJM*, 355:18, 1847-1849, Nov 2, 2006

Shahian David et al. Quality Measurement in Adult Cardiac Surgery: Part 1—Conceptual Framework and Measure Selection. *Ann Thorac Surg* 2007. 83:S3–12 http://ats.ctsnetjournals.org/cgi/reprint/83/4_Supplement/S3

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Organization	New York State Department of Health
Category	State focus; Performance Ratings/Reports/Scorecards/Databases/Benchmarking
Source	http://hospitals.nyhealth.gov/
Measure	New York State Hospital Quality Ratings

Summary

The New York State Hospital Profile Web site allows comparative hospital search (by region or county, by name, or by alphabetical browsing) and hospital profiles including quality of care measurements.

Enables consumer to compare hospitals' quality of care with each other and with the state average. Side-by-side comparisons in seven areas: Appropriate Heart Attack care; Heart Failure care; Pneumonia; Surgical infection prevention; Adult or Pediatric cardiac surgery mortality (death) rates; and Angioplasty mortality rates. The search by procedure feature shows volume of common surgeries like gall bladder removal and tonsillectomy.

All hospitals in New York State licensed by the NYS Department of Health to provide critical, acute and/or primary medical care are included

Methodology

Data sources include:

- Contact information, certified bed counts, and available services for each hospital come from the Health Facilities Master File (HFMF), a database maintained by the New York State Department of Health.
- Quality of care measures come from the Centers for Medicare and Medicaid Services (CMS).
- The information on number of times each type of procedure was performed at each hospital comes from the Statewide Planning and Research Cooperative System (SPARCS) database, maintained by the New York State Department of Health.

Three kinds of quality data are used: Recommended Care, Composite Scores and Outcomes Measures

- Evidence based **quality measures** used to determine hospital quality. Information on how often a hospital provides recommended care and treatment to eligible patients is converted into percentages that can be compared with other hospitals and statewide averages. These recommended procedures include:

    - care that a patient should receive upon arrival at the hospital
    - care that should occur during the hospital stay
    - advice or instructions patients should receive when discharged from the hospital

Outcome measures include risk-adjusted mortality rate.

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Composite Scores

Each set of Recommended Care measures pertains to a specific condition, namely Heart Attack, Heart Failure, Pneumonia or Surgical Infection. In each set, some measures are required for hospitals participating in the Hospital Quality Alliance, while others are voluntary.

Other data used include volume data and facility data.

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Organization	**New York State Health Accountability Foundation**
Category	State focus; Performance Ratings/Reports/Scorecards/Databases/Benchmarking
Source	http://www.nyshaf.org/index/about
Measure	**Regional Health Care Report Cards** http://www.nyshaf.org/index/hmo_report_card

Summary

New York State Health Accountability Foundation is a public-private partnership dedicated to promoting transparency in the health care system and providing employers and consumers with reliable, independent information on health care cost and quality. Founded in 1998, the Health Accountability Foundation

- publishes standardized performance data on health plans, hospitals, nursing homes and physicians
- promotes value-based health care purchasing by encouraging payers and others to reward quality and efficiency
- helps providers improve by benchmarking their performance against others and providing best practices information
- helps patients make informed choices about their care

Online interactive Regional Health Care Report Card which provides comparative information on commercial health insurance plans and hospitals in New York, New Jersey, Connecticut, Vermont and Rhode Island. Covers data on the cost and quality of care received by members of the states' commercial health insurance plans, and the quality of care, mortality rates, length of stay and pricing of care provided to the State's hospital patients.

Methodology

Hospital Report Cards cover key areas of:

- Appropriate care based upon evidence based guidelines
- Key clinical areas include Heart Care, Maternity, other conditions (Asthma, COPD, Depression, diabetes, Kidney disease, pneumonia), some surgical procedures (including appendectomy, hip replacement), patient safety (AHRQ patient safety, Leapfrog survey, infection control) and Patient satisfaction (HCAHPS).
- Other areas covered include mortality, length of stay, hospital charges

Data is sourced from CMS data from New York, New Jersey, Connecticut, Rhode Island, and Vermont State hospitals that volunteered to submit their data for public reporting. The clinical measures reported focus on heart attack, heart failure, pneumonia and surgical infection prevention. Administrative data includes hospital stays and is sourced from New York State's Department of Health Statewide Planning and Research Cooperative System (SPARCS), The State of New Jersey Department of Health and Senior Services uniform billing data files (UB-92 inpatient), State of Vermont Department of Banking, Insurance, Securities & Health Care Administration - Vermont Uniform Hospital Discharge Data Set (VUHDDS) and Rhode Island Department of Health Uniform Hospital Discharge Data Set. Patient safety information is sourced from Leapfrog Group Surveys and Patient Satisfaction from HCAHPS.

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Organization	**New Zealand Ministry of Health**
Category	International; Performance ratings, Reports, Scorecards, Databases, Benchmarking
Source	www.moh.govt.nz
Measure	**District Health Board (DHB) Hospital Benchmark Information Reports** http://www.moh.govt.nz/moh.nsf/pagesmh/8443/$File/hbi-benchmark-report-apr-jun-08.pdf

Summary

Balanced scorecard for public hospitals introduced in 2001 to look at financial performance, customer satisfaction, internal processes, and organizational learning. From 2004, data have been published as quarterly District Health Board (DHB) reports which provide a tool for DHBs to use as a basis for benchmarking and other performance improvement exercises, as well as a form of public accountability. System was reviewed in 2005 to further enhance transparency and utility of hospital performance data. Hospital Benchmark Information reports, report on data supplied by the hospital services in District Health Boards.

4 categories of information organizational health, quality and patient satisfaction, process and efficiency, and financial. 15 high-level comparative measures of New Zealand hospital performance include triage times, patient satisfaction, average length of stay, acute readmissions, hospital acquired infections and a number of measures relating to organizational issues (turnover, workplace injuries).

Methodology

Performance measures included in the report are provided for use by DHBs as a basis for benchmarking.

1. The **Quality and Patient Outcome quadran**t contains four measures: emergency triage rates acute readmissions patient satisfaction and HABSI (Healthcare Associated *S. aureus* Bloodstream Infections)
2. **The Process and Efficiency Quadrant** contains four measures: average length of stay (ALOS), day case procedures; day of surgery admission; and did not attends.
3. The **Organizational Health quadrant** contains three measures: staff turnover, sick leave, workplace illness and injuries.
4. **Financial Quadrant**

Publications

District Health Board Hospital Information Benchmark April-June 2008
http://www.moh.govt.nz/moh.nsf/pagesmh/8443/$File/hbi-benchmark-report-apr-jun-08.pdf

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Organization	**Organization for Economic Cooperation and Development (OECD)**
Category	International; Performance ratings, Reports, Scorecards, Databases, Benchmarking
Source	http://www.oecd.org/health/hcqi
Measure	**Health Care Quality Indicator (HCQI) Project** http://www.oecd.org/dataoecd/1/36/36262363.pdf

Summary

The OECD Health Care Quality Indicator (HCQI) Project was started in 2001. The long-term objective of the HCQI Project is to develop a set of indicators that can be used to raise questions for further investigation concerning quality of health care across countries. The HCQI project has built on two pre-existing international collaborations organized by the Commonwealth Fund of New York (five countries) and The Nordic Minister Council Working Group on Quality Measurement (six countries). It now involves 23 countries and has spanned nearly four years of work. The project has been divided into two phases. The initial phase, concentrated on 17 important and readily available indicators of effectiveness of care. Future indicators to be considered in the second phase of work will consider a broader set of clinical conditions and other dimensions of health care quality.

The indicators recommended for retention in an initial HCQI indicator set are

- Breast Cancer Survival
- Mammography Screening
- Cervical Cancer Survival
- Cervical Cancer Screening
- Colorectal Cancer Survival
- Incidence of Vaccine Preventable Diseases
- Coverage for basic vaccination
- Asthma mortality rate
- AMI 30-day case fatality rate
- Stroke 30-day case fatality rate
- Waiting time for femur fracture surgery
- Influenza vaccination for adults over 65
- Smoking rates

The HCQI Project Initial Indicators Report and HCQI Project Conceptual Framework Paper were released in March 2006. International effort aimed at measuring quality of care in key areas of:

- a range of health care conditions, such as cancer, diabetes, asthma, vaccine preventable diseases, cardiovascular disease;
- a range of dimensions of healthcare quality, such as effectiveness, patient safety and responsiveness or patient centeredness;
- a range of patient needs, such as preventive health, curative care, living with disability, and coping with end of life.

Methodology

The effort at deriving an initial set of indicators for the HCQI Project has spanned 4 years, involving extensive consensus building across the 23 participating countries and detailed analysis on the comparability of data across different country data sources.

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Results

Purpose of the HCQI was to develop indicators for cross-national comparison. Project recognized the substantial challenges of arriving at comparable international data. Work has focused on methodological tasks of detailing specifications, reconciling differing data sources, understanding differences in health care systems and their mandates, and separating differences in performance from differences in measurement. Short-term goal is to generate information that will raise questions and stimulate further investigation about the measures themselves.

Publications

Health Care Quality Indicators Project Initial Indicators Report. Soeren Mattke, Edward Kelley, Peter Scherer, Jeremy Hurst, Maria Luisa Gil Lapetra 09-Mar-2006 OECD Health Working Papers No. 22
http://www.oecd.org/dataoecd/1/34/36262514.pdf

Health Care Quality Indicators Project Conceptual Framework Paper Edward Kelley and Jeremy Hurst. OECD Health Working Papers No. 23. 09-Mar-2006. http://www.oecd.org/dataoecd/1/36/36262363.pdf

Facilitating Cross National Comparisons of Indicators for Patient Safety at the Health System Level in the OECD Countries. Saskia Drösler. OECD Health Technical Papers No. 19. 07-Apr-2008
http://www.oecd.org/dataoecd/24/48/40401929.pdf?contentId=40401936

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Organization	**Pacific Business Group on Health/California Cooperative Healthcare Reporting Initiative**
Category	State focus; Performance Ratings/Reports/Scorecards/Databases/Benchmarking
Source	http://www.pbgh.org/
Measure	**California Physician Performance Initiative (CPPI)** http://www.cchri.org/ http://www.cchri.org/programs/programs_CPPI.html

Summary

The Pacific Business Group on Health (PBGH), a business coalition of 50 purchasers, seeks to improve the quality and availability of health care while moderating cost. Since 1989, PBGH has played a leading role both nationally and statewide in health care measurement, trend moderation, and system accountability through public reporting.

California Physician Performance Initiative (CPPI)

Collaborative project of the California Cooperative Healthcare Reporting Initiative (CCHRI), managed by the Pacific Business Group on Health. Commenced in 2006. Generates standard performance measures and reports at the health plan, physician group, and physician levels. A standardized system for analyzing administrative claims data to measure and report on the quality and cost of physician-provided health care in California. Goals are to work collaboratively with physicians, health plans, consumers, and employers as part of a national effort to improve the quality of patient care while moderating costs.

In 2006, the Centers for Medicare and Medicaid Services (CMS) provided funding to aggregate Medicare fee-for-service and commercial claims data to calculate and report quality measures as part of a national effort to establish physician performance standards. (The six-site pilot project is known as the **Better Quality Initiative**). The voluntary addition of data from California's three largest commercial PPOs (Anthem Blue Cross, Blue Shield of California, and United Healthcare) provided a large enough pool to test the reliability of an initial set of 15 quality measures (cancer, care for older adults, diabetes, heart disease, heart failure, pulmonary disease, rheumatology & orthopedics) as well as methods for attributing patients based on claims data of patient care provided in 2007.

Methodology

During the pilot phase, CPPI combined Medicare fee-for-service data with commercial claims data to establish an infrastructure to aggregate claims data across multiple data suppliers, score and report results to physicians and other stakeholders. 15 clinical quality measures. Uses aggregated data to test a broader set of quality measures. Uses composites indicators that aggregate related, individual quality measures. Tests episode-based cost of care measures.

Physician Performance Reports - advise physicians of the quality measurement work that is underway in California, to share results with physicians, and to begin an information exchange about ways to improve the measurement data and performance. California physicians who participate in the Medicare program and/or contract with one or more of three participating commercial PPOs during 2007 are eligible to receive a report. Approximately 20,000 physicians have a reliable score for at least one of the fifteen measures and will receive a Physician Performance Report. CPPI assessed physician performance using clinical quality measures that are evidence-based, nationally standardized. CPPI used measure specifications from the NCQA, HEDIS, and the Physician Consortium for Performance Improvement. The measures address both preventive care and chronic condition management.

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Publications

Report on Quality. 2008 http://www.pbgh.org/programs/cchri/documents/CCHRI2008_QR.pdf

California Physician Performance Initiative (CPPI) Clinical Quality Measures
http://www.cchri.org/programs/documents/CPPI_Measures_Oct2008.pdf

California Physician Performance Initiative Methodology for Physician Performance Scoring October 2008
http://www.cchri.org/programs/documents/CPPI_Methods_Oct2008.pdf

Cost Efficiency At Hospital Facilities In California 2007
http://www.pbgh.org/documents/Milliman_OSHPD_Report_FINAL_20071017.pdf

Hospital Cost Efficiency Measurement: Methodological Approaches 2006
http://www.pbgh.org/news/pubs/documents/PBGHHospEfficiencyMeas_01-2006_22p.pdf

Advancing Physician Performance Measurement Using Administrative Data to Assess Physician Quality and Efficiency. September 2005 http://www.pbgh.org/news/pubs/documents/PBGHP3Report_09-01-05final.pdf

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Organization	Patient Centered Primary Care Collaborative (PCPCC)
Category	Payment Reform
Source	http://www.pcpcc.net/content/joint-principles-patient-centered-medical-home
Measure	**Summary of Medical Home material and pilots** http://www.pcpcc.net/who-we-are http://www.pcpcc.net/pcpcc-pilot-projects

Summary

The Patient Centered Primary Care Collaborative (PCPCC) is a coalition of major employers, consumer groups, patient quality organizations, health plans, labor unions, hospitals, clinicians and many others who have joined together to develop and advance the patient centered medical home (PCMH). The Collaborative has well over 700 members.

The Collaborative believes that, if implemented, the patient centered medical home will improve the health of patients and the viability of the healthcare delivery system. Employers, consumers, patients, clinicians and payers have agreed that it is essential to support a better model of compensating clinicians.

Compensation under the PCMH model would incorporate enhanced access and communication, improve coordination of care, reward for higher value, expand administrative and quality innovations, and promote active patient and family involvement. The PCMH model will also engage patients and their families in positive, ongoing relationships with their clinicians. Further, the PCMH will improve the quality of care delivered and help control the unsustainable rising costs of healthcare for both individuals and plan-sponsors.

The Patient Centered Medical Home (PCMH) is an approach to providing comprehensive primary care for children, youth and adults. The PCMH is a health care setting that facilitates partnerships between individual patients, and their personal physicians, and when appropriate, the patient's family.

Principles (from the organizations listed below)

The AAP, AAFP, ACP, and AOA, representing approximately 333,000 physicians, have developed the following joint principles to describe the characteristics of the PC-MH.

- Personal physician - each patient has an ongoing relationship with a personal physician trained to provide first contact, continuous and comprehensive care.

- Physician directed medical practice – the personal physician leads a team of individuals at the practice level who collectively take responsibility for the ongoing care of patients.

- Whole person orientation – the personal physician is responsible for providing for all the patient's health care needs or taking responsibility for appropriately arranging care with other qualified professionals. This includes care for all stages of life; acute care; chronic care; preventive services; and end of life care.

