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## Basic Health Program: Considerations Regarding the Federal Payment Methodology

By Steven Armstrong, Michael Cook and Lindsay Kotecki

**T**he Patient Protection and Affordable Care Act (ACA) includes numerous provisions that aim to provide greater access and more affordable health care coverage to low- and moderate-income individuals. Most notably, these programs include the option for states to expand their Medicaid programs to individuals with incomes up to 138 percent of the federal poverty level (FPL) and premium and/or cost-sharing subsidies on public exchanges for individuals with household incomes between 100 and 400 percent of FPL. A lesser-known provision of the law, Section 1331, gives states the option to establish a Basic Health Program (BHP). The BHP is intended to provide states with the flexibility to design programs that meet the specific needs of the state and the low-income population. Through the program, states may be able to provide such benefits as additional premium and/or cost-sharing reductions (CSRs) to low-income individuals beyond those offered through the exchanges, as well as to reduce the churn of beneficiaries in and out of the Medicaid program as eligibility status changes throughout the year.

In states electing to implement a BHP, coverage through the program will be available to individuals under the age of 65 with household incomes up to 200 percent of FPL who

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### Editorial Board Members

Valerie Nelson, *Editor-in-Chief*  
[valerie\\_nelson@bcbsil.com](mailto:valerie_nelson@bcbsil.com)

J. Patrick Kinney  
ph: 585.238.4379  
[Patrick.Kinney@excellus.com](mailto:Patrick.Kinney@excellus.com)

Jeff Miller  
ph: 913.707.0067  
[jeff@jdmfsa.com](mailto:jeff@jdmfsa.com)

### SOA Staff

Karen Perry, *Publications Manager*  
ph: 847-706-3527 f: 847-273-8527  
[kperry@soa.org](mailto:kperry@soa.org)

Joe Wurzbarger, *Staff Partner*  
[jwurzbarger@soa.org](mailto:jwurzbarger@soa.org)

Leslie Smith, *Staff Specialist*  
[lsmith@soa.org](mailto:lsmith@soa.org)

Julissa Sweeney, *Graphic Designer*  
ph: 847.706.3548 f: 847.273.8548  
[jsweeney@soa.org](mailto:jsweeney@soa.org)

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## Letter from the Editor

By Valerie Nelson

**H**appy 2015! And as new year's go, this edition of *Health Watch* features content on new topics as well as a new ongoing installment.

This issue's cover article features Basic Health Programs and is written by Steven Armstrong, Michael Cook and Lindsay Kotecki. This informative article provides an overview of these types of programs, the federal payment methodology, and the issues remaining at the state level that need to be considered.

We also feature two articles on less-common but growing product markets. The first is written by David Dillon and Josh Hammerquist and covers supplemental benefit products for the commercial population. The second is written by Mark Peterson and covers Medicare Medical Savings Accounts.

As a follow-up to his October 2014 article, Kurt Wrobel writes about the differences in risk adjustment programs associated with Medicare Advantage and exchange products.

In October 2014, the Society of Actuaries (SOA) Annual Meeting was held in Orlando, Florida. A recap of the Health Section Breakfast is covered as well as some candid feedback received from attendees at the health sessions.

Reprinted from the SOA Reinsurance Section's newsletter is an article written by Ross Campbell titled "Ebola—Not the Next Pandemic?" We believe this will interest many *Health Watch* readers too!

*Health Watch* will now feature the abstracts for relevant articles published in the *North American Actuarial Journal* and in international publications. This will allow for the *Health Watch* readership to see, and hopefully read, all the meaningful health-related content that is being published.

Finally, an exciting installment coming to *Health Watch* is a series titled "Examining the Evidence" written by Tia Goss Sawhney and Bruce Pyenson. This series will provide both evidence and the authors' opinions on a different topic for each publication and is meant to create lively discussion. This issue's topic covers enhanced primary care savings models, and we look forward to readers' feedback. ■



Valerie Nelson, FSA, MAAA, is an executive director and actuary at Blue Cross/Blue Shield of Illinois. She can be reached at [valerie\\_nelson@bcbsil.com](mailto:valerie_nelson@bcbsil.com).

