



THE INDEPENDENT CONSULTANT


[LinkedIn](#)

[Share](#)

[Print-Friendly
Newsletter](#)

[Search
Back issues](#)

CONTENTS

[Issue Notes from the Editor](#)

by Bill Ely

[More Ideas Are Needed!](#)

by James Ramenda

[From the Chairperson](#)

[Section Initiatives](#)

by Kevin Pledge

[Fast-Track Your Brand](#)

by Suzanne Bates

[To Build Your Business, Speak to Groups!](#)

by Ken Lizotte

[Playoffs?!?!](#)

[Fixing College Football](#)

by Pete Rossi

[Efficient Risk Identification in a Reformed World](#)

by J.P. Barela

ENTREPRENEURIAL
ACTUARIES SECTION

[Entrepreneurial Actuaries
Section Leadership](#)

Efficient Risk Identification in a Reformed World

by J.P. Barela

This essay was submitted for the Society of Actuaries' Entrepreneurial Actuaries Section 2010 Papers Competition.

Executive Summary

When health care exchanges become operational in 2014, roughly 30 percent of the entire population will be eligible for risk adjusted payments. These payments will change the nature of the unit of exposure in health care from an individual with demographic data to a set of medical conditions. Plans that optimize their operations will be able to capture not only exposure data more accurately and make better business decisions but may also improve their regulatory medical loss ratio.

Mega Issue

The standard method of exposure in health insurance is the member month. For rating reasons, this concept is often expanded to age, gender, family status and, for some markets, a selection factor. The Patient Protection and Affordable Care Act (PPACA) transforms this definition for several markets. Instead of age and gender, PPACA expands the definition of exposure by introducing risk adjustment into the small group and individual markets. The exchanges combined with existing risk adjustment in the Medicare advantage market may make up to 31.2 percent of the entire U.S. population eligible for risk based payment. This estimate does not include additional risk based programs in the large employer or Medicaid markets, so it is possible that well over 30 percent of the population will have health status as the primary

[William Ely, Editor](#)

SOA Staff

[Meg Weber, Staff Partner](#)

[Jacque Kirkwood, Staff Editor](#)

[Sue Martz, Section Specialist](#)

OTHER SITES OF INTEREST

[Entrepreneurial
Actuaries](#)

[Newsletter](#)

[Resource Center](#)

[Member Benefits](#)

method of exposure in 2014. The payment for these markets will depend on the actual health status of the individuals covered. Based on existing systems, this adjustment may result in premium differentials of 4-1 for a member with several chronic conditions compared to a member with no condition markers, making tracking health status critically important.

Tracking these exposures is complicated by that fact that health plans are not able to directly define the health status of members. In the case of Medicare and likely in the case of the new exchanges, only qualified health care providers (M.D.s and advanced practice nurses) are able to diagnose the health conditions that will result in increased payment. Health plans will therefore need to develop programs to ensure accurate coding of health status.

Solution Overview

Actuaries are used to and often push the idea of risk adjustment as a more accurate measure of risk. Actually tying payment to risk adjustment will result in several operational challenges. How does the risk adjustment impact cash flow? Should reserving and trend analysis incorporate risk adjustment? Plans that develop solutions to these questions will prosper but for plans that truly embrace risk adjustment an additional benefit is likely, an increase in the medical loss ratio (MLR).

In addition to creating the exchanges, PPACA also dictated that health plans publish their MLR in 2010. In 2011, plans will be required to refund consumers' premiums if the loss ratio is above 80 percent to 85 percent depending upon the market. A plan that develops enhanced claims systems tied to care coordination is likely to include much of the cost for these upgrades in the medical cost portion of the loss ratio. If designed effectively this data should be easily converted to risk adjustment data for use by the actuarial department minimizing the IT cost outside of medical costs.

The center piece of these efforts is a system that analyzes claim data for condition status markers. Several systems exist currently to track the risk adjustment system for Medicare using a member's claims to identify which health status. The current systems are unlikely to qualify as the care coordination because they focus on past claims instead of managing future care. Developing a near real-time system will enable the information to be used for care coordination, particularly developing a care plan for members with newly diagnosed chronic diseases and ensuring that evidence based protocols are being followed.

Timely condition identification allows for the aggregate risk information to be used throughout the organization including actuarial tasks such as reserving, utilization and trend analysis. Many risk adjustment systems including Medicare use interim payments based on incomplete risk

adjustment and then true up the risk adjustment after sufficient claims run out. Plans that identify conditions quickly will therefore see improved cash flow.

Focusing on care coordination can also have further benefits for defining the exposure of the health plan. By developing a care plan with the member, the correct risk classification can be confirmed, and, if necessary, additional testing and medical care can be done to confirm the correct diagnosis and potentially increase overall plan reimbursement.

Reviewing existing members for previous conditions can also yield additional current conditions. Many existing risk adjustment systems require an office visit or surgical procedure to diagnose a member. This means that even if the member is taking medications or having routine blood work the member may not be classified appropriately. A near real-time system can isolate members who are taking low cost measures to manage a chronic condition but who are not being categorized as having the condition because of the lack of a qualifying diagnostic visit. Care coordinators can then reach out to these members to ensure that the member sees a provider to confirm that the condition is still treated effectively while also providing the clinical input to confirm the condition in the risk adjustment system.

Measuring Results

Developing an improved and integrated health claims system will increase operational efficiency but by how much? The MLR is one key metric that should be improved due to the adoption of the system. Another key metric will be the return on investment (ROI) of an intervention strategy.

Health plans should be currently in the processes of developing a figure for their 2010 MLR. This figure can be used as a baseline for understanding the change in the MLR due to centralizing the risk adjustment methodology. Plans should target three areas for shifting expenses to medical portion of the MLR current risk adjustment costs, IT support for care coordination, and IT support for the actuarial department.

The second area for a direct metric for the risk identification system is the ROI of the intervention strategy based on a near real-time risk adjustment system. Care management strategies can be complex and measuring their overall effectiveness is difficult, but in the context of risk identification both the costs and benefits are concrete and relatively straightforward.

The risk identification benefit that can be assigned to a care management system can be seen as increase in revenue due to a

change in the risk score of an individual member from the intervention date. This method will not capture the initial reason for developing a care management plan but will capture any changes such as additional comorbidities and increases in the severity of initial condition. The benefit for interventions targeting existing conditions will be the revenue for classifying the member with the targeted condition.

The most obvious cost associated with an intervention plan is the direct communication cost of contacting members. The next direct cost is the medical intervention necessary to diagnosis the conditions. To minimize confusion in calculating the ROI, a predetermined list of diagnostic services should be developed. Finally, the plan may consider allocating some of the IT and personnel costs of the care management program to risk identification. This last point also highlights the need to make sure that costs are only included in either the risk identification or care management program for ROI evaluations.

Care should also be taken in developing an ROI target for risk identification. The mix of intervention types will play a major role in the ROI calculation. The return on initial care plan development will depend on the coding accuracy of the health plan's providers. Since the coding accuracy should improve over time, the risk identification return should decrease of time. The return for existing condition interventions is likely to be more stable as monetary return can be calculated before the intervention and response rates can be estimated. In addition to the case mix, the ROI may decrease as risk identification moves from a new program to an internal automatic process, decreasing the need for interventions.

J.P. Barela, ASA, ACA, MAAA, is an actuary with the Colorado Division of Insurance in Denver, Colo. He may be reached at John.Barela@dora.state.co.us.



475 North Martingale Road, Suite 600, Schaumburg, Illinois 60173
Phone: 847.706.3500 Fax: 847.706.3599 www.soa.org