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- Care is coordinated and/or integrated across all elements of the complex health care system (e.g., subspecialty care, hospitals, home health agencies, nursing homes) and the patient's community (e.g., family, public and private community-based services). Care is facilitated by registries, information technology, health information exchange and other means to assure that patients get the indicated care when and where they need and want it in a culturally and linguistically appropriate manner.

- Quality and safety are hallmarks of the medical home

Payment under Medical Home

Payment appropriately recognizes the added value provided to patients who have a patient-centered medical home. The payment structure should be based on the following framework:

- It should reflect the value of physician and non-physician staff patient-centered care management work that falls outside of the face-to-face visit.
- It should pay for services associated with coordination of care both within a given practice and between consultants, ancillary providers, and community resources.
- It should support adoption and use of health information technology for quality improvement.
- It should support provision of enhanced communication access such as secure e-mail and telephone consultation.
- It should recognize the value of physician work associated with remote monitoring of clinical data using technology.
- It should allow for separate fee-for-service payments for face-to-face visits. (Payments for care management services that fall outside of the face-to-face visit, as described above, should not result in a reduction in the payments for face-to-face visits).
- It should recognize case mix differences in the patient population being treated within the practice.
- It should allow physicians to share in savings from reduced hospitalizations associated with physician-guided care management in the office setting.
- It should allow for additional payments for achieving measurable and continuous quality improvements.

Website (including summary of pilots and demonstrations)

Their website provides a brochure, strategic plan, and general powerpoint presentation giving an overview of the PCPCC and the goals they are trying to achieve. In addition, the site provides a summary of many of the PCMH pilots in various states. At last count, there were 38 pilots listed on the site.

Publications

http://www.pcpcc.net/who-we-are
PCPCC brochure http://www.pcpcc.net/files/pcpcc_brochure.pdf
PCPCC General Powerpoint Presentation http://www.pcpcc.net/files/pcpcc_powerpoint_slides_2010_0.pptx
PCPCC Strategic Plan 01.20.2010 http://www.pcpcc.net/files/PCPCC_Board_Strategic_Plan_012010.pdf
Pilots and Demonstrations http://www.pcpcc.net/pcpcc-pilot-projects
Demonstration Guidelines http://www.pcpcc.net/content/demonstration-guidelines

Joint principles http://www.pcpcc.net/content/joint-principles-patient-centered-medical-home

[entry updated 2010]

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Organization	**Patient Choice Healthcare Inc** (Medica)
Category	State focus; Performance Ratings/Reports/Scorecards/Databases/Benchmarking; Consumer
Source	http://www.patientchoicesignature.com/index.html
Measure	**Patient Choice** http://www.patientchoicesignature.com/aboutpcs/index.html

Summary

The first tiered health care delivery network in the country, established in 1997, by a group of Minnesota business leaders. Patient Choice Healthcare Inc., was formed in 2000 to assume management of the Choice Plus program (now know as the Patient Choice Care System Program) and to build on its success by creating programs that spur greater competition in the health care market, control costs, improve quality and enhance consumer choice. Medica acquired the Minnesota and Dakota operations of Patient Choice in 2004.

Focus is on program development that leads the market toward value-based health care purchasing—differentiating provider performance and giving consumers the information they need to evaluate cost and quality. Patient Choice programs are available to self-funded employers of all sizes in Minnesota and the Dakotas.

Patient Choice is an innovative program that allows the consumer to easily identify high-quality providers who deliver efficient, cost-effective care. The program features a network in which groups of providers are analyzed on a variety of cost, quality and service measures and tiered into three cost groups—1 (low cost), 2 (middle cost), and 3 (higher cost). Consumers can maximize health care dollars by choosing providers who have priced themselves competitively and managed their patients' care effectively. System covers nearly 30 care systems including 95% of area physicians.

Methodology

Care Systems

Health care providers organize themselves into patient-focused networks called "Care Systems". Each Care System includes primary care clinics, primary care physicians, specialists, hospitals, and other health care professionals and facilities that work together to provide service. Consumers select the Care System that best suits their needs.

Care Systems participating in the Patient Choice program determine their own pricing. Through a unique "tiering" process conducted annually by Patient Choice, Care Systems are analyzed on measures of cost, quality and performance, then grouped into low, medium and high cost groups. Care Systems that manage their patients most effectively and price themselves competitively are available to individuals at a lower cost. Cost groups do not signify lower- or higher-quality care or service. Patient Choice offers comparative information to enable evaluation of Care Systems on factors such as cost, quality and service.

Areas covered include

- Clinical performance
- Patient satisfaction
- Customer service

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- Internet capabilities
- Bridges to Excellence Honorees
- Hospital patient safety

Publications

2009 Patient Choice- *Signature* Care System Summary
http://www.patientchoicesignature.com/aboutpcs/2009/CS_costgroup_summ_sig_2009.pdf

Comparison Guide. *A Consumer's Guide to Care System Quality, Cost and Service*
http://www.patientchoicesignature.com/aboutpcs/consumersurvey.html

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Organization	**Premera Blue Cross**
Category	State; Performance Ratings/Reports/Scorecards/Databases/Benchmarking
Source	https://www.premera.com
Measure	**Quality Score Card** https://www.premera.com/stellent/groups/public/documents/xcpproject/qsc08_overview.asp http://www.pugetsoundhealthalliance.org/news/documents/PremeraQualityProgramisOneofTwoInUS.pdf

Summary

Premera Blue Cross provide health care coverage and related services to more than 1.3 million people. Premera Blue Cross has operated in Washington since 1933 and Alaska since 1952 and is an independent licensee of the Blue Cross Blue Shield Association.

Quality Score Card

Published annually and was developed in 2002 by Washington state medical groups and Premera. The Quality Score Card was the first Washington scorecard developed collaboratively by a health insurer and multi-specialty medical groups. This collaborative approach to quality improvement has since set a standard for quality assessment in the state. Focus of the Quality Score Card was expanded in 2005 to track not just how often medical guidelines were followed, but how well certain indicators of member health were controlled. Specific conditions including diabetes and heart disease were tracked. Premera has worked with other organizations to introduce expanded community scorecards in the Northwest. These include Puget Sound Health Alliance and Oregon Health Care Quality Corporation.

Quality Score Card provides information and resources for members to assist in managing their health and healthcare options. Clinical performance of the over 200 participating medical groups is provided in key areas of health care and measures are based on national guidelines and best practices. Consumer focused information is provided on topics such as monitoring cholesterol, blood glucose, or blood pressure; well-child visits; and Pap tests. Measures covered by the score card include asthma, coronary artery disease, diabetes care, ear infection, mammogram, pap test, patient satisfaction, preferred drug list compliance, use of generic drugs, well child visits. Information can be sorted by clinic or by achievement rate, and the network average is also given.

Premera have a **Healthcare Quality Awards Program** which recognizes physicians and practices of all sizes that are delivering high levels of quality care in key areas of preventive care, acute care, chronic care, and overall quality.

The Premera healthcare quality improvement programs are the focus of a major independent academic study to evaluate the impact of quality programs on the healthcare delivered by Washington physicians and clinics. Funded by RSJ Foundation in 2007. The study is examining the relationship between quality and cost impacts of quality incentives by examining clinical quality and efficiency in caring for a broad array of patients. For more information, contact Douglas A. Conrad at dconrad@u.washington.edu. http://www.hcfo.org/pdf/news0108.pdf

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Organization	**Premier Healthcare**
Category	Standards Setting, Industry Organizations
Source	http://www.premierinc.com/about/index.jsp
Measure	**Hospital Quality Incentive Demonstration (HQID)** http://www.premierinc.com/quality-safety/tools-services/p4p/hqi/index.jsp

Summary

Serving more than 2,100 U.S. hospitals and 54,000-plus other healthcare sites, the Premier healthcare alliance and its members are transforming healthcare together. Nearly 200 hospitals and health systems created and entirely own the Premier alliance. Premier's core purpose is "To improve the health of communities." It does this by collecting and analyzing clinical and financial data from its member hospitals, organizing committees of members to make decisions and set direction for the alliance, sponsoring seminars and conferences, and sharing best practices.

Hospital Quality Incentive Demonstration (HQID)

National project designed to determine if economic incentives to hospitals are effective at improving the quality of inpatient care. Launched in October 2003 by the Premier healthcare alliance and the Centers for Medicare & Medicaid Services (CMS), the Hospital Quality Incentive Demonstration (HQID) pay-for-performance project involves more than 250 hospitals across the nation. CMS, which approved a three-year extension of the project in February 2008.

Methodology

HQID tracks process and outcome measures in five clinical areas – acute myocardial infarction (AMI), heart failure, coronary artery bypass graft (CABG), pneumonia, and hip and knee replacement. More than 250 hospitals submit clinical quality data to Premier through the Perspective(TM) data warehouse. Hospitals in the project include small/large, urban/rural, teaching/non-teaching facilities.

- Participation is voluntary.
- More than 30 nationally defined, standardized, risk-adjusted measures representing process of care, as well as patient outcomes, are being tracked to evaluate whether the care provided consistently meets accepted evidence-based practice standards.
- The quality measures were developed by government and private organizations, such as the National Quality Forum (NQF), the American Hospital Association (AHA) and the Leapfrog Group. In addition, they have been tested by CMS, the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) and the Agency for Health Research Quality (AHRQ)

CMS uses the data collected to financially reward top performers in five clinical areas.

Results

Improvements in quality of care in Hospital Quality Incentive Demonstration (HQID) pay-for-performance project saved an estimated 2,500 acute myocardial infarction (AMI/heart attack) patients across the first three years of the project.

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More than 1.1 million patients treated in five clinical areas at participating HQID hospitals received approximately 300,000 additional recommended evidence-based clinical quality measures, such as smoking cessation, discharge instructions and pneumococcal vaccination, during that same timeframe.

HQID hospitals - the average Composite Quality Score (CQS), an aggregate of all quality measures within each clinical area, improved by 4.4 percent between the project's second and third year for total gains of 15.8 percent over the project's first three years.

Publications

Centers For Medicare & Medicaid Services (CMS)/ Premier Hospital Quality Incentive Demonstration Project. Project Findings from Year Two May 2007. http://www.premierinc.com/quality-safety/tools-services/p4p/hqi/resources/hqi-whitepaper-year2.pdf

Fact Sheet 2008 http://www.premierinc.com/quality-safety/tools-services/p4p/hqi/year-3-results/HQID-FactsonlyPartic%20_2_.pdf

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Organization	**Premier Healthcare**
Category	Standards Setting, Industry Organizations
Source	http://www.premierinc.com/quest/
Measure Summary	**QUEST: High Performing Hospitals**

Serving more than 2,100 U.S. hospitals and 54,000-plus other healthcare sites, the Premier healthcare alliance and its members are transforming healthcare together. Nearly 200 hospitals and health systems created and entirely own the Premier alliance. Premier's core purpose is "To improve the health of communities." It does this by collecting and analyzing clinical and financial data from its member hospitals, organizing committees of members to make decisions and set direction for the alliance, sponsoring seminars and conferences, and sharing best practices.

QUEST: High Performing Hospitals

Premier recently launched "QUEST: High Performing Hospitals" based on many of the same principles used in the HQID project. QUEST is a new three-year program involving a cohort of hospitals joined together to develop and share best practices for improving performance in quality, safety and efficiency.

Comprehensive project launched (April 2008) by Premier to improve patient safety and quality in the nation's hospitals while safely reducing healthcare costs. Builds on the success of the Premier/CMS Hospital Quality Incentive Demonstration (HQID). QUEST program seeks to develop the next generation of quality, safety and cost metrics with a consistency and standardization that does not exist today. The purpose of this first-of-its kind program is to accelerate access to technologies proven to be safe and effective. The program will measure the effectiveness of new technologies against the metrics on which QUEST participating hospitals will be measuring themselves.

The QUEST measures focus on Quality, Efficiency, Safety, with Transparency. These measures include harm avoidance, efficiency and mortality reduction. Program is open to all suppliers, medical device manufacturers, pharmaceutical manufacturers and service providers. It will track and test the efficacy and safety outcomes of new technologies from a cost, quality and efficiency standpoint.

Methodology

The QUEST measures focus on Quality, Efficiency, Safety, with Transparency. QUEST participating hospitals report data to Premier on a set of clearly defined performance measures encompassing aspects of quality, efficiency, safety and patient satisfaction. Premier analyzes the data, facilitates sharing of best practices, and provides incentives for top-performing hospitals

Five measurement areas are: mortality ratio; appropriate care: evidence based; efficiency; harm avoidance; and patient experience.

- **Mortality Ratio:** measured against a risk-adjusted model.

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- **Appropriate Care-Evidence Based:** measures the percentage of patients receiving "perfect care" as defined by national standards.
- **Cost of Care:** measures adjusted cost per discharge.
- **Harm Avoidance:** Will be developed over time by the cohort and will likely parallel the IHI 5 Million Lives campaign initially using the IHI Global Trigger Tool and then the Premier SafetySurveillor automated surveillance tool.
- **Patient Experience:** Will measure HCAHPS results, once mandated in October 2007.

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Organization	**Puget Sound Health Alliance**
Category	State focus; Performance Ratings/Reports/Scorecards/Databases/Benchmarking
Source	http://www.pugetsoundhealthalliance.org/
Measure	**Community CheckUp** http://www.wacommunitycheckup.org/

Summary

Puget Sound Health Alliance is a regional partnership involving employers, physicians, hospitals, patients, health plans, and others working together to improve quality and efficiency while reducing the rate of health care cost.

Community Checkup is a publicly-available report comparing health care across the Puget Sound region. Objective is to help improve health care decision-making. This measure includes 21 measures of medical group care and 41 measures of hospital care for as many as 200 health care facilities. Results are available on the website and are searchable by areas of interest, health conditions or geographic location.

Methodology

Contains 21 measures of medical group care and 41 measures of hospital care.

- **The medical group measures** address important topics in health care including preventive care, such as screening for certain cancers; appropriate use of commonly overused services, such as prescriptions for antibiotics; generic drug prescribing; and care for certain chronic conditions—asthma, depression, diabetes, and heart disease. All of the medical group measures are based on extensive work by Clinical Improvement Teams convened by the Alliance. These teams are comprised of local physicians and other community and medical leaders. Each team recommended measures, most of which are based on generally accepted national guidelines for quality care endorsed by the National Quality Forum, the Institute of Medicine and/or HEDIS.

- **The hospital measures** include care for heart failure, heart attack, and pneumonia; surgical care, the occurrence of "never events" (errors that should never happen); and patients' experience of care. The hospital measures are combined from several public sources including the Washington State Department of Health, the Leapfrog Group, and the US Department of Health and Human Services Hospital Compare Program.

Results are benchmarked or compared to those for the top 10 percent of medical groups in the nation for which measurements are available. Objective is to establish a baseline for the region. The focus areas of the Community Checkup—address care for people with diabetes, heart disease and other chronic conditions—reflect the categories of care that make up a significant portion of health care services provided in the community.