# Chairperson's Corner

By Andie Christopherson

I am delighted to be writing this introduction as your Health Section Council chair for the 2014-15 year! I will talk about some new initiatives we have in store this year in our effort to provide value for our members. But first, I must thank all the outgoing council members for their hard work these past several years. Donna Kalin, Nancy Hubler, Valerie Nelson, Greger Vigen and Olga Jacobs all spent dozens (hundreds?) of hours working on behalf of the section and our profession; a heartfelt thanks to each of you for your dedicated efforts as volunteers.

I also want to welcome those new to the council—Elaine Corrough, Dan Feucht, Bill O'Brien, Brian Pauley and Rina Vertes—we are lucky to have you and appreciate you jumping in with both feet!

It is such an interesting time to be a health actuary. In addition to the Affordable Care Act (ACA), the entire health care system is transforming before our eyes. To that end, your council is pursuing some very important strategic initiatives to position our profession for the future—but we can't do it alone. I would strongly encourage you to reach out to Kara Clark ([kara.clark@walgreens.com](mailto:kara.clark@walgreens.com)) if any of the topics below pique your interest. We are a section 4,000 strong—your council of 12 can lead the charge, but it's up to the wider community of health actuaries to influence the future of our profession.

The broad strategic vision, which will be a multiyear effort, is to delve into topics involving areas of transformation within the health care system. For any particular area of focus, we will seek to answer a set of questions regarding risk and opportunity, with respect to both the industry as a whole and the actuarial profession specifically. A key element will be to acquire outside perspectives—both to further our profession's understanding of the topic, and to establish ourselves as thought leaders outside of the profession.

The first area of focus being pursued is the individual market, ACA and exchanges. Highly variant pricing and the politicized nature of this topic present serious reputational risk to our profession if not handled in a proactive manner. The crux of this work stream will be to get ahead of the things we, as actuaries, see coming down the pike, by presenting information in a way that can be well understood by those outside the profession. Our hope is that by doing so, we will allow for more informed conversation about the challenges and possible solutions. At press time, initial efforts are planned for interpreting the emerging data and looking at how players in the industry are likely to respond to risk protection removals in 2017.

The second subject of focus underway is in the area of accountable value-based care. There are many professionals in the health care industry working in this space, and it is our challenge as an actuarial profession to determine how we can contribute to developing the next generation of solutions in a way that ensures focus on financial performance. We need to build skill sets and understanding within the actuarial community. Understanding outside points of view and the expertise that comes with it is a key aspect of this topic. Actuarial and non-actuarial perspectives need to be brought together to further the discussion and develop new solutions.

In closing, I am very excited about the opportunities and challenges awaiting us all in 2015. For the longest time, 2014 seemed to be the end-all-be-all year as a health actuary. We all made it through; I'm excited to see what nuances and improvements we can bring to the year following it! ■



Andie Christopherson, FSA, MAAA, is chief actuary at Land of Lincoln Health in Chicago, Ill. She can be reached at [achristo@landoflincolnhealth.org](mailto:achristo@landoflincolnhealth.org).





Steven Armstrong is an actuarial assistant at Milliman in Brookfield, Wisconsin. He can be reached at [steven.armstrong@milliman.com](mailto:steven.armstrong@milliman.com).



Michael Cook, FSA, MAAA, is a principal and consulting actuary at Milliman in Brookfield, Wisconsin. He can be reached at [michael.cook@milliman.com](mailto:michael.cook@milliman.com).



Lindsay Kotecki, ASA, MAAA, is an associate actuary at Milliman in Minneapolis, Minnesota. She can be reached at [lindsay.kotecki@milliman.com](mailto:lindsay.kotecki@milliman.com).

are not eligible for Medicaid or affordable/creditable employer-sponsored insurance. Coverage will also be available to lawfully present noncitizens with incomes under 200 percent of FPL who are not eligible for coverage through Medicaid or the Children's Health Insurance Program (CHIP). Under the BHP, states must provide coverage that includes at least the essential health benefits required for plans offered on their exchanges. Federal funding for the BHP will be calculated based on the level of premium tax credits (PTCs) and CSRs that enrollees would have received had they been enrolled in a qualified health plan (QHP) offered through the exchanges. Specifically, the federal government will pay 95 percent of these amounts into a BHP trust fund, with states being required to fund any remaining costs of the program through other sources.