Based on data that reflect care provided to approximately 1.6 million people in the region. Uses insurance claims data to measure aspects of care. The data are "de-identified", public report includes only results for clinics or physicians with at least 160 patients with the condition being measured. Community Checkup measures "processes of care" that do not require risk adjustment in the results to account for differences in patient populations

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Publications

Puget Sound Health Alliance Evidence Based Measures Round 2 Reporting August 15, 2008 - Revised
http://www.wacommunitycheckup.org/editable/files/CommunityCheckup_Nov2008/Tech/All21Measures.pdf

Overview: Community Checkup Report
http://www.wacommunitycheckup.org/editable/files/CommunityCheckup_Nov2008/Overview_Nov08.pdf

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Organization	**RAND Corporation**
Category	Standards Setting, Industry Organizations
Source	http://www.rand.org/
Measure	**Rand Health** http://www.rand.org/health/

Summary

RAND Health - A research division within the RAND Corporation that focuses on understanding of health and health behaviors, and examining how the organization and financing of care affect costs, quality, and access. RAND Health originated in the 1960s, when policymakers were engaged in a vigorous debate about how health care should be financed. To provide a factual basis for the debate, in 1971 the Department of Health, Education, and Welfare (now the Department of Health and Human Services) funded the, Rand Health Insurance Experiment a 15-year, multimillion-dollar effort that to this day remains the largest health policy study in U.S. history

Health research studies are coordinated through three programs and four strategic initiatives. The programs focus on long-standing core areas of RAND Health's policy research expertise: quality assessment and improvement; health care economics, organization, and finance; and health promotion and disease prevention. The strategic initiatives focus on policy research in areas that involve high-profile and crosscutting issues (Project COMPARE); important emerging issues (global health and public health preparedness); or special client relationships (military health).

1. The Economics, Financing, and Organization Program

The program's current research agenda focuses on 7 major topics:
• Health care costs
• Health insurance
• Prescription drugs
• Economic incentives to improve quality
• HIV and infectious disease
• Obesity
• U.S. health care reform

2. Quality Assessment and Quality Improvement

Conducted extensive research designed to measure, assess, and improve health care quality and to provide reliable information on quality to consumers selecting care providers or health plans, providers seeking to offer the highest quality care, and purchasers choosing the best health plans for their employees

3. Health promotion and Disease Prevention Program

Determine what behaviors promote healthy lifestyles

- Find effective ways to integrate these behaviors into daily life (including research on why people do – and do not – engage in health promotion activities)
- Improve delivery of preventive care, including encouraging health screenings and diagnosis of under-recognized disorders such as depression

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- Promote healthy aging
- Understand how people assess probabilities and conceptualize risk
- Make well-child care effective and efficient
- Develop strategies to address specific health problems, such as:
  - Obesity
  - HIV and other sexually transmitted diseases
  - Accidents and injuries
- Promote health at worksites, schools, faith-based institutions and other community settings

RAND Health has developed specialized research centers, many in partnership with other institutions.

- Bing Center for Health Economics
- Global Health
- RAND Center for Domestic and International Health Security
- RAND Center for Health and Safety in the Workplace (CHSW)
- RAND Center for Military Health Policy Research
- RAND Center for Population Health and Health Disparities
- RAND Center for Public Health Preparedness
- RAND Drug Policy Research Center
- RAND Gulf States Policy Institute
- Roybal Center for Health Policy Simulation
- Southern California Evidence-Based Practice Center
- UCLA/RAND Center for Adolescent Health Promotion
- UCLA/RAND NIMH Center for Research on Quality in Managed Care

QA Tools - www.rand.org/health/surveys_tools/qatools/index.html

RAND Health has developed and markets several comprehensive, clinically based QA Tools system for assessing quality of care for children and adults. Each QA Tools indicator is based on a focused review of the scientific literature and on ratings by a panel of experts in the field. The QA Tools system includes 46 clinical areas and all four functions of medicine—screening, diagnosis, treatment, and follow-up. They also cover a variety of modes of providing care, including history, physical examination, laboratory study, medication, and other interventions and contacts.

Selected Publications - www.rand.org/health/pubs_topics.html

The Economics, Financing, and Organization Program http://www.rand.org/health/abstracts/project_descriptions/EFO.pdf

Quality Assessment and Quality Improvement Program

http://www.rand.org/health/abstracts/project_descriptions/QAQI.pdf

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Health promotion and Disease Prevention Program. http://www.rand.org/health/abstracts/project_descriptions/HPDP.pdf

Organizing for Quality Inside the "Black Box" of Health Care Improvement in Europe and the United States
http://www.rand.org/pubs/research_briefs/2008/RAND_RB9329.pdf

The First National Report Card on Quality of Health Care in America
http://www.rand.org/pubs/research_briefs/2006/RAND_RB9053-2.pdf

The Quality of Health Care Delivered to Adults in the United States. Appendix
http://www.rand.org/pubs/working_papers/2006/RAND_WR174-1.pdf

The Case for Keeping Quality on the Health Reform Agenda. Testimony presented before the Senate Committee on Finance on June 3, 2008 http://www.rand.org/pubs/testimonies/2008/RAND_CT306.pdf

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Organization	**Resolution Health** (subsidiary of WellPoint)
Category	Proprietary/Analytics/Decision Support/Healthcare Data Technology
Source	http://www.resolutionhealth.com/
Measure	**Physician Quality Profiler** http://www.resolutionhealth.com/536

Summary

Resolution Health, Inc. is a leading data analytics-driven personal health care guidance company. Its services help improve the quality, coordination and safety of health care, enhance communications between patients and their physicians, and reduce medical costs. Resolution Health serves health plans, self-insured employers, unions, third-party administrators, disease management firms and pharmacy benefits managers. Resolution Health is an operating subsidiary of WellPoint

Resolution Health compiles evidence-based care guidelines and clinical best practices, sourced from independent accreditation organizations (NCQA), medical specialty societies (AHA, ADA), government agencies (CDC, FDA), clinical literature and health care experts.

Physician Quality Profiler

Physician Quality Profiler can improve quality of care

- Improve transparency of physician quality
- Increase physician compliance with evidence-based guidelines
- Support pay-for-performance programs
- Support design of tiered, performance-based provider networks

Methodology

Physician Quality Profiler employs 103 clinical performance measures related to 20 clinical specialties.

Provider-specific Quality Reports

- Quality score and profile, by quality measure, are created for individual physicians and physician groups
- Physician performance is evaluated within single health plan or across multiple plans

Condition-specific Quality Reports

- Composite scores by clinical condition (e.g., diabetes) or type of care (e.g., prevention) can be created for physicians or physician groups

Member-specific Detail

- Health plan members whose care was not consistent with best practice guidelines are identified, allowing providers to validate findings and improve performance

Results

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Physician Quality Profiler compares performance of different physicians in a statistically meaningful way

- Uses claims data to evaluate quality of care delivered by individual physicians and physician groups
- Carefully attributes responsibility for the management of each covered health plan member's clinical issues to the appropriate physicians
- Provides state-of-the-art statistical analyses to support quality profiles

Publications

Improving the Quality of Care. Can We Practice What We Preach? *The New England Journal of Medicine*, Volume 348, No. 26
http://www.resolutionhealth.com/wsc_content/pics/user_upload/publications/Steinberg_NE_Journal_of_Medicine.pdf

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Organization	**Rewarding Results Demonstration Projects – RWJ Foundation**
Category	Incentive/Reward Programs
Source	http://www.rwjf.org/pr/product.jsp?id=32332
Measure	**P4P**

Summary

Rewarding Results: Aligning Payments with High-Quality Health Care was a national program of the Robert Wood Johnson Foundation (RWJF) and California HealthCare Foundation that tested the use of financial incentives to improve the quality of health care.

The program supported seven projects across the nation that implemented systems designed to measure the performance of health care providers and adjust their compensation based on performance scores — a strategy commonly termed pay for performance.

Six projects involved physician incentives and one involved hospital incentives. The projects also included nonfinancial incentives, such as public reports on physician performance.

Key Results

The projects, their evaluations and a wealth of related educational materials informed the health care sector about pay-for-performance designs and processes — those that were effective as well as those requiring refinement.

Although they differed considerably in design and results, together the seven demonstrations paid out tens of millions of dollars in provider incentives and instituted performance reports and other nonfinancial mechanisms to help physicians gauge and improve the quality of their care.

Six of the seven projects continued after program funding ended and were operational as of December 2007 — either as implemented during the program or in an evolved form.

Lessons Learned

At the program's conclusion, the Leapfrog Group disseminated 10 principal lessons learned by the program and project staffs.

1. Financial incentives motivate change, but they need to be large enough to make a difference.
2. Nonfinancial incentives, such as additional staffing, infrastructure and technology, also can make a difference.
3. Engaging physicians is a critical activity.
4. There is no clear picture yet of return on investment (ROI).
5. Public reporting is a strong catalyst for providers to improve care.
6. Providers need frequent, clear and actionable feedback on their performance.
7. Providers need to be better educated about pay for performance.
8. Data integrity is important.
9. Experience with managed care appears to be a factor in the success of pay for performance.
10. Pay for performance is not a magic bullet, but can be a useful tool.

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Publications

Rewarding Results Pay-for-Performance: Lessons for Medicare**.** Amanda Folsom, Cyanne Demchak, and Sharon B. Arnold
http://www.hcfo.net/pdf/monograph0308.pdf

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Organization	**Robert Wood Johnson Foundation**
Category	Standards Setting, Industry Organizations
Source	http://www.rwjf.org/
Measure	**Grantmaking Foundation**

Summary

The mission of the Robert Wood Johnson Foundation is to improve the health and health care of all Americans. Focus is on health care delivery, payment systems and quality outcomes. A grantmaking foundation, RWJ builds evidence and produces, synthesizes and distributes knowledge, new ideas and expertise.

Grantmaking framework groups activities into four portfolios—Human Capital, Vulnerable Populations, Pioneer and Targeted.

1. **Targeted portfolio**. Addresses Childhood Obesity, Coverage, Public Health and Quality/Equality—
2. **Building Human Capital**. Health Professionals leadership; enhancing the skills and careers of frontline health workers; training scholars to conduct health policy research; and encouraging youth to pursue health careers.
3. **Childhood Obesity**. Help all children and families eat well and move more—especially those in communities at highest risk for obesity. Aim to reverse the childhood obesity epidemic by 2015.
4. **Vulnerable Populations**. Mitigate role of factors such as poverty, violence, inadequate housing and education that contribute to poor health.
5. **Other key strategies**:
   - Pioneer - support innovators whose bold ideas push beyond conventional thinking to explore solutions at the cutting edge of health and health care.
   - Quality/Equality - committed to improving the quality of health care for all Americans.

Improve Quality And Value

RWJF has several strategies in place to achieve health care that is high-quality and delivers better value. *Aligning Forces for Quality* (refer below), a national initiative of RWJF, is bringing together all of these stakeholders in targeted communities throughout the country to transform the way health care is delivered. The Foundation also supports several other programs and projects focused on improving quality and value. These efforts fall into seven major categories, as outlined below:

1. Measuring Regional Differences in Care

The Foundation is a longtime supporter of the Dartmouth Atlas Project, which has gathered data that documents remarkable differences in per capita Medicare spending from one geographic location in the country to another for the past 20 years. Dartmouth researchers found a 2.5-fold variation in Medicare spending in different regions, even after adjusting for differences in local prices, and the age, race, and underlying health of the population. When the project benchmarked the nation against care provided for Medicare patients by the Mayo Clinic, the data showed that the United States could reduce health care spending by as much as 30 percent for acute and chronic illnesses while still improving the quality of care. The research also shows that more care is not better care—that higher spending does not lead to improvements either from the patient or physician perspectives.

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Improving Data on the Quality and Cost of Care Physicians Provide

Accurate data measuring of the quality of physician and hospital performance helps improve the quality of patient care in the United States. However, the nation lacks standardized, comprehensive data about physician performance and the infrastructure for collecting and reporting on this data does not yet exist, since performance data currently gets collected through a wide range of public and private means. The Foundation is supporting the **High Value Health Care Project**, which is working to develop a nationally consistent, efficient approach to making information on physician performance and costs widely available. This project is coordinated through the Quality Alliance Steering Committee and is primarily managed by the Brookings Institution.

2. **Exploring New Models for Physician Payment**

RWJF is funding efforts to potentially transform the way the public and private sectors pay for and deliver health care, so that our systems reward value instead of volume. One example of this is the PROMETHEUS Payment, Inc. project, which is testing a novel method to pay hospitals, physicians, and other providers by developing what it calls Evidence-Informed Case Rates™ (ECRs) for a number of conditions. ECRs are the total amount that would typically be paid to *all* providers who collectively provide treatment during a specific episode of care, assuming that all commonly accepted clinical practice guidelines were followed. The PROMETHEUS model adjusts the ECRs to take into account the complexity of a patient's condition and adds a financial margin are added to complete the rate. Under the model, various providers would then negotiate what portions of the case rate they agree to deliver, and at what price. This unique model is being tested in two regions of the country starting January 2009, with others to follow.

3. **Assessing Adoption of Health Information Technology**

RWJF supports efforts to enhance and speed the adoption of electronic health records (EHRs) by health care providers because we believe that if an EHR system is implemented in the context of an approach to improve quality, then the promise of improved safety, effectiveness and efficiency in American health care can better be realized. RWJF helped support the release of two seminal studies showing trends in health information technology (HIT) adoption among physicians, with the most recent release in June 2008 showing that 17 percent of physicians currently have and use EHRs (either basic or fully functional). The research provides insights into physicians' perceived barriers and benefits of adopting a HIT system.

4. **Improving Quality in Communities**

Aligning Forces for Quality (AF4Q) is RWJF's signature effort to lift the overall quality of health care in targeted communities throughout the U.S., reduce racial and ethnic disparities, and provide models for national reform. The premise of this initiative is that no single person, group or profession can improve health and health care throughout a community without aligning the major entities and factors that influence people's health and the type of health care they receive. In the AF4Q communities, RWJF is helping everyone who gets care, gives care, and pays for care to work simultaneously on three strategies for improving quality: quality improvement, performance measurement and public reporting, and consumer engagement.

5. **Bringing National Stakeholders Together to Improve Quality**

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With RWJF's support, the National Quality Forum (NQF) is currently coordinating a diverse set of national organizations through its National Priorities Partnership (NPP). This initiative has engaged the major groups or organizations with a stake in improving health care to set priorities for improving the health care system from the inside out. The diverse partners represent organizations that receive, pay for, deliver, and evaluate health care. The NPP's six priorities are: patient and family engagement, population health, safety, care coordination, palliative and end-of-life care, and overuse.

6. **Improving Quality While Reducing Racial and Ethnic Disparities in Care**

   For more than 20 years, research has documented the persistent gaps in health care quality that disproportionately affect Americans from specific racial and ethnic backgrounds. These gaps in quality persist even when other factors, such as insurance status and income level, are taken into account between minority and non-minority patients. RWJF sponsors several research efforts documenting these disparities, and also supports quality improvement programs that help hospitals and others improve quality, while also identifying if they have racial and ethnic disparities in their care. These programs teach hospitals to use patient data to analyze how well they meet specific quality measures by patient race, ethnicity or language—and then develop effective interventions if disparities are shown.

7. **Assessing Legal Barriers to Using Health Information to Improve Quality**

   Information about a patient's health care is critical to improving the quality of health care, however, research shows that real and perceived legal barriers could dramatically hinder efforts to use this type of information for quality improvement. RWJF supports Removing Legal Barriers to Health Information, an invaluable source for analysis of emerging issues in health information law and policy. The project provides balanced options and legal tools for addressing perceived legal barriers to the responsible use of health information to improve quality and reduce health care disparities.

Aligning Forces for Quality Strategy

Regional strategy of fourteen targeted regions across the US to improve health care across the spectrum. Enlists doctors, nurses, hospitals, patients, consumer groups, employers, health plans and other health professionals to work together to improve quality in ways that transform health care for patients from all racial and ethnic backgrounds.
The central goals of *Aligning Forces* are:

- To help providers improve their own ability to deliver quality care.
- To help providers measure and publicly report their performance, as a fundamental means to understand where quality gaps are occurring.
- To help the major forces that influence health care in any one place—such as businesses, health plans, doctors, nurses, and patients—align around some fundamental goals for change.
- To help patients and consumers understand their vital role in recognizing and demanding quality health care

Selected Publications

The State of Health Care Quality in America. http://www.rwjf.org/files/research/currentstateofquality.pdf

Better Ways to Pay for Health Care: A Primer on Healthcare Payment Reform. Jan 2009
http://www.rwjf.org/files/research/nrhiseriesbettewaystopay.pdf

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The Dartmouth Atlas of Health Care Chapter Two, excerpted from The Robert Wood Johnson Foundation Anthology: To Improve Health and Health Care Volume X. Carolyn Newbergh.
http://www.rwjf.org/files/publications/books/2007/AnthologyX_CH02.pdf
Charting the Course: Preparing for the Future, Learning from the Past. Feb 09
.http://www.rwjf.org/files/research/20090204stateofthestates.pdf
Improving Access to Improve Quality: Evaluation of an Organizational Innovation
http://www.rwjf.org/files/research/0808.findingsbrief.pdff.pdf

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Organization	**Subimo** (acquired by WebMD 2006)
Category	Proprietary/Analytics/Decision Support/Healthcare Data Technology
Source	http://www.subimo.com/
Measure	**Health & Benefits Manager**

Summary

Decision support and wellness products supported by WebMD Health Services.

Health & Benefits Manager solution

- Health Management Suite - assists employees reduce their health risks and associated medical costs
- Provider & Treatment Suite - make Quality and Cost Transparent.
- The WebMD Provider & Treatment Suite empowers employees to make more informed provider decisions, identify appropriate drug and treatment care, and understand the costs associated with that care.
- Benefits & Financial Suite – helps employees better understand the financial implications of their healthcare and lifestyle choices. Employees can align their benefits choices with their personal health profile and individual financial needs. Sophisticated cost-modeling and projection tools help understand and more confidently adopt consumer-directed healthcare plans (CDHPs) and tax-preferred accounts such as health savings accounts (HSAs) and flexible spending accounts (FSAs).
- Health Record SuiteWebMD Health Record Suite provides a secure, portable repository for self-reported and imported, professionally sourced health information

Methodology

WebMD Health Services' proprietary technology platform (the WebMD Insight Engine) provides the foundation for the four product suites. The Insight Engine offers extensive capabilities in four key areas:

- Personalization
- Integration
- Engagement
- Reporting & Analysis

The Subimo website mentioned their Healthcare Advisor product that lets members compare hospitals based on personally specified criteria, research conditions and understand treatment options, know what questions to ask a doctor and to learn how to prepare for a procedure. However, information on the website could not be viewed without a user name and password.

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Organization	**TalkingQuality.gov**
Category	Summary for Public; Consumer; Infomediary
Source	http://www.talkingquality.gov
Measure	**TalkingQuality website**

Summary

The contents of this site were produced by the Work Group on Consumer Health Information, a group of researchers with expertise in quality reporting, current sponsors of reporting projects, and recognized experts from related fields.

The Work Group was convened by a trio of Federal Government agencies with substantial interest in these issues:

- Agency for Healthcare Research and Quality (AHRQ).
- Centers for Medicare & Medicaid Services (CMS).
- Office of Personnel Management (OPM).

TalkingQuality site was designed for people and organizations trying to educate consumers about health care quality. In particular, it is intended to help those who are providing consumers with information on the performance of health plans and providers. The site offers the latest research findings, real-world examples, and innovative ideas on ways to communicate complex information on health care quality to consumers.

To maintain a focus on reporting issues rather than measurement issues, site strongly emphasizes projects with the following two characteristics:

- They are oriented toward the information needs and concerns of consumers.
- They rely on well-tested, standardized measures that are widely accepted and used by a broad base of public and private entities

Site does not cover individual physician reports, development of quality measures or information on treatment choices.

Methodology

The contents of this site were produced by the Work Group on Consumer Health Information, a group of researchers with expertise in quality reporting, current sponsors of reporting projects, and recognized experts from related fields.

The Work Group was convened by a trio of Federal Government agencies with substantial interest in these issues:

- Agency for Healthcare Research and Quality (AHRQ).
- Centers for Medicare and Medicaid Services (CMS).
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Organization	**Thomson Reuters Healthcare**
Category	Performance Ratings/Reports/Scorecards/Databases/Benchmarking
Source	http://www.thomsonreuters.com/business_units/healthcare/
Measure	**100 Top Hospitals Benchmarks for Success Program** www.100tophospitals.com/

Summary

Thomson Reuters provides information to better manage the cost and quality of healthcare - combining industry expertise with innovative technology to deliver critical information for decision makers across the globe. Thomson Reuters helps government agencies fight fraud and abuse, identifies ways to build a better health plan, helps hospitals reward or deter physician behaviors, and provides employers with insight to employee healthcare cost drivers and behaviors.

100 Top Hospitals

Annual (past 15yrs) national review of hospitals that demonstrate superior organization-wide performance in outcomes of care, service-line efficiency, hospital efficiency and financial performance.

Comparisons of organization-wide performance against national benchmarks. Hospitals that have been in the top 100 list consistently for five years are identified as a subset. Focus on state and regional differences in performance.

100 Top Hospitals
Three levels of reporting

1. **100 Top Hospitals: National Benchmarks for Success**— highest organizational performance in most recent year of public data.
2. **100 Top Hospitals: Performance Improvement Leaders**— fastest improvements for past 5 consecutive years of public data.
3. **Clinical Service Line Level_ 100 Top Hospitals: Cardiovascular Benchmarks for Success**—highest performance of cardiovascular services

After exclusions, study (2007 National Study) included 3,018 hospitals as follows:

- 168 major teaching hospitals
- 423 teaching hospitals
- 324 large community hospitals
- 1,122 medium community hospitals
- 981 small community hospitals

Methodology

Uses a balanced scorecard approach with publicly available data. Focus is on short-term, acute care, non-federal U.S. hospitals that treat a broad spectrum of patients. The scorecard includes 10 metrics across five key domains: Inpatient and Outpatient Outcomes, Patient Safety, Clinical Process of Care, Efficiency, Financial Performance, and Patient Perception of Care. Three studies are undertaken - **100 Top Hospitals: Health System Benchmarks -** annual, quantitative study that uses public data sources to identify the 10 health systems setting the highest benchmarks on a modified 100 Top Hospitals Balanced Scorecard focused on clinical quality and efficiency. **100 Top Hospitals: National Benchmarks** - identifies the 100 best hospitals in the

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nation across clinical, financial, and operational measures; **100 Top Hospitals: Cardiovascular Benchmarks -** identifies the 100 best hospitals in the nation across key measures of organizational and cardiovascular performance.

Method:

1. Database of hospitals built, including special selection and exclusion criteria
2. Hospitals classified into comparison groups. Major Teaching, Teaching, Large Community, Medium Community, and Small Community Hospitals
3. Hospitals scored on a set of weighted performance measures
4. Relative rankings determined

Data is from public sources including the Medicare Provider Analysis and Review (MedPAR) data set (calculation of mortality, complications, patient safety, and length of stay, set contains information on the approximately 12 million Medicare patients who are discharged from the nation's acute care hospitals annually) and the Medicare Cost Report. Several other data sets are also used. Core measures data are from the CMS Hospital Compare data set. American Medical Association (ACGME-accredited programs) & the American Osteopathic Association (AOA) residency program information. Hospital specific demographic information, all-payer revenue and expense data, and asset and liability data.

Study Measures: Focus on 3 main aspects of hospital performance: clinical excellence, efficiency, and financial health.

1. **Risk-adjusted mortality index** - to predict likelihood of a patient's death based on patient-level characteristics (age, sex, presence of complicating diagnoses, and other characteristics) and factors associated with the hospital (size, teaching status, geographic location, and community setting).
2. **Risk-adjusted complications index** - Complications rates are calculated from normative data for two patient risk groups: medical and surgical
3. **Risk-adjusted patient safety index –** reflect both clinical quality and the effectiveness of systems within the hospital. Use AHRQ Patient Safety Indicators (PSIs) which use data related to administrative, surgical complications & iatrogenic events.
4. **Core measures score** - minimum basic standards. Widely accepted method for measuring patient care quality that includes specific guidelines for heart attack, heart failure, and pneumonia care, & surgical infection prevention.
5. **Severity-adjusted average length of stay** – measure of efficient consumption of hospital resources and reduced risk to patients.
6. **Expense per adjusted discharge, case mix & wage adjusted** – Efficiency of care measure.
7. **Profitability (operating profit margin)** – measure of financial health.
8. **Cash to total debt ratio** - indicator of the solvency and financial strength.

Results

The 100 Top hospitals series demonstrates that high quality patient outcomes can be achieved while keeping finances in line.

High performing hospitals had

- 6% fewer deaths
- 4% fewer patient complications
- 15 % fewer adverse patient safety events
- 13% lower expenses than peers

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- healthy cash to debt ratios
- operating profit margins were more than three times the median for peer group hospitals
- clear regional variations in hospital performance

Publications

Research Brief. Hospitals Increase Cardiovascular Core Measure Compliance. Janet Young, Md. Center For Healthcare Analytics, November 15, 2010. http://www.100tophospitals.com/assets/CardioResearchBrief1210.pdf

100 TOP HOSPITALS: HEALTH SYSTEM BENCHMARKS STUDY 2ND EDITION. June 21, 2010 http://www.100tophospitals.com/assets/Health_Sys_2nd_Abstract.pdf

Methodology Highlights. 100 Top Hospitals: Health System Benchmarks June 21, 2010 http://www.100tophospitals.com/assets/Health_Systems_Methodology.pdf

[entry updated 2010]

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Organization	**Thomson Reuters Healthcare**
Category	Proprietary/Analytics/Decision Support/Healthcare Data Technology
Source	http://thomsonreuters.com/products_services/healthcare/
Measure	**CareDiscovery™ - Clinical Performance Improvement Solutions** **CareDiscovery™ Quality Measures** **Clinical Xpert Suite™**

Summary

Thomson Reuters provides information to better manage the cost and quality of healthcare - combining industry expertise with innovative technology to deliver critical information for decision makers across the globe. Thomson Reuters helps government agencies fight fraud and abuse, identifies ways to build a better health plan, helps hospitals reward or deter physician behaviors, and provides employers with insight to employee healthcare cost drivers and behaviors.

Thomson Reuters has a number of proprietary products to assist performance including:

CareDiscovery™ Clinical Performance Improvement Solutions

http://thomsonreuters.com/products_services/healthcare/healthcare_products/hosp_healthcare_prov/clinical_perf_impr/care_discovery

Examine hospital or health system's clinical performance using benchmarks to detect unseen inefficiencies, prioritize opportunities, and set improvement goals based on relevant, dependable quantitative information. A hospital can compare its data with the U.S. national average, the Top 10 percent of best-performing facilities, and/or teaching or community hospitals. Data mining and reporting capabilities on more than 250 data elements for every patient with descriptive clinical and financial information, including pharmacy, lab, radiology, and other services. Patient-level analysis, enables the precise identification of opportunities to improve the quality, cost, and process of care. **Physician Insights Module**, provides objective view of physician practice patterns and their impact on the hospital's overall performance improvement goals with comprehensive reports on length of stay, cost, complications, mortality, and case distribution.

CareDiscovery™ Quality Measures

http://thomsonreuters.com/products_services/healthcare/healthcare_products/hosp_healthcare_prov/clinical_perf_impr/carediscovery_quality_measures

Helps hospitals and health systems deliver efficient and reliable reporting, ensuring their performance-based reimbursement and protecting their market share. Quality Measures looks at a hospital's performance on individual measures, down to the patient and physician level. As the nation's largest ORYX® core measures vendor, CareDiscovery Quality Measures supports quality improvement initiatives. Quality Measures supports regulatory requirements for both National Hospital Inpatient Quality Measures and the Hospital Outpatient Quality Data Reporting Program.

Clinical Xpert Suite™

http://thomsonreuters.com/products_services/healthcare/healthcare_products/clinical_deci_support/clinical_xpert_clinical_wfs/

The Clinical Xpert™ Suite targets improved patient safety, clinical workflow, and physician satisfaction. Aggregates clinical data from across the entire hospital information system to deliver real-time patient data to any caregiver directly at the point-of-care via the Web and mobile devices — including Windows® Phone, Palm®, and BlackBerry® smartphones as well as the iPhone®,

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iPad™, and iPod touch®. Improves clinical efficiency through better access to critical patient information, identification of high-risk patients, pharmacy workflow efficiencies, charge and procedure management, and care team coordination.

Publications

CareDiscovery™ Clinical Performance Improvement Solutions

Building a Best-Practice Quality Infrastructure Supported by Objective Data
http://thomsonreuters.com/content/healthcare/pdf/394452/carediscovery_iasis_case_study
Carediscovery™ Clinical Performance Improvement Solution Brochure
http://thomsonreuters.com/content/healthcare/pdf/394455/CareDiscovery_Solution_0709

CareDiscovery™ Quality Measures

CareDiscovery™ quality measures brochure.
http://thomsonreuters.com/content/healthcare/pdf/394455/carediscovery_quality_meas
http://thomsonreuters.com/products_services/healthcare/healthcare_products/hosp_healthcare_prov/clinical_perf_impr/carediscovery_quality_measures

Clinical Xpert Suite™

Clinicalxpert suite brochure http://thomsonreuters.com/content/PDF/healthcare/ClinicalXpertSolutionBrochure
http://thomsonreuters.com/content/healthcare/pdf/470565/clinical_xpert_pharmacy_intervention
http://thomsonreuters.com/content/healthcare/pdf/470565/clinical_xpert_carefocus_product

[entry updated 2010]

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Organization	**Thomson Reuters Healthcare**
Category	Proprietary/Analytics/Decision Support/Healthcare Data Technology
Source	http://home.thomsonhealthcare.com/Products/view/?id=72
Measure	**Medstat Medical Episode Grouper**

Summary

Thomson Reuters provides information to better manage the cost and quality of healthcare - combining industry expertise with innovative technology to deliver critical information for decision makers across the globe. Thomson Reuters helps government agencies fight fraud and abuse, identifies ways to build a better health plan, helps hospitals reward or deter physician behaviors, and provides employers with insight to employee healthcare cost drivers and behaviors.

Medstat Medical Episode Grouper

Medical Episode Grouper (MEG), from the Healthcare business of Thomson Reuters, enables health plans to analyze patient treatments, evaluate quality of care, and manage associated costs. It does so by grouping inpatient, outpatient, and pharmaceutical claims into clinically homogeneous units of analysis called episodes that describe a patient's complete course of care for a single illness or condition. Enables health plans to analyze patient treatments, evaluate quality of care, and manage associated costs by grouping inpatient, outpatient, and pharmaceutical claims into clinically homogeneous units of analysis or episodes that describe a patient's complete course of care for a single illness or condition. Used for a wide range of applications such as provider profiling, disease management, quality improvement, and cost and use analysis. Medical Episode Grouper uses risk-adjusted, disease-based methodology to allow users to group patients by clinically defined levels of severity and compare physicians to evaluate and improve quality and appropriateness of care. Organizations can incorporate MEG into their existing information system, or it can serve as an integrated component of Medstat Advantage Suite (a Web-enabled decision support tool that balances the need to contain costs, improve quality of care, and expand access to care).

Medical Episode Grouper (MEG) uses risk-adjusted, disease-based methodology to allow users to group patients by clinically defined levels of severity and compare physicians while improving the overall quality of care.