To date, Minnesota is the only state to have opted to implement a BHP. The BHP will essentially replace the current MinnesotaCare program, which serves individuals with household incomes between 138 and 200 percent of FPL who do not have access to insurance coverage through an employer or other assistance programs. The Minnesota Department of Human Services has submitted a BHP blueprint<sup>1</sup> to the U.S. Department of Health and Human Services (HHS) for approval, which is scheduled to take effect beginning Jan. 1, 2015.

In August 2014, the Oregon Health Authority (OHA), which was tasked with studying options to increase continuity of coverage and reduce the impact of transitions between Medicaid and QHPs on the exchanges, issued a report<sup>2</sup> advising against the implementation of the program. Though the report notes several potential benefits of the program, the committee concluded that this option would place additional financial risk and administrative burdens on the state, would limit coverage options for BHP-eligible individuals, would reduce provider reimbursement rates for services provided to individuals enrolled in the BHP relative to those paid by plans sold on the exchanges, and would reduce the size of the risk pool for plans on the exchange. It is estimated that, nationwide, as much as one-third of the

individuals eligible to purchase subsidized coverage on the exchanges have incomes below 200 percent of FPL and would instead be required to obtain coverage through the BHP.<sup>3</sup> Such a reduction in the size of the risk pool would have the potential to alter the risk profile of the exchange population and, in turn, impact premium levels on the exchanges. Though the OHA report focused on a variety of options to reduce churn, a more thorough feasibility study focused on the BHP is scheduled to be delivered to the legislature in November 2014.

Other states, such as New York, Massachusetts, California, Hawaii and Washington, have explored the viability of this option in their states. However, it is unclear at this time whether or not these states will move to implement a BHP after 2015.

## Federal Payment Methodology

In March 2014, HHS released the final rule payment methodology for the BHP,<sup>4,5</sup> which outlined the specific formulas that will be used to determine the payments made by the federal government into the BHP trust fund. Though the payment formulas are simplified, they are designed to account for relevant factors that would be considered in the determination of the actual PTC and CSR amounts for individuals enrolled in a QHP through the exchanges. These factors include:

- Reference premium (see the Reference Premium section below)
- Tobacco rating factors
- Induced utilization
- Premium trend
- Administrative costs included in premium
- Actuarial value
- Health status (potentially)
- Income reconciliation (for changes in eligibility throughout the year).

Rather than estimating the reference premium, PTC and CSR amounts at the individual level, these amounts will be calculated on average for

different rate cells. The rate cells prescribed in the BHP payment methodology vary by the following characteristics:

- Age range
- Household income
- Level of coverage (self-only or family)
- Household size (in states where children at or below 200 percent of FPL are not eligible for Medicaid or CHIP)
- Geographic rating area.

The federal payments will equal 95 percent of estimated PTC and CSR amounts, and will be deposited into each state's BHP trust fund on a quarterly basis.

#### Reference Premium

PTCs paid through the exchanges are determined based on the premium rate for the second-lowest-cost silver plan. Therefore, in order to estimate the PTC that would have been paid to BHP-eligible individuals had they enrolled through the exchanges, the BHP payment methodology includes the calculation of a reference premium. The reference premium is calculated for each age range and coverage level, and reflects the average nontobacco premium rate for the second-lowest-cost silver plan in a given geographic area.

For 2015, the reference premium will be calculated using actual 2015 premium rates for the second-lowest-cost silver plans, unless a state requests that 2014 premium rates be used instead. If 2014 premium rates are used, a premium trend adjustment will be applied to reflect the anticipated premium change for 2015. The methodology used to calculate reference premiums for future years will be published in the annual notice.

The reference premium may be adjusted to account for the health status of the BHP and non-grandfathered, ACA-compliant individual market populations combined relative to the health status of the non-grandfathered, ACA-compliant individual market population excluding the BHP-eligible population. This adjustment is called the population health

factor (PHF), and is intended to reflect the expected impact that BHP-eligible individuals would have had on exchange premium rates if they were included in the exchange population (more on this below in the Health Risk Adjustment section).