- Clinically defined measures
- Ability to review severity stratified data and assess appropriateness of procedures
- Builds episodes based on clinical diagnosis of a patient's illness, thus avoiding unnecessary medical interventions
- Identifies high-risk patients for care management programs
- Allows for the evaluation of care management programs on a risk-adjusted basis, affording a more accurate reflection of the program's ROI

MEG is an established episode methodology analyzing more than 43 million covered lives. Since its inception in 1998, MEG has been continually improved and is a trusted resource for measuring physician performance, improving quality, and reducing costs.

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Methodology

Founded upon 25 years of clinical expertise, MEG makes accurate physician evaluation possible and enables organizations to evaluate quality of care.

MEG incorporates the fifth edition Medstat Disease Staging® patient classification system with 555 disease categories - enabling a sophisticated understanding of conditions, disease progression, and care choices. Clustering logic (i.e., construction of the episode) includes: (1) starting points; (2) episode duration; (3) multiple diagnosis codes; (4) look back mechanism; (5) inclusion of non-specific coding; and (6) drug claims.

To keep up with the latest advances in medicine, Thomson Reuters assembled a distinguished panel of experts including over 50 physician specialists, and every disease category was reviewed by at least three physicians.

- Clinically-defined measures that physicians find credible - enabling physician engagement and collaboration
- Ability to review severity stratified data and assess the appropriateness of procedures with a clinically-sound basis to improve quality
- Builds episodes based on the clinical diagnosis of the patient's illness to avoid unnecessary medical interventions and reduce costs
- Identifies high risk patients for disease / care management programs to improve the clinical basis for patient selection, and target the right patients for the right programs
- Allows for evaluation of disease/care management programs on a risk-adjusted basis to gain a more accurate reflection of ROI for programs

Publications

Next-generation episode grouping could drive care quality. Bill Gillette. October 2005 MANAGED HEALTHCARE EXECUTIVE p. 32. http://provider.thomsonhealthcare.com/uploadedFiles/docs/034-Medstat_MHE_MEG_Oct_2005.pdf

MEG for Health Plans Product sheet http://provider.thomsonhealthcare.com/uploadedFiles/docs/PAY-5166_MEG_HealthPlan_03%2009-Electronic.pdf

http://thomsonreuters.com/products_services/healthcare/healthcare_products/employers/payment_integrity_fraud/medical_episode_grouper?parentKey=606109,587185

http://thomsonreuters.com/products_services/healthcare/healthcare_products/gov_federal/cost_control/medical_episode_grouper_gov?parentKey=602397,573672

[entry updated 2010]

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Organization	**Thomson Reuters Healthcare**
Category	Proprietary/Analytics/Decision Support/Healthcare Data Technology
Source	www.medstat.com/hp http://www.thomsonreuters.com/business_units/healthcare/
Measure	**Physician Performance Assessment** http://home.thomsonhealthcare.com/Products/view/?id=713

Summary

Thomson Reuters provides information to better manage the cost and quality of healthcare - combining industry expertise with innovative technology to deliver critical information for decision makers across the globe. Thomson Reuters helps government agencies fight fraud and abuse, identifies ways to build a better health plan, helps hospitals reward or deter physician behaviors, and provides employers with insight to employee healthcare cost drivers and behaviors.

Physician Performance Assessment

A web-based secure application of clinically based physician performance measures which utilizes clinical effectiveness and cost efficiency methodologies to assess performance for primary care and specialty care physicians. Includes summary and detail reports by physician specialty across the clinical effectiveness and cost efficiency dimensions to assess performance of both the peer group as well as individual physicians. The general approach is to develop a composite cost efficiency score and a composite clinical effectiveness score that can be used to compare each physician to their peer group.

Based on clinically sound, well-established, well-defined, and well-regarded measures. The physician performance assessment software package delivers information for improving the cost efficiency and clinical effectiveness of physicians. Cost and quality reports are available for primary care, cardiology, pediatrics, OB/GYN, and pulmonology. Multi-level reports allow comparison of physicians to their peers; produce individual "physician scorecards" for distribution directly to doctors; and drill down to a specific physician's panel of patients for an actionable list of each patient's gaps in care.

Methodology

Episode-based analysis of physician cost includes all costs associated with a course of treatment. Case mix risk adjustment of physician results. Reports member compliance rates for specific care, identifying "gaps in care". Clinical effectiveness evaluation is based on nationally adopted AQA and NQF measures and cost efficiency evaluation is based on nationally recognized risk-adjusted episode grouping methodology. This solution draws on the capabilities and power of Medstat Advantage Suite and the clinically robust Medical Episode Grouper (MEG).

Evaluates whether medical care follows established clinical guidelines while it accounts for the severity and duration of the medical condition being treated. Generates reports that inform physicians and physician networks about gaps in their patient care, so they can take corrective steps and improve clinical quality.

Cost and quality of medical care is analyzed by:

- Severity, other complicating conditions and health risk.

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- Evaluates physician performance from a clinical point of view, and assesses use of healthcare resources. Focus is on care and cost.
- Uses widely accepted and scientifically valid measures of physician performance developed by the National Quality Forum, The National Committee for Quality Assurance, and the AQA (formerly the Ambulatory Care Quality Alliance).

Physician Performance Assessment also helps doctors improve the quality of care, because it shows how they compare with their peers and generates reports that identify gaps in care and “action lists” indicating which patients need intervention. For example, doctors are informed whether their diabetic patients have received all the recommended care and, if not, which patients are missing tests or treatments.

Results

Evaluate effectiveness and manage population care on the most up-to-date information, resulting in higher-quality healthcare and lower costs. Accurately evaluate the total cost of treatment in terms that physicians understand. Provide a fairer comparison of physicians with their peers by accounting for both the severity of their patients’ illnesses and comorbidities.

Publications

Physician Performance Assessment Fact Sheet 2007
http://home.thomsonhealthcare.com/uploadedFiles/docs/Physician_Performance_Assessment_HP_TH10004.pdf

[entry updated 2010]

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Organization	**United Healthcare**
Category	Incentive/Reward Programs
Source	www.UnitedHealthcareOnline.com
Measure	**United Healthcare Practice Rewards** https://www.unitedhealthcareonline.com/b2c/CmaAction.do?channelId=b80ee7a1e193b010VgnVCM100000c520720a

Summary

UnitedHealth Group is working to create the health care system of tomorrow. Focused on innovation and change and on building a high-performance health care system. There are six business segments of UnitedHealthcare, AmeriChoice, Ovations, OptumHealth, Ingenix and Prescription Solutions. United Healthcare seeks to improve the quality and effectiveness of health care for all Americans, enhance access to health benefits, create products and services that make health care more affordable & use technology to make the health care system easier to navigate. The family of companies deliver products and services to approximately 70 million Americans. UnitedHealthcare's nationwide network includes 589,000 physicians and health care professionals, 80,000 dentists and 4,920 hospitals. The pharmaceutical management programs provide more affordable access to drugs for 13 million people.

UnitedHealth Practice Rewards

Recognizes and rewards, through fee schedule enhancements, solo practitioners and medical groups who have met the quality and cost efficiency criteria for the UnitedHealth Premium program and meet the more robust criteria for UnitedHealth Practice Rewards. United Healthcare recognizes the importance of aligning financial incentives and rewards for demonstrated performance in clinical practices against quality of care and cost efficiency criteria. UnitedHealth Practice Rewards builds on the UnitedHealth Premium designation program by rewarding medical groups and physicians who receive the UnitedHealth Premium designation and who meet the additional criteria for UnitedHealth Practice Rewards. Physicians who meet UnitedHealth Practice Rewards criteria will receive enhanced fee schedules.

UnitedHealth Practice Rewards is based on the following criteria:

- At a minimum, one physician in the group or a solo practitioner must meet the UnitedHealth Premium quality of care and cost efficiency criteria. Of these physicians designated for both quality and cost efficiency, a subset of groups and solo practitioners who meet additional administrative, quality and efficiency criteria are then identified.
- Physicians must efficiently use electronic administrative tools such as electronic claim submission and other self service tools offered by UnitedHealthcare.
- Physicians must use UnitedHealthcare market standard fee schedules and standard contracts.

Methodology

1. **Quality and Efficiency of care scores:** The physician’s UnitedHealth Premium Quality and Efficiency of care scores are statistically ranked by deciles for each specialty. The overall group Quality and Efficiency of care score is computed using a weighted average of each specialty’s score.
2. **Administrative score:** Percentage of claims submitted electronically, Utilization of self service per 1000 claims

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3. **Total UnitedHealth Practice Rewards Score.** The Quality, Efficiency of care and Administrative scores are weighted at 51%, 30% and 19%, respectively, to compute the overall score.

If the physician and/or group qualify for UnitedHealth Practice Rewards, they will receive a 5% increase to their commercial fee schedule for evaluation and management, surgery, medicine, obstetrics and ambulance types of service. The fee schedule increase remains in place until the next UnitedHealth Practice Rewards assessment period.

Measuring improvement:

In year two of the program, measure improvement compared to the prior Practice Rewards assessment period for solo practitioners and groups that did not qualify for practice rewards based on the overall practice rewards score in either period. If the physician and/or group qualifies for the practice rewards improvement metric, they will receive a 3% increase to their commercial fee schedule for evaluation and management, surgery, medicine, obstetrics and ambulance types of service.

Results

In addition to meeting the quality and cost efficiency criteria, solo practitioners and groups must also demonstrate appropriate use of clinical and administrative resources enabled through advanced technology and standardized processes.

Quality is the primary measurement, demonstrating commitment to evidence based practice. Quality is 51% of the overall score. The cost efficiency weight is 30% of the overall score and demonstrates efficiency in the use of health care assets across the complete episode of care. Administrative practice is the remaining 19% of the overall score and represents effective and efficient administrative practices through advanced technology and standardized processes.

Publications

Practice Rewards Methodology https://www.unitedhealthcareonline.com/ccmcontent/ProviderII/UHC/en-US/Assets/ProviderStaticFiles/ProviderStaticFilesPdf/Clinician%20Resources/Ext_PR_Methodology_Summary.pdf

Presentation https://www.unitedhealthcareonline.com/ccmcontent/ProviderII/UHC/en-US/Assets/ProviderStaticFiles/ProviderStaticFilesPdf/Clinician%20Resources/Financial%20Rewards/Ext_PR%20Presentation.pdf

Practice Rewards Fact Sheet https://www.unitedhealthcareonline.com/ccmcontent/ProviderII/UHC/en-US/Assets/ProviderStaticFiles/ProviderStaticFilesPdf/Clinician%20Resources/Financial%20Rewards/Program%20Summary_OnePager.pdf

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Organization	**United Healthcare**
Category	Performance Ratings/Reports/Scorecards/Databases/Benchmarking
Source	www.UnitedHealthcareOnline.com
Measure	**United Healthcare Premium Physician Designation Program** https://www.unitedhealthcareonline.com/b2c/CmaAction.do?channelId=dc2bfeff7f0f4110VgnVCM2000008040dc0a https://www.unitedhealthcareonline.com/ccmcontent/ProviderII/UHC/en-US/Assets/ProviderStaticFiles/ProviderStaticFilesPdf/Clinician%20Resources/UnitedHealth%20Premium%20Designation%20Program/Ext_Premium_Methodology_Detail.pdf

Summary

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Premium Physician Designation Program

The program uses national industry, evidence-based and medical society standards with a transparent methodology and robust data sources to evaluate physicians across 21 specialties to advance safe, timely, effective, efficient, equitable and patient-centered care. The program supports practice improvement and provides physicians with access to information on how their clinical practice compares with national and specialty-specific standards for quality and local cost efficiency benchmarks. The evaluation of physicians for cost efficiency compares observed cost for episodes of care to expected cost for episodes of care, with adjustments for the patient's severity of illness and the physician's case mix.

Methodology

UnitedHealthcare uses Symmetry EBM Connect to assess quality measure compliance. The software uses paid claims data and selected laboratory data to evaluate the sequence and content of care at the individual patient level and then compares it with evidence–based guidelines. Each application of a criterion to a patient is called an evidence-based medicine measure.

Software tools used in designation

1. **APR-DRG** – 3M software that assigns one of four levels of severity to an illness requiring hospitalization: 1) minor, 2)moderate, 3) major and 4) extreme
2. **Symmetry EBM Connect**– An Ingenix tool that provides a paid claims analysis component to identify deviations from clinical guidelines in patient care
3. **Symmetry ETG**– An Ingenix tool that aggregates paid claims into episodes of disease

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4. **ATPG** – A tool that compiles paid claims at a patient level on the basis of procedure-specific interventions with diagnosis-related tests before and after a procedure.

Results

1. Quality of care criteria

- Patient safety (duplication, interaction, monitoring)
- Sequencing of care (diagnostic, treatments and monitoring)
- Procedural effectiveness (failed therapy and monitoring)
- Compliance with guidelines (peer-reviewed scientific evidence)

2. Clinical criteria base is developed using published literature and information from organizations such as:

- National Quality Foundation measure sets
- The AQA Alliance
- National Committee for Quality Assurance (NCQA) Programs
- Clinical societies and specialty associations

3. Cost efficiency - adjusted for Case mix and severity

Publications

Methodology Fact Sheet https://www.unitedhealthcareonline.com/ccmcontent/ProviderII/UHC/en-US/Assets/ProviderStaticFiles/ProviderStaticFilesPdf/Clinician%20Resources/UnitedHealth%20Premium%20Designation%20Program/Premium_Methodology_Summary.pdf

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Organization	**United Healthcare (PacifiCare Health Systems subsidiary)**
Category	State focus; Performance Ratings/Reports/Scorecards/Databases/Benchmarking; Incentive/Reward Programs
Source	www.pacificare.com
Measure	**Quality Incentive Program (QIP)** http://www.opm.gov/insure/health/planinfo/safety/cy.asp **Quality Index Profile of Hospitals** http://www.pacificare.com/commonPortal/application?origin=hnav_bar.jsp&event=bea.portal.framework.internal.portlet.event&pageid=QualityIndexProfile&portletid=QIIndex&wfevent=link.viewarticle&navnode=QualityIndexProfile.14 **Quality Index Profile of Medical Groups** http://www.pacificare.com/commonPortal/application?origin=hnav_bar.jsp&event=bea.portal.framework.internal.portlet.event&pageid=QualityIndexProfile&portletid=QIIndex&wfevent=link.viewarticle&navnode=QualityIndexProfile.13

Summary

UnitedHealth Group is working to create the health care system of tomorrow. Focused on innovation and change and on building a high-performance health care system. There are six business segments of UnitedHealthcare, AmeriChoice, Ovations, OptumHealth, Ingenix and Prescription Solutions. United Healthcare seeks to improve the quality and effectiveness of health care for all Americans, enhance access to health benefits, create products and services that make health care more affordable & use technology to make the health care system easier to navigate. The family of companies deliver products and services to approximately 70 million Americans. UnitedHealthcare's nationwide network includes 589,000 physicians and health care professionals, 80,000 dentists and 4,920 hospitals. The pharmaceutical management programs provide more affordable access to drugs for 13 million people.

PacifiCare Health Systems became a subsidiary of United Healthcare in 2005. PacifiCare contracts with about 300 large multispecialty physician organizations and has measured the performance of these groups on clinical and patient satisfaction indicators since 1993. PacifiCare Health Systems, Inc. provides managed care and other health insurance products to employer groups, individuals, and Medicare beneficiaries. Products include health insurance; health benefits administration; and indemnity insurance products, such as Medicare Supplement products offered through health maintenance organizations (HMO) and preferred provider organizations. The company also offers various specialty managed care products and services including pharmacy benefit management (PBM) services, behavioral health services, group life and health insurance, and dental and vision benefit plans.

Quality Improvement Program

- Publishes two report cards – Hospitals; and large Medical Groups. Objective is to help improve accountability and competition among hospitals, and foster an environment for continuous quality improvement, and promote the sharing of best medical and service practices.
- In 2002, a quality incentive program (QIP) was introduced for its California network. Paid its physician organizations in California bonuses for meeting or exceeding ten clinical and patient satisfaction measures. PacifiCare participates in the IHA statewide pay-for-performance program.

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1. Quality Index Profile of Hospitals

Introduced 2003. Measures the clinical and service performance of approximately 200 participating California hospitals on 59 criteria in specific areas related to cardiac care, obstetrics, orthopedics, general surgery, gynecology, cancer treatment, medical conditions and pediatric care as well as satisfaction and utilization. Most of the measures are derived from publicly available data from California's Office of Statewide Health Planning and Development (OSHPD) and the Leapfrog Group data sets. The measures are grouped into three categories: Complication Rates, Mortality-Related Rates, and Efficiency.

Hospitals are given an overall quality grade – determined by its relative placement compared to others and based on the average of all 58 measures. A Grade hospitals are in top third, B Grade in middle third and C Grade in lower third. Overall grades are also assigned to the 3 specific categories (Complication Rates, Mortality-Related Rates, and Efficiency), again established by relative placements based on average of all measures in the category. These grades show how one hospital compares to others, across a variety of measures.

Best Practice designations are awarded to hospitals that score in the 80th percentile or higher in any given category. "Best Practice" designations are represented by a star.

2. Quality Index Profile of Medical Groups

Published since 1998, this is a public report on physician group performance. The index rates PacifiCare and SecureHorizons contracted physician groups and IPAs on 32 measures related to clinical and service quality, affordability and administrative accuracy.

The scores of all participating medical groups are converted to percentiles, to enable comparisons between physician groups. An Overall Score Best Practice designation is awarded to physician groups scoring in the top 10 percentile in any given category. The Overall Score is the average of the combined total of the physician group's scores.

Focus is of medical groups serving Pacificare's commercial population. Restricted to groups providing services to an average of at least 1,000 members over a 12 month period. Unit of analysis is the contracting entity or occasionally a sub set within that entity.

Categories include

- Staying healthy –screenings, immunizations
- Appropriate care – diabetes, cholesterol, asthma, use of antibiotics,
- Patient safety – medication management, testing
- Efficiency of clinical care – re-admissions, average length of stay, ER use, outpatient surgery volume
- Member satisfaction – timeliness, access, coordination of care
- Complaints – primary care, claims
- Medical group transfers – member initiated transfers
- Appeals – volume, number overturned

3. Quality Incentive Program (QIP)

In 2003, PacifiCare began a rewards program based on 16 measures - the Quality Incentive Program. This program commits to improving patient safety and quality through:

- implementation of Leapfrog standards

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- organizing consumer and physician activities to support achievement of Leapfrog standards
- publishing report cards
- providing physicians with financial and non-financial rewards and incentives
- developing innovative health plan designs to promote and reward quality.

Publications

Quality Index Profile of Hospitals. Fall 2008 http://www.pacificare.com/vgn/images/portal/cit_60701/600693013_PCA140967-003.pdf

Quality Index. Profile of Medical Groups. Fall 2008
http://www.pacificare.com/vgn/images/portal/cit_60701/600693456_PCA080402_004.pdf

Commonwealth Fund Newsletter (re QIP) http://www.commonwealthfund.org/Content/Newsletters/Washington-Health-Policy-in-Review/2005/Oct/Washington-Health-Policy-Week-in-Review---October-17--2005/Study-Finds--P4P--Programs-Improve-Quality.aspx

Early Experience With Pay-for-Performance From Concept to Practice. Meredith B. Rosenthal, Richard G. Frank, Zhonghe Li, Arnold M. Epstein. JAMA, October 12, 2005—Vol 294, No. 14
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"Can You Get What You Pay For? Pay-For-Performance and the Quality of Healthcare Providers." Mullen, Kathleen, Richard Frank and Meredith Rosenthal (2008). Unpublished manuscript.
http://works.bepress.com/kathleen_mullen/2/
http://healthcare-economist.com/2008/11/18/does-p4p-improve-quality/

Do Integrated Medical Groups Provide Higher-Quality Medical Care than Individual Practice Associations?
Ateev Mehrotra, Arnold M. Epstein, and Meredith B. Rosenthal. *Ann Intern Med.* 2006;145:826-833.
http://www.annals.org/cgi/reprint/145/11/826.pdf

Paying For Quality: Providers' Incentives For Quality Improvement. An assessment of recent efforts to align providers' incentives with the quality improvement agenda. Meredith B. Rosenthal, Rushika Fernandopulle, HyunSook Ryu Song, and Bruce Landon. Health Affairs, 23:2,127-141, March/April 2004
http://content.healthaffairs.org/cgi/reprint/23/2/127

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Organization	**U.S. News & World Report**
Category	Performance Ratings/Reports/Scorecards/Databases/Benchmarking
Source	www.usnews.com
Measure	**America's Best Hospitals** http://health.usnews.com/sections/health/best-hospitals/index.html.

Summary

The news magazine started ranking hospitals in 1990. Annual listing of the top 50 hospitals in 17 specialties in searchable web format.

Methodology

Hospitals are assigned a composite score and ranked at the specialty level, based on data from multiple sources.

In 2008, hospitals were ranked in 16 specialties:

- Cancer
- Ear, Nose, and Throat
- Endocrinology
- Gastrointestinal Disorders
- Geriatric Care
- Gynecology
- Heart and Heart Surgery
- Kidney Disease
- Neurology and Neurosurgery
- Ophthalmology
- Orthopedics
- Psychiatry
- Rehabilitation
- Respiratory Disorders
- Rheumatology
- Urology

Focus of the rankings is serious, complicated medical conditions and procedures - to assist consumers to determine which hospitals provide the best care. Twelve of the 16 specialty rankings employ hard data; the other four rankings are based on a physician survey only.

A: Data-Driven Rankings

The data-driven rankings assign a score—the Index of Hospital Quality (IHQ)—to hospitals in the following specialties: Cancer; Ear, Nose, and Throat; Endocrinology; Gastrointestinal Disorders; Geriatric Care; Gynecology; Heart and Heart Surgery; Kidney Disease; Neurology and Neurosurgery; Orthopedics; Respiratory Disorders; and Urology.

Utilizes three fundamental dimensions of healthcare: structure, process, and outcomes.

1. **Structure -** This score is based on data related to the structural characteristics of each medical specialty within a given hospital. These elements represent volume (i.e., discharges), technology, and other features that characterize the hospital environment. The majority of these data elements are derived from the most recent AHA Annual Survey

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Database, which covers fiscal year (FY) 2006. Volume data are taken from the Medicare Provider Analysis and Review (MedPAR) database maintained by the Centers for Medicare & Medicaid Services (CMS). This database contains information on all Medicare beneficiaries who use hospital inpatient services.

2. **Process -** The process score can be viewed as the reputational component of the IHQ, representing a hospital's reputation for an overall process that leads to high-quality care. Process also can be seen as a form of peer review. The score is based on cumulative responses from three surveys of board-certified physicians, conducted in 2006, 2007, and 2008, in which those surveyed were asked to nominate up to five "best hospitals" in their specific field of care, irrespective of expense or location, for patients with serious or difficult conditions. In 2006, 2007, and again in 2008, a sample of 200 board-certified physicians was selected in each specialty. In 2006 and 2007, the sample was selected from the American Medical Association Physician Master File, a database of more than 850,000 physicians. In 2008, the sample was selected from the American Board of Medical Specialties (ABMS) database. The physician sample was stratified by census region (West, Northeast, South, and Midwest) and by specialty to assure appropriate representation. The final aggregated sample includes both federal and nonfederal medical and osteopathic physicians residing in all 50 states and the District of Columbia.

3. **Outcomes -** The outcomes score measures mortality 30 days after admission for all IHQ-driven specialties. Like the volume indicator, the outcomes measure is based on MedPAR data. For each hospital and specialty, the Healthcare Division of Thomson Reuters computed an adjusted mortality rate based on predicted and actual mortality rates using the All Patient Refined Diagnosis Related Group (APR-DRG) method created by 3M Health Information Systems. APR-DRGs adjust the value for expected deaths by severity of illness using the patient's principal and secondary diagnoses. The method is applied to the 3 most recent years (FY2004, FY2005, and FY2006) of Medicare reimbursement claims made by hospitals to CMS.

B. Reputation-Only Rankings

The second ranking approach is used for the remaining four specialties—Ophthalmology, Psychiatry, Rehabilitation, and Rheumatology—and ranking scores reflect the results of the reputational survey alone. Many structural and outcomes measures are inapplicable to these specialties because procedures are performed largely on an outpatient basis and pose a very small risk of death. For this report, these specialties are referred to as reputation-only specialties; the associated rankings are referred to as reputation-only rankings.

Publications

America's Best Hospitals 2008 Methodology. http://www.usnews.com/usnews/health/best-hospitals/methodology/ABH_Methodology_2008.pdf?s_cid=related-links:TOP

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Organization	**Verisk HealthCare**
Category	Proprietary/Analytics/Decision Support/Healthcare Data Technology
Source	http://www.veriskhealthcare.com/
Measure	**Sightlines™ DxCG Risk Solutions** http://www.veriskhealth.com/content/verisk-health-sightlines-dxcg-risk-solutions

Summary

Verisk HealthCare, a subsidiary of ISO, is an innovative, health care technology company with a foundation in predictive modeling and business intelligence. Offers web-based analytical and reporting systems for health insurers, provider organizations, and self-insured employers. Verisk Health products and services help manage healthcare programs, improve health outcomes, and contain costs. Verisk also develops modeling software that predicts medical costs and helps improve the financing, organization, and delivery of health services.

Sightlines DxCG Risk Solutions offers the 'best-in-class' risk adjustment and prediction engines, used to analyze and quantify both financial and clinical risk. Based on DxCG science, a transparent, validated set of models with academic roots, Sightlines DxCG Risk Solutions can be used as a stand-alone tool. It can also be embedded in Verisk's Sightlines Enterprise Analytics or Medical Intelligence platforms, and/or 3rd-party applications. Built using powerful, validated, medical and pharmacy classification systems, as well as proven predictive modeling methodologies, Sightlines DxCG Risk Solutions can be utilized for commercial, pharmacy, Medicaid, Medicare and medical management applications.

Risk Solutions enables:

- Identification of high cost cases for care/disease management intervention.
- Comparative profiling against costs and outcomes while adjusting for differences in health status.
- Establishment of health-based and performance-based payment schemas.
- Reimbursement, negotiation of payments and incentives.

There are a number of different model variations covering a wide range of business purposes, data sources, and populations.

Capabilities include:

- Validated, best-in-class predictive modeling technology
- Advanced analytics to manage risk, improve health outcomes, and contain costs
- Transparent models founded on straight-forward and easy-to-understand clinical principles
- Designed to integrate with 3rd party systems, including home-grown financial and actuarial methodologies

Applications include:

- Assess the illness burden of individuals, groups and populations
- Identify cost drivers
- Renew rating and underwriting
- Develop risk-based provider payment structures
- Measure and demonstrate the impact of care management programs
- Use predicted costs to set underwriting rates
- Develop risk-based provider payment systems
- Allocate healthcare resource budgets

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Available versions include - Commercial Risk Solutions; Pharmacy Risk Solutions; Medicaid Risk Solutions; Medicare Risk Solutions; Medical Management Risk Solutions; Primary Care Payment Solutions; Performance Assessment Solutions; Sightlines™ Actuarial Advisor.

Methodology

Model structure: Medical risk analyses of patient populations that predict health care costs and outcomes, and identify trends and patterns in health care utilization. Focus is healthcare financing, clinical management, and administrative.

DxCG models are clinically oriented and resource-based, utilizing demographic, medical and pharmacy claims information to quantify the illness burden of a population. The models are applicable to Commercial, Medicare, and Medicaid populations, and have been used extensively in the United States and abroad. The DxCG model classifies ICD-9-CM codes (or in other countries, other version of ICD codes as appropriate) into 1,010 distinct diagnostic groups[2] (DxGroups) on the basis of clinical similarity and resource use. The DxGroups are grouped into 394 Condition Categories (CCs) based on diagnoses recorded on a patient's claims. Each patient is also assigned to one of 34 age/sex categories. The majority of DxCG models use diagnoses from all sites of service and impose hierarchies on the resulting Condition Categories (CCs) prior to calculating Relative Risk Scores (RRS). The hierarchies identify the most costly manifestation of each distinct disease and decrease sensitivity of the DxCG models to coding idiosyncrasies. Individuals can be assigned to multiple condition categories but only one condition within a hierarchical group.

The Relative Risk Score is a factor that, when applied to a population average, yields an individual's expected resource utilization. Resource utilization may apply to costs, in which case cost is the dependent variable in the model. It may also apply to outcomes, in which case a specific event is the dependent variable. For example, models may predict the Risk Adjusted expected number of hospitalizations or Emergency Department visits at the individual level. By combining sophisticated classification methodologies, clinical insight, and modeling techniques, the DxCG models achieve strong statistical accuracy in predicting healthcare costs and outcomes.

Results

Aggregating individual scores by groups of interest (disease cohorts, employer groups, benefit levels, regions, physician practice panels, etc.) creates predictive model results specific to many financial and medical management applications.

Publications

White papers are available on Verix website following a registration process.

[entry updated 2010]

[2] The prior version of DxGroups consisted of 781 distinct groupings and 184 Condition Categories.

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Organization	**Vermont Healthcare Reform**
Category	Standards Setting, Industry Organizations; Incentive/Reward Programs
Source	http://hcr.vermont.gov/home
Measure	**Blueprint for Health** http://healthvermont.gov/blueprint.aspx **Accountable Care Organization Pilot** http://healthcaredisclosure.org/docs/files/HesterVT_ACOPilot5-25-10.pdf

Summary

Launched in 2003 as a public–private partnership, the **Blueprint for Health** was fully endorsed in 2006 as Vermont's plan to have a systemic statewide system of care that improves the lives of individuals with, and at risk for, chronic conditions. The Blueprint model targets six change areas of individuals (increased health knowledge and personal responsibility); provider practice teams (evidence-based standards and incentives); communities (local area engagement); information technology (statewide system); health system (common performance measures and linked financing mechanisms) and public health systems (health promotion and environmental change).

In 2007, the Blueprint for Health was expanded to create **Enhanced Medical Home** pilot programs in three Vermont communities covering 10 percent of the state's population. The Enhanced Medical Home pilot added all-payer payment reform for primary care practices, a new shared resource for primary care called the Community Health Team, and a formal assessment of community risk factors with an integrated prevention action plan. These three pilot communities include 12 practice sites, 58 medical home providers, 3 community health teams, and an overall patient base of approximately 60,000 patients, with approximately 43,280 of these patients having been seen in the participating practices in the last 12 months.

In 2008, the legislature requested an assessment of the feasibility of a pilot project based on **the Accountable Care Organization model**. Working with Dartmouth's and the Brookings Institution's 50-plus member ACO Learning Network (refer separate entry), three ACO pilots have emerged in Vermont. In order to achieve desired delivery system changes, payment reform had to expand beyond the primary care practices affected by the Enhanced Medical Home pilots to include local specialists and the community hospital. The ACO's shared-savings model had to capture some of the financial benefits of the medical home within the local community so that they could be reinvested in meeting the needs of the population, while helping to mitigate the incentives to increase costs that are inherent in fee-for-service payment.