#### Calculation of Premium Tax Credit

The PTC amount paid into the BHP trust fund will be calculated at the rate cell level, and will be based on the difference between the average adjusted reference premium and the average maximum premium that would be charged to BHP-eligible individuals if they purchased the second-lowest-cost silver plan through the exchanges. The average maximum premium amount varies based on household income as a percent of the FPL.

An additional adjustment will be made to the PTC payment to account for the expected impact of income reconciliation. For enrollees on the exchanges, the PTC will be paid prospectively based on income at the time of application, with an annual reconciliation to reflect actual changes in income over the course of the year. Though BHP enrollees are not eligible for these prospective payments, HHS will use historical income data for BHP-eligible individuals to estimate the expected change in tax credit eligibility through the year and adjust the PTC payment accordingly. For 2015, this factor will equal 94.92 percent.

#### Calculation of Cost-Sharing Reduction

In determining the CSR payment, the adjusted reference premium will be used as the basis for estimating the average claims cost in each rate cell. Because the reference premium is based on the nontobacco rate, an adjustment factor will be applied to account for additional medical costs related to tobacco use. HHS will base this adjustment on the relativity of nontobacco and tobacco rates for the second-lowest-cost silver plan on the exchanges, and will account for the expected proportion of tobacco users within the BHP population based on tobacco utilization rates published by the U.S. Centers for Disease Control and Prevention (CDC). The impact of administrative costs will also be removed from the resulting premium to estimate

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the expected net claims costs for the population. This adjustment has been set at 80 percent, which is consistent with the factor used for calculating CSR advance payments for plans on the exchanges.

The CSRs that BHP members would have received though coverage on the exchanges are estimated by first grossing up the estimated net claims costs to an allowed cost basis and then calculating the expected reduction in cost sharing using a simplified approach. Allowed costs will be calculated by dividing the estimated net claims by an actuarial value (AV) of 70 percent, which is the nominal actuarial value for a silver-level plan. Then the estimated portion of total allowed costs that would be subsidized by federal dollars through an exchange is estimated based on the difference between the nominal AV of a standard silver plan (70 percent) and the nominal AV of the applicable CSR plan. The nominal AV for silver CSR plans is 94 percent for enrollees who are under 150 percent of FPL, and 87 percent for enrollees who are between 150 and 200 percent of FPL. Therefore, the portion of subsidized allowed costs is estimated to be 24 per-

cent (= 94% – 70%) for enrollees under 150 percent of FPL, and 17 percent (= 87% – 70%) for enrollees between 150 and 200 percent of FPL.

Finally, higher utilization of services is expected as a result of CSRs because beneficiaries will be able to receive services at a lower cost. This will be accounted for in the CSR calculation through an induced utilization factor. For 2015, this factor will be 112 percent (meaning aggregate allowed claims costs are expected to be 12 percent higher as a result of CSRs).

## Health Risk Adjustment

For 2015, HHS has proposed adjusting the reference premium used in the calculation of the PTC and CSR by a PHF of 1.00. A PHF of 1.00 was established because of the analytical challenges and uncertainties regarding the characteristics and risk level of BHP-eligible enrollees in 2015. However, states have the option to submit a proposed methodology for retrospectively calculating the difference in health status between the combined BHP and non-grandfathered, ACA-compliant individual market populations and the non-grandfathered, ACA-compliant individual market population excluding the BHP-eligible population.<sup>6</sup> Based on this protocol, the federal BHP payment for 2015 would be reconciled to reflect the actual level of risk in the plan year. This adjustment was appropriate for Minnesota, because the BHP-eligible population was already covered through the state's Medicaid program in 2014, and was therefore not reflected in exchange premium rates. Minnesota has proposed a methodology for implementing a health risk adjustment factor for 2015 with CMS approval or feedback due Dec. 31, 2014.

## Notable Payment Methodology Implications and Considerations

There are several factors and simplifications made in the BHP payment methodology that may have implications for states choosing to establish a BHP. First and foremost, BHP payments only reimburse 95 percent of estimated PTC and CSR payments.