Three qualified and interested ACO pilot sites were identified & participated in National Learning Network Payer model. Model outline includes

- Three major commercial payers participating; consolidated shared savings pool accepted
- Planning for Medicaid participation due 7/10
- Planning for Medicare participation 2012
- Financial impact model for ACO developed for two sites

The cumulative effect of this evolution of legislation and program design over the last four years is a strategy of delivery system reform based on the development of a true community health system that both improves the health of the population it serves and manages medical costs at a population level.

Methodology

Approach - System redesign at four geographic levels

1. Primary care practice level: Enhanced medical homes
2. Community health system: 'neighborhood' for medical home

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3. State/regional infrastructure and support e.g. HIT, payment reform
4. National: Medicare participation

Five key generic functions of a community health system
1. Service integration across levels and settings of care
2. Financial integration
3. Governance: Provide leadership, and establish accountability
4. Information: Deploy information tools to support care, management, process improvement and evaluation
5. Process improvement: Design, implement and improve performance

Service Model
- Patient Centered Medical Home (PCMH) model
- New community health team funded by payers

Financial integration: single system of aligned incentives
- Sliding care management fee linked to 10 NCQA-PCMH criteria (refer separate entry for criteria)
- Mandated participation by 3 commercial payers and Medicaid
- Medicare: MAPCP demo

IT support:
- Registry, EMR's & interfaces, HIE, all payer claims data
- Process improvement: training and ongoing support

Underlying the Blueprint Integrated Health Services model is financial reform that aligns fiscal incentives with healthcare goals. With the exception of Medicare, all major insurers are participating in financial reform that includes two major components.

- First, primary care practices receive an enhanced per person per month (PPPM) payment based on the quality of care they provide. The payment is based on the practices official National Committee for Quality Assurance's Physician Practice Connections – Patient Centered Medical Home (NCQA PPC-PCMH) score and is in addition to their normal fee-for-service or other payments. Every six months practices are re-scored against the NCQA's nationally recognized quality indicators. This approach provides an incentive for ongoing quality improvement as payment is adjusted up or down based on 5 point incremental changes in the score. Payments can range from $1.20 to $2.39 PPPM, providing a substantive incentive for thorough outpatient care.
- Secondly, insurers share the costs for the Community Health Teams (CHT). Each of the 3 pilots has a CHT that includes 5 full time equivalents (FTEs) at a cost of $350,000 and is intended to provide care support for a general population of approximately 20,000 patients.

Results

The Integrated Pilots have not been operating long enough to adequately evaluate their clinical and financial impacts. In addition, the program's data sources have not sufficiently matured to be a source for a thorough evaluation. Early trends are felt to be promising. Preliminary analyses suggest lower rates of rates of emergency department visits, and inpatient admissions for patients identified with a primary care provider in two medical home practices but it is not clear if these results reflect changing trends, as in a slowing or reduction in unplanned acute care.

Data collected includes Clinical Quality Cost/Efficiency Patient Experience/Satisfaction Provider Experience/Satisfaction Direct chart review, registry, multi-payer claims data base, public health sources (i.e., BRFSS, hospital discharge and disease prevalence data and immunization registry), qualitative collection (e.g., patient, provider surveys and focus groups).

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Publications

Vermont Blueprint for Health 2009 Annual Report. January 2010.
http://healthvermont.gov/prevent/blueprint/documents/Blueprint_AnnualReport_2009_0110rev.pdf

VERMONT 2007 Blueprint for Health: Strategic Plan. Report to the Legislature on Act 191 January 2007
http://healthvermont.gov/admin/legislature/documents/Blueprint_leg_report.pdf

The Vermont Accountable Care Organization Pilot: A Community Health System To Control Total Medical Costs And Improve Population Health. Jim Hester, Julie Lewis, And Aaron McKethan. May 2010
http://www.commonwealthfund.org/~/media/Files/Publications/Fund%20Report/2010/May/1403_Hester_Vermont_accountable_care_org_pilot.pdf

Development of a Vermont ACO Pilot: A Community Health System To Achieve the Triple Aims P4P Summit March 10, 2010 Jim Hester. http://www.ehcca.com/presentations/pfpsummit5/hester_ms8.pdf

[entry updated 2010]

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Organization	**Virginia Mason Hospital & Medical Center**
Category	Performance Ratings/Reports/Scorecards/Databases/Benchmarking
Source	https://www.virginiamason.org
Measure	**Virginia Mason Production System (VMPS)** https://www.virginiamason.org/home/body.cfm?id=5154

Summary

Virginia Mason Medical Center is a private, non-profit organization offering a system of integrated health services. More than 440 physicians are employed, offering primary care and a full range of specialist care. There are 336 acute hospital beds, a network of regional clinics, a Center for Health Care Solutions and the Virginia Mason Institute that provides education and training in the VMPS management method to other health-care providers and organizations.

In 2002, Virginia Mason embarked on an ambitious, system-wide program to change the way it delivers health care and in the process improve patient safety and quality. It did so by adopting the basic tenets of the Toyota Production System (TPS), calling it the Virginia Mason Production system, or VMPS. While some medical centers have initiated projects using TPS, Virginia Mason is the first to integrate the Toyota management philosophy throughout its entire system. The Virginia Mason Production System adapted production processes to health care on the basis that healthcare processes should embrace the concepts of quality, safety, customer satisfaction, staff satisfaction and cost effectiveness and optimize each of these on behalf of patients.

Methodology

Virginia Mason incorporated two key concepts from Toyota that form the pillars of its management system:
just–in–time production or producing and delivering only what is needed when and where it is needed (anything else is deemed waste), and *jidoka* or identifying defects in production and "stopping the line" to fix them.

Patient Safety Alert System Improves Patient Safety

Virginia Mason used VMPS to develop a Patient Safety Alert (PSA) system requiring all staff who encounter a situation likely to harm a patient to make an immediate report and cease any activity that could cause further harm. If the safety of a patient is indeed at risk, an investigation is immediately launched to correct the problem. From inception in 2002 through 2009, 14,604 PSAs were reported. Most reports are processed within 24 hours – a significant improvement over the original three to 18 months. Patient safety at VM has increased and professional liability claims have dropped.

Primary Care Achieves Positive Net Margins

Primary care teams used VMPS to realign their work and improve the patient experience. Teams analyzed how supplies and providers "flowed" through the day. By making key changes, such as doing non-direct patient care (reviewing lab results, calling the pharmacy) between patient visits and setting up each exam room identically, providers see more patients in shorter work days with better quality care. The turnaround time for lab results also improved from 25 days for normal results to two days or fewer.

Product Review Process Saves Time, Frustration

At Virginia Mason, the process for reviewing and adopting new products and advancing health care technology was frustrating, confusing and took too long. Using VMPS, a multidisciplinary team improved the review process, adding financial analysis, improving clinical information and automating much of the process. A physician liaison, who

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understands the clinical needs of a requesting provider, assists with the intake process for new product reviews. The lead time for product reviews reduced by 41 percent from 141 days to 84 days.

Results

Since implementing its production system in 2002, Virginia Mason has saved from $12 to $15 million in budgeted capital. Inventory has been cut in half. Lead time has decreased by 53 percent or more than two years. Additionally, there has been a 44 percent gain in productivity, or the equivalent of 77 full-time employees.

Since adopting VMPS, Virginia Mason teams have achieved significant organizational and departmental improvements:

- Reduced the time it takes to report lab test results to the patient by more than 85 percent.
- Improved the percent of time nurses spend in direct patient care from 35 percent to 90 percent.
- Reduced bedsores from 8 percent to less than 2 percent, preventing 838 patients per year from acquiring bedsores.
- Saved $1 million in supply expense in 2009.
- Reduced professional liability insurance 48.9 percent from 2004 to 2009.
- Reduced laboratory staff walking distance by 2.8 miles and removed 357 hours of lead time from lab operations.
- Improved medication distribution from physician order to availability from 2.5 hours to 10 minutes and reduced incomplete inpatient medication orders from 20 to 40 percent to less than 0.2 percent; through process improvement and computer physician order entry (CPOE) implementation.

Publications

The Virginia Mason Production System https://www.virginiamason.org/home/workfiles/clinicians/Winter_Contact_2008.pdf

2010 VMPS Facts
https://www.virginiamason.org/home/workfiles/pdfdocs/press/vmps_fastfacts.pdf

‘Reducing Waste in US Health Care Systems.’ Roger W. Bush, JAMA, February 28, 2007—Vol 297, No. 8 871-874

Virginia Mason Medical Center. Harvard Business Review Case Study, 2006.
https://www.virginiamason.org/home/workfiles/VMI/HarvardBusinessSchool_VMPS.pdf

Redesigning Care Delivery In Response To A High-Performance Network: The Virginia Mason Medical Center by Hoangmai H. Pham, Paul B. Ginsburg, Kelly McKenzie, and Arnold Milstein. Health Affairs Web Exclusive. 10 July 2007
http://content.healthaffairs.org/cgi/content/abstract/hlthaff.26.4.w532

2010 Integrated Healthcare Association Pay for Performance Conference
http://www.ehcca.com/presentations/pfpsummit5/kaplan_2.pdf

[entry updated 2010]

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Organization	WebMD Health Corp.
Category	Proprietary/Analytics/Decision Support/Healthcare Data Technology Summary for Public; Consumer; Infomediary
Source	http://www.webmdhealthservices.com/whs/
Measure	**WebMD Quality Care** http://www.selectqualitycare.com/ **Select Quality Care - Consumer** http://www.selectqualitycare.com/SQC/consumer/ **Select Quality Care - Professional** http://www.selectqualitycare.com/SQC/professional/

Summary

WebMD Health Corp. provides health information services to consumers, physicians, healthcare professionals, employers, and health plans through its public and private online portals, and health-focused publications primarily in the United States. The WebMD Health Network consists of public portals, such as WebMD Health, a primary public portal for consumers; and Medscape from WebMD, a primary public portal for physicians and other healthcare professionals, as well as third party sites, through which the company provides branded health and wellness content, tools, and services. WebMD Quality Services (formerly HealthShare Technology) offers a suite of fully-integrated, personalized decision support tools to help hospitals, health plans, employers and consumers make more informed health care decisions. Product lines include online information/educational services (WebMD Health), administrative and clinical software (WebMD Practice Services) and payer/provider transaction processing (WebMD Business Services).WebMD Health Corp. is a subsidiary of HLTH Corporation

1. **Select Quality Care™ Consumer**: Web-based tool allows members to objectively evaluate hospital quality and cost. Provides consumers with severity-adjusted, condition-specific, side-by-side comparisons of hospital treatment outcomes. Personalized hospital quality comparisons are based on measures such as patient volume, mortality rates, major complications and number of days spent in the hospital, as well as additional evaluations such as The Leapfrog Group's hospital patient safety survey results, Centers for Medicare & Medicaid Services (CMS) measures, and Patients' Evaluation of Performance in California (PEP-C) patient experience information.
2. **Select Quality Care™ Professional**: Decision-support tool to help healthcare executives evaluate hospital quality, better prepare for contract negotiations, & benchmark physicians. Enables in-depth analysis of severity-adjusted (using RDRGs or APR-DRGs), publicly-available data to compare hospital performance based upon both cost and quality. The data also incorporates AHRQ quality indicators, Leapfrog and CMS measures. An enterprise-wide tool that provides value across multiple departments for designing innovative networks, developing centers of excellence, preparing for contract negotiations, applying quality performance measures, and understanding hospital profitability under payer's contract terms. Hospital-based physician performance can also be profiled in those states where physician data is available.

Methodology

Select Quality Care Consumer.

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Severity-adjusted, condition-specific, side-by-side comparisons of hospital treatment outcomes. Users can compare up to 10 hospitals at a time on factors:

- Number of patients treated
- Mortality rates by procedure
- Major complications
- Number of days spent in the hospital
- Average hospital charges
- Leapfrog patient safety results
- CMS measures

Data sources. Database of publicly available data from the federal and state governments. Data is standardized and industry-accepted severity adjustment algorithms and nationally recognized quality outcomes and process measures are applied to provide the most comprehensive and current data available. The sources of data include Medicare (MEDPAR), as well as "All Patient" data which is collected by over 24 state agencies.

Severity Adjustments. Mortality, complications, length-of-stay and charges are adjusted for severity of illness. This adjustment is based upon the Refined Diagnosis Related Groups (RDRGs) from Health Systems Consultants or the All Patient Refined DRGs (APR-DRGs) from 3M. For each of these factors, the severity mix is standardized by using the average case mix of all of the hospitals selected for comparison. Then, each hospital's actual experience is applied to the standardized case mix to produce that hospital's "standardized" or severity-adjusted experience.

Quality Indicators. Two different complication approaches are available including a universe of 23 possible complications measures drawn from the Healthcare Utilization Project (HCUP) Indicators and Patient Safety Indicators from the Agency for Healthcare Research and Quality (AHRQ), or a more narrow definition of complications based on the AHRQ Patient Safety Indicators. These Quality Indicators (QIs) are comprised of clinical performance measures that are based on hospital administrative data to assess the quality of inpatient care.

Select Quality Care Professional.

Supports a wide variety of decision-making activities in the contracting, network development, finance, marketing and quality improvement areas of managed care organizations. Specific uses include:

- Understanding a hospital's performance compared to peer hospitals and best practices
- Comparing severity-adjusted charges, cost and LOS across hospitals by service line
- Understanding physician performance for inpatient care in comparison and benchmarks
- Aligning pay-for-performance incentives with quality
- Evaluating hospitals for network inclusion on the basis of quality and cost
- Identifying centers of excellence for specific product lines and high cost procedures
- Modeling the effect of different reimbursement approaches (e.g., per diem, per case type) on hospital profitability

Improve Network Management and Design. Can be used to define a market area and identify the appropriate hospitals for analysis, rank the hospitals by severity-adjusted cost and quality, separate hospitals into performance tiers and quantify the savings if volume were to be shifted to high-quality, low-cost hospitals.

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Identify Centers of Excellence for Specific Product Lines. Enables payers to identify Centers of Excellence for specific inpatient treatments — such as bariatric surgery, transplants, cancer care and tertiary pediatric services — using volume, cost and quality information.

Model Contract Terms and Determine Hospital Profitability. Effect of current and contemplated contract terms on specific hospital profitability in total or by hospital service. Incorporate per diems, case rates, capitation, stop-loss provisions and other methodologies into the analysis.

Severity-Adjusted Benchmark Comparisons. Enables measurement and comparison of the performance of hospital-based services to state, national or customized benchmarks based on resource use and quality measures. Provider performance is compared to benchmarks calculated at each level of risk and severity, taking into account the difference in case mix from one provider to another.

Data sources. Database of publicly available data from the federal and state governments. Data is acquired, standardized and industry-accepted severity adjustment algorithms and nationally recognized quality outcomes and process measures are applied to provide the most comprehensive and current data available. The sources of data include Medicare (MEDPAR), as well as "All Patient" data which is collected by over 24 state agencies.

Claims Data. Enables detailed reporting on inpatient and outpatient data. The tool incorporates definitions from the U.S. Agency for Health Care Research and Quality (AHRQ) and includes measures from AHRQ's Patient Safety, Prevention, and Utilization Indicators modules. Uses over 190 indicators users can make use of the latest measures from AHRQ as well as other industry sources including CMS-Hospital Quality Alliance (CMS-HQA) and The Leapfrog Group.

Severity Adjustment. Incorporates the RDRG methodology developed for the Centers for Medicare and Medicare Services (CMS) by Health Systems Consultants and the optional APR-DRGs from 3M. Both are nationally recognized severity-adjustment methodologies that ensure that analyses and comparisons take into account the severity of patients.