**Table 1**

	A	B	C	D	E	F	G	H
Eligibility Category	Premium for 2nd Lowest Cost Silver Plan	Maximum Premium	Population Health Factor	Adjusted Reference Premium	Premium Tax Credit (PTC) <sup>1</sup>	Reference Premium less Admin	Cost-Sharing Reduction (CSR) <sup>2</sup>	Federal BHP Payment
				A x C	A - B	D x 0.8	F / 0.70 x 1.12 x (CSR AV - 0.70)	95% x (E + G)
< 150% FPL	\$200.00	\$50.00	1.00	\$200.00	\$150.00	\$160.00	\$61.44	\$200.87
150% - 200% FPL	\$200.00	\$90.00	1.00	\$200.00	\$110.00	\$160.00	\$43.52	\$145.84
NOTE: Premiums and maximum premiums are for illustrative purposes only.								
<sup>1</sup> Assumes 1.0 income reconciliation factor								
<sup>2</sup> Assumes 1.0 tobacco rating adjustment factor								

These payments will not necessarily be sufficient to cover the total cost of expanding coverage. That is, states establishing a BHP will be responsible for taking on the added cost, if it is not already a Medicaid-covered population. Table 1 demonstrates the calculation of the PTC and CSR payments to a state at the individual level (note that actual payments will be calculated at the rate cell, rather than individual level). The premium amounts are strictly illustrative. Note that estimating the final net cost assumed by a state under BHP requires a good deal of effort because of significant differences between BHP programs and the exchanges upon which federal funding is based, including potential differences in:

- Provider reimbursement levels
- Covered benefits
- BHP actuarial values relative to federal funding assumptions
- Taxes and assessments
- Administrative costs
- Risk mitigation mechanisms.

Next, the BHP payment methodology is developed on a statewide basis. It is up to the states to establish the new program structure and determine how payments will be made to those offering plans. Given

the variety of coverage options that low-income individuals may qualify for (Medicaid, BHP, or a QHP through the individual exchange), there is potential for confusion among members and providers regarding service benefits and reimbursement. This could also introduce an administrative burden to a state, and there are no federal funds for administration included in the BHP payments. Again, these concerns are mitigated for states that already cover the BHP population.

Because enrollees who are eligible for the BHP are not eligible to enroll in a health plan through the exchanges, it is not possible to precisely calculate the value of tax credits and cost-sharing subsidies those individuals would have received through the exchanges. In general, the BHP payment methodology accounts for relevant factors that are expected to materially impact the PTC and CSR payments, but simplified methods were used when appropriate. Specific examples include:

- The BHP payment methodology groups the BHP-eligible population into rate cells based on demographics and other characteristics. The reference premium, PTC and CSR amounts are then estimated at the rate cell level assuming a uniform distribution of enrollment within each cell. This simplifying assumption reduces the

CONTINUED ON PAGE 8

complexity of the calculation and allows payments to be calculated prospectively, but is not expected to have a material impact on the final BHP payment.

- The calculation of the reference premium assumes that all BHP-eligible enrollees would have enrolled in the second-lowest-cost silver plan through the exchanges. In reality, however, those individuals could have enrolled in any plan (or no plan at all).
- The CSR formula adjusts the reference premium for the expected average tobacco rating factor based on CDC statistics on tobacco users. This is a simplifying assumption because tobacco use among the BHP-eligible population may be different from the general population.
- The BHP payment methodology also does not adjust for the expected amount of federal transitional reinsurance benefits that would have been paid to insurers for high-cost BHP-eligible individuals had they enrolled through the exchanges. Therefore, states that establish a BHP will be forgoing potential reinsurance benefits, but will not receive a proportionate reduction in contributions. (Although transitional reinsurance fees will not be collected on BHP enrollees, the vast majority of reinsurance fees are assessed on the group market, and will be regardless of whether a state implements a BHP.)

There are also several implications to consider with respect to the PHF that will be used to adjust payments for expected health status differences between BHP enrollees and other enrollees in the individual market.