Publications

Consumers Needing Hospital Care Arm Themselves with Quality Data
http://www.selectqualitycare.com/SQC/White_Paper_Cons_Need_Hosp_Care_Jul05.pdf

Hospital Quality Comparisons Are Beginning to Influence Consumer Choice and Behavior
http://www.selectqualitycare.com/SQC/HealthShare_Annual_Consumer_Study.pdf

Kane, N. M and R. B. Siegrist. 2002. Understanding Rising Hospital Inpatient Costs: Key Components of Cost and the Impact of Poor Quality
http://www.selectqualitycare.com/SQC/Understanding%20Rising%20Hospital%20Inpatient%20Costs.pdf

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Organization	**Wisconsin Collaborative for Healthcare Quality (WCHQ)**
Category	State focus; Performance Ratings/Reports/Scorecards/Databases/Benchmarking
Source	http://www.wchq.org
Measure	**Performance and Progress Report** http://www.wchq.org/reporting/

Summary

The Wisconsin Collaborative for Healthcare Quality (WCHQ) is a voluntary consortium of organizations learning and working together to improve the quality and cost-effectiveness of healthcare for the people of Wisconsin. Members include physician groups, hospitals and health plans and two of Wisconsin's largest health systems: Aurora Healthcare and the University of Wisconsin Medical Foundation/UW Hospitals and Clinics.

Focus on

- Develop performance measures for assessing the quality of healthcare services.
- Guide the collection, validation and analysis of data related to these measures.
- Publicly report measurement results for healthcare providers, purchasers and consumers.
- Share the best practices of healthcare organizations that demonstrate high-quality service, enabling all providers to adopt successful methods.

Measures

The Performance and Progress Report is a collection of healthcare *performance* measures by which healthcare provider organizations have agreed to be compared. Each measure represents a specific aspect of care for a defined period of time to provide a "snapshot" of a healthcare organization's performance in relation to an evidence-based standard - and in relation to one another.

Methodology

Report is interactive and criterion include

- Type of Provider – Physician Group, Hospital, Health Plan
- Geographic location
- Ambulatory Care Measures – chronic care, episodic care, preventive care
- Clinical Topics – access, critical care, diabetes, HIT, heart care, patient satisfaction, pneumonia, surgery, women's health
- Service delivery – safety, timeliness, effectiveness, efficiency, patient-centeredness

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In WCHQ's model, the measure's numerator is identified first. For each numerator, parameters of the denominator are constructed to define relevant patients cared for by a physician group. For this denominator to be meaningful, it must identify every such patient for every payer, not just those who were served by a particular payer. For each measure, WCHQ has identified a standard set of three questions to guide construction of the denominator.

Measure Validation

A three-year schedule with each organization having each measure numerator validated a minimum of one time over a three year period. Denominator validation occurs for measure specification annually. New member organizations are validated for each denominator and numerator measure with their initial data submission. When new measures are introduced, every member organization is validated for each denominator and numerator prior to the initial data publication of the new measure.

- WCHQ's current and planned measures all align with nationally endorsed measure sets (AQA, NQF).
- Each measure's evidence-based data criteria are presented in a flow chart for ease of use.
- Data are collected through a web-based interface designed in consultation with data submitters.

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Organization	**Zynx Health**
Category	Proprietary/Analytics/Decision Support/Healthcare Data Technology
Source	http://www.zynxhealth.com/
Measure	**ZynxEvidence and ZynxOrder**

Summary

A provider of evidence-based clinical decision support, Zynx Health has been helping hospitals implement evidence-based clinical decision support for more than 10 years. Zynx Health includes 17 full-time physicians, 11 full-time nurses, and 3 full-time pharmacists They work with physician and nursing advisors from organizations throughout the country—including Vanderbilt, UCLA, and Partners Healthcare—to review and distill evidence. Reviews of the peer-reviewed literature and regulatory standards form the basis of evidence-based content including clinical synopses and best practices for a broad range of conditions and procedures. This multi-disciplinary team has produced more than 450 order sets covering 116 conditions or problems, more than 110 plans of care, and approximately 250 alerts and reminders. Products used by more than 1,400 hospitals nationwide. Zynx was formed out of the Cedars-Sinai Medical Center Division of Health Services Research and pioneered the field of evidence-based decision support. It is now a part of the Hearst Corporation.

Products

ZynxEvidence and ZynxOrder are Internet-based products that facilitate the integration of "best practices" into hospital-based clinician workflow. Zynx provides evidence, order sets, and performance measure checklists for use in physician practices.

1. Zynx Evidence

An Internet-based solution that provides evidence-based clinical content on "best practices" for physicians, nurses, and allied health professionals (eg, nutritionists, occupational therapists, physical therapists, respiratory therapists, social workers). It empowers quality improvement teams in their continuing efforts to manage evidence-based clinical content.

- Includes more than 145 modules covering a wide array of inpatient conditions and procedures. Content is divided into modules that represent either clinical conditions (eg, Heart Failure – Systolic), procedures (eg, Total Hip Replacement), or problems that are experienced by patients with a variety of medical conditions, events, and procedures (eg, Patient Problems). Each module of evidence-based content consists of one or more of the following components: medical evidence, interdisciplinary evidence, forecasting, continuing medical education.
- Clinical modules cover many of the high-volume, high-cost conditions and procedures that comprise key specialties such as cardiology, infectious diseases, orthopedics, pediatrics, pulmonary diseases, surgery, vascular diseases, and women's health.
- Highlights the specific interventions that enable compliance with major regulatory initiatives and accrediting bodies, including: The Joint Commission, American Nurses Credentialing Center Magnet Recognition Program, Leapfrog Group, Centers for Medicare & Medicaid Services, National Quality Forum, and the National Database of Nursing Quality Indicators.
- Includes a suite of forecasting functions modeled on outcome data for clinical interventions that have been shown to result in improved patient and economic outcomes.

2. Zynx Order

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ZynxOrder - evidence-based order sets.

- ZynxOrder has four key components: Clinical Content, Implementation, Collaborative Technology, and Deployment
- Robust clinical content – more than 850 evidence-based order set templates addressing more than 78% of inpatient diagnosis-related groups
- Implementation services – a dedicated Client Services manager helping each client with training, project management, and reconciliation of existing order sets
- Collaboration technology – features AuthorSpace, an online work environment to manage localization of order set build project, customize order sets, and reach consensus on standard protocols
- Deployment –the ability to generate order sets either on paper, as HTML files for use on hospital intranet, or as integratable files for computerized provider order entry (CPOE) application
- Publishes the order set templates and software tools to enable measurable improvement of the quality, safety, and efficiency of care. The content includes more than 850 order set templates.

3. Zynx Care

- Targets nurses and interdisciplinary nurse teams to incorporate evidence-based practices without interrupting workflow and care processes. The 150+ plan of care templates in ZynxCare are based on the latest evidence, regulatory guidelines, and performance measures. The templates are fully customizable and allow for integration in workflow—either in a paper-based format or within a clinical information system.
- Includes plan of care templates, flowsheets, and education checklists with links to the underlying evidence. The solution also includes AuthorSpace, an online software tool for efficiently customizing, reviewing, and maintaining the content.

4. Zynx Ambulatory Care

- Zynx AmbulatoryCare centers on the care of high-profile conditions in a primary care setting. These high-volume conditions are the focus of most national pay-for-performance programs. Zynx AmbulatoryCare content is divided into modules that represent clinical conditions (eg, Heart Failure – Systolic), health maintenance topics (eg, Preventive Care and Screening – Adult), symptoms (eg, Low Back Pain – Acute), or diagnostic workup (eg, Breast Mass Workup). Each module consists of 1 or more of the following components: evidence, order sets, rules, performance measure checklists, forecasting, continuing medical education

- Zynx AmbulatoryCare includes several clinical decision support tools:

  - **Clinical summaries** of peer-reviewed research, guidelines, and performance measures that support each recommendation
  - **References** for each article summary with links to PubMed abstracts and full-text articles when available
  - **Evidence-based order sets** with full customization capabilities
  - **Forecasters** that allow you to measure, identify, and prioritize opportunities for quality improvement
  - **Rules** (reminders/alerts) that can be built or incorporated into EMR

- The evidence-based outpatient order sets in Zynx AmbulatoryCare are specifically designed to incorporate performance measures developed or endorsed by:

  - AQA Alliance
  - Centers for Medicare & Medicaid Services (CMS)
  - National Committee for Quality Assurance (NCQA)
  - National Quality Forum (NQF)

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5. Zynx Forecasting

Zynx Forecasting modules are designed to complement the evidence-based literature in ZynxEvidence or Zynx AmbulatoryCare by providing a tool with which to calculate the potential benefits that may be realized through implementation of any of the "best practices" presented there. Calculate potential financial and quality benefits for more than 300 different interventions.

Methodology

Zynx order sets and plans of care include direct links to clinical summaries of the supporting evidence.

A summary is always presented in the same three-section format:

1. Reminder (ie, a concise recommendation);
2. Rationale (ie, a summary of the supporting evidence); and
3. References (ie, a comprehensive list of citations with links to relevant abstracts or full-text articles).

Updated content released every six months based on new evidence and performance measures or in response to critical issues. Each quarter, Zynx sends an updated list of measures from the Joint Commission on Accreditation of Healthcare Organizations (JCAHO), Centers for Medicare & Medicaid Services (CMS), Leapfrog Group, Institute for Healthcare Improvement (IHI), and many other organizations.

Performance Measures

Zynx Health solutions incorporate performance measures from a substantial number of national organizations. These include

Hospital Performance Measures

- American Association of Cardiovascular and Pulmonary Rehabilitation/American College of Cardiology/American Heart Association Clinical Performance Measure
- American College of Cardiology/American Heart Association Clinical Performance Measure
- American Heart Association/American Stroke Association (AHA/ASA) Get With The Guidelines Core Measure
- American Medical Association Consortium for Performance Improvement Performance Measure
- AQA Alliance–Endorsed Performance Measure
- Centers for Medicare & Medicaid Services (CMS) Hospital Quality Alliance Quality Measure
- CMS National Hospital Quality Measure
- CMS Physician Quality Reporting Initiative Physician Quality Measure
- CMS Premier Hospital Quality Incentive Demonstration Measure
- CMS Surgical Care Improvement Project Performance Measure
- Institute for Healthcare Improvement 5 Million Lives Campaign Performance Measure
- Leapfrog Nationally Endorsed Process Measure
- National Quality Forum–Endorsed Performance Measure
- Surviving Sepsis Campaign Performance Measure
- The Joint Commission (formerly known as the Joint Commission on Accreditation of Healthcare Organizations) National Hospital Quality Measure
- The Joint Commission National Patient Safety Goal

Nursing Performance Measures

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- American Nurses Association Nursing Quality Indicator
- National Quality Forum–Endorsed Performance Measure

Physician Performance Measures

- American College of Cardiology/American Heart Association Clinical Performance Measure
- American Medical Association Physician Consortium for Performance Improvement Performance Measure
- AQA Alliance–Endorsed Performance Measure
- CMS Doctors' Office Quality Information Technology Performance Measure
- CMS Medicare Physician Group Practice Demonstration Measure
- CMS Physician Quality Reporting Initiative Physician Quality Measure
- National Committee for Quality Assurance (NCQA) Back Pain Recognition Program Clinical Measure
- National Diabetes Quality Improvement Alliance Performance Measure
- National Initiative for Children's Healthcare Quality Performance Measure
- National Quality Forum–Endorsed Performance Measure
- NCQA Diabetes Physician Recognition Program Clinical Measure
- NCQA/AHA/ASA Heart/Stroke Recognition Program Clinical Measure

Chronic Disease Management Performance Measures

- The Joint Commission Disease-Specific Care Performance Measure

Health Plan Performance Measures

- NCQA Healthcare Effectiveness Data and Information Set (HEDIS) Performance Measure

Publications

The Overall Impact of Evidence-Based Practice. Sheri Matter.
http://assets.zynx.com/protected/pdfs/ZH_Conference/2007/matter.pdf

10 Questions to Ask When Considering Evidence-Based Decision Support. White Paper Jan 2007
http://assets.zynx.com/protected/pdfs/White_Papers/10_Questions_to_Ask.pdf

Methodology ZynxOrder™ and ZynxEvidence™ – Medical Evidence
http://assets.zynx.com/protected/pdfs/methodology/zo_methodology.pdf

Methodology ZynxCare™ and ZynxEvidence™ – Interdisciplinary Evidence
http://assets.zynx.com/protected/pdfs/methodology/zc_methodology.pdf

Methodology Zynx AmbulatoryCare http://assets.zynx.com/protected/pdfs/methodology/zac_methodology.pdf

Methodology ZynxEvidence http://assets.zynx.com/protected/pdfs/methodology/ze_methodology.pdf

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APPENDIX

Definitions of secondary level categories used to organize data from web-based research are:

1. **Accreditation, Certification** - Products such as published standards based upon defined and agreed best-practice of an accrediting/certifying organization; or, an organization undertaking the action of accreditation - an evaluative process in which a healthcare organizations policies, procedures and performance are self-reviewed and externally examined. Primary purpose is quality oversight with a view to establishing whether the healthcare organization exceeds, meets, or has not met published standards, resulting in some sort of formal acknowledgment or designation of status achieved.

2. **Analytics, Decision Support, Healthcare Data Technology**– Data technology vendor or data product that gathers, organizes/analyzes large amounts of information/data; either provides authoritative analytical information, assists clinical decision-making or the means by which an organization can generate/analyze information (such as episode-grouping tools); intended to assist an organization analyze its results/performance to improve healthcare quality and/or efficiency or to inform and align clinical decision-making with best-practice.

3. **Incentives, Rewards Programs** –Seek to align providers' financial **incentives** with quality goals; motivate and reward improved performance or reward exemplary performance on targeted dimensions of health care quality through various means such as pay for performance, pay for quality improvement, financial incentive, bonus, reward.

4. **Performance Ratings, Reports, Scorecards, Benchmarking (report actual performance)** - Organization or product that examines/analyzes/categorizes/reports on the way in which a group or organization performs and/or accomplishes its important functions or processes. Involves analysis/interpretation of performance measurement data into contextually useful information to drive quality and efficiency improvement. Use of qualitative and/or quantitative measures of care and services developed to gauge/interpret processes and outcomes. Performance measures may include measures of clinical quality and process, patient outcomes (health attained, mortality, morbidity), patient perceptions of care, organizational structure and systems. Results provided in form of a rating, report card/scorecard or measured against an industry benchmark.

5. **Standards Setting, Industry Organizations -** Organizations formed around specific purpose or subject matter; established for the purposes of developing standards and processes; or, to act on behalf of members promoting the interests of members. Focus is on common issues of interest such as in this context, developing widely applicable standards/criteria of healthcare quality and/or efficiency; or, health sector analysis identifying areas of future research/action.

6. **Summary for Public, Consumer, Infomediaries** - Organization or product that seeks to promote transparency in the health care industry by a comparative analysis and reporting capability. Assists patients make decisions about their health and guide patients regarding quality of care and of providers. Includes gathering and providing information on the performance of healthcare organizations enabling the user to compare performance against that of peer organizations, against a range of user selected benchmarks. This may include providing users (consumers, providers, employers, and policymaker) with comparative cost, volume and quality information about medical procedures performed at various hospitals and outpatient facilities or by various providers – based upon well-tested, standardized measures that are widely accepted and used by a broad base of public and private entities.

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7. Payment reform – there are a variety of programs and applications that move beyond basic incentives for particular illnesses to broader changes in the reimbursement structure. The goal is to create a financial structure that encourages results and rewards for the provider community for initiatives to improve quality and manage resources effectively. Payment reform initiatives are part of the health reform legislation.

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