- The PHF is calculated on a statewide basis (based on the entire BHP and non-grandfathered, ACA-compliant individual market populations). That is, the PHF used to adjust reference premiums does not vary by rate cell. This method implicitly assumes that differences between the health status of BHP-eligible individuals and ACA individual market enrollees are similar across the state.

- The reference premium after the PHF adjustment is not likely to reflect the true morbidity of the BHP-eligible population on its own. This is intentional, because in regulation the BHP payments are to be based on the subsidies that enrollees would have received had the BHP population instead enrolled in the individual market. Instead, the PHF adjusts the reference premium to reflect the combined health status of the BHP-eligible and non-grandfathered, ACA-compliant individual market populations. In other words, BHP payments are not based solely on the health status of the BHP-eligible population, even after the PHF adjustment. As such, states would face some financial risk that the morbidity of the BHP population varies from that of the individual market population.
- A consistent model should be used to estimate health status for the BHP and individual market populations.
- Because risk scores include coefficients based on age, and the BHP payment formula also includes age rating cells, it is important to make adjustments in the PHF calculation in order to avoid double counting.
- To the extent that risk scores estimate relative plan liability net of member cost sharing—for instance, as the HHS-Hierarchical Condition Categories (HCC) model does—it is important to make an appropriate adjustment in the PHF calculation to avoid including differences in plan richness in the factor.
- For risk adjusters based on diagnosis codes, members with only a partial year of enrollment may have understated risk scores that are due to missing data. If a state expects or finds that BHP enrollees are more or less likely to have partial enrollment years than the individual market population, an adjustment to the PHF may be warranted.

Given these funding implications, several states are continuing to evaluate the fiscal impact of establish-



ing and maintaining a BHP, as well as the potential for a BHP to meet the health care needs of low- to moderate-income individuals in their states. Any states desiring to implement a BHP are required to submit a BHP blueprint to HHS outlining how the program will be organized to meet the requirements set forth in the final rule and how the program will be funded. Upon receiving approval from the Secretary of HHS, the state can begin to enroll members into the program and will be eligible to receive federal funding payments. ■

#### ENDNOTES

- <sup>1</sup> Minnesota Department of Human Services. Basic Health Program-Blueprint. Retrieved from [http://mn.gov/dhs/images/MN\\_BHP\\_Blueprint\\_DD.pdf](http://mn.gov/dhs/images/MN_BHP_Blueprint_DD.pdf).
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# The Voluntary Health Insurance Market—Old Market, New Growth

By David M. Dillon and Joshua A. Hammerquist



David M. Dillon, FSA, MAAA, M.S., is a vice president and principal at Lewis & Ellis in Dallas, Texas. He can be reached at [ddillon@lewisellis.com](mailto:ddillon@lewisellis.com).



Joshua A. Hammerquist, ASA, MAAA is an assistant vice president at Lewis & Ellis in Dallas, Texas. He can be reached at [jhammerquist@lewisellis.com](mailto:jhammerquist@lewisellis.com).

Over the last several years, both participants and consumers in the health insurance industry have faced many challenges. As a result, the health insurance market has changed in many significant ways.

## A Change to the System

### Insurers

Provisions in the Patient Protection and Affordable Care Act (ACA) created a great deal of uncertainty for insurance companies. One such provision is the Medical Loss Ratio (MLR) requirements of 80 percent in the individual and small group markets and 85 percent in the large group market for major medical policies.

Many small to mid-sized health insurers are concerned about meeting these requirements due to high levels of administrative costs, marketing expenses and fees. High levels of retention can make it difficult for insurers to price at profit levels that are supportable to the long-term health of the insurer.

The ACA regulatory environment in tandem with profit pressures has resulted in an influx of insurers entering other lines of business that are not materially impacted by the regulatory restrictions of the ACA.

### Consumers

For decades, the vast majority of consumers in the United States have been receiving health insurance coverage from their employers, with few choices when it came to selecting coverage. Many consumers just took what they were given without a lot of thought, and the system worked well enough for many individuals and companies. Meanwhile, consumers who preferred to buy their own coverage were few and far between, and millions of Americans simply went without coverage due to affordability concerns.

Then, as health care expenditures and insurance premiums increase, employers typically shift more costs to workers in the form of copays and

increased deductibles. These actions help reduce the financial impact of medical inflation on their health care budgets. This often results in employer health plans with burdensome cost-sharing for consumers.

The ACA took steps to reduce those concerns and, as a side effect, seems to have made consumers more conscious about their health care costs and their type of health coverage. This has led many health insurance companies and employers offering coverage to rethink the ways they create and provide coverage to consumers.

This increased consciousness has prompted critical thinking about the kind of coverage people buy, and what they're actually paying for. This is especially true among those who chose to forgo coverage when having to decide between purchasing coverage or paying the fee for the ACA's individual mandate. Therefore, many consumers have to think about health insurance costs for what could be the first time in their adult lives.

### Employers

The ACA created a large amount of uncertainty with regard to providing benefits to consumers. Since 2010, employers have been attempting to determine which parts of the law apply to them and how to manage benefits accordingly. While dealing with all of these complexities, employers have several key issues that they must address:

- **The employer mandate**

Employers are contemplating whether it will be more cost-effective to pay the penalties for not offering health coverage. Some consumers may be able to find affordable and adequate coverage on the public exchanges; however, not all consumers (e.g., those who don't qualify for subsidies) will be able to find the right kind of coverage at an affordable price.

- **The Cadillac tax**

In order to avoid this excise tax, employers are taking steps to adjust their high-premium health plans.

- **Overall employee satisfaction**

A reduction or elimination of benefits could be seen as a reduction in compensation and could hurt morale and recruitment.

## Stabilizing the Future

With the cost of health care weighing so heavily on consumers, a major disruptive trend in 2015 and beyond could be their increasing purchasing power and access to information that can be used to drive health care decisions. The act of balancing low premiums and out-of-pocket costs while providing coverage that is both adequate to meet personal needs and governmental requirements has been the focus of many insurers and employers.

### For Consumers

After several years of shifting responsibility for copays, premiums and deductibles, it's no longer just the employer paying for coverage—it's the consumers' money, and they want a voice in deciding where and how to spend it, and what courses of treatment to follow. Providing a reasonable balance between high-quality health care—which gives consumers not only buying power but flexibility when it comes to choosing from a wide variety of doctors for their specific medical needs—and a low price point is key for insurers for many reasons. What consumers tend to want out of these plans are, again, relatively simple: low prices, but with lots of choices.

Supplemental health insurance plans give consumers more diversity in their benefits packages. Consumers with family histories of illness, for example, could opt to buy a critical illness plan to help offset expenses should they contract that illness. Beyond choice, though, supplemental plans have the ability to reduce overall costs and liability for consumers, which becomes critical as the ACA takes full effect.

Since the ACA has led to premium increases in some locations, consumers may be able to save on their health insurance expenditures by coupling a high-deductible traditional health insurance plan with a less costly supplemental policy.

As out-of-pocket medical costs grow for many Americans, the insurance industry is offering an alternative, while expanding its business by selling supplemental policies that fill the gaps for consumers. The supplemental plans getting the most attention currently include hospital indemnity, critical illness, disability and accident plans.

### For Employers

To help balance changes in medical benefits, many employers are offering benefits that can help protect employees' finances while also reducing costs. This type of financial protection must be health-care-reform-ready and must complement their current benefits program.

Offering voluntary group supplemental products is an option that many employers view as allowing them to balance their own costs while providing desired choices to their employees. Because these types of products are typically low-cost and payroll-deducted, they can provide employees with a smart and convenient way to manage out-of-pocket costs that may no longer be covered under traditional major medical plans.

Because supplemental plans are seen as cost-effective, employers of all sizes also are able to offer an expanded roster of voluntary benefits. Also, when an employer offers a possible solution to an employee's needs, a positive message is sent.

## Benefit Offerings Now Being Advanced

Supplemental benefits sold to employees on a voluntary basis are a relatively simple concept:

- Offer benefits to employees through their employer where the employee typically pays 100 percent of the premium.
- The premiums are paid through payroll deduction.
- Employees typically pay less in monthly premium versus purchasing the policy on their own.
- Employees who do not qualify for a product on their own may be able to obtain coverage through their employer.

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Insurance companies generally need to recognize that the developments in their industry going forward are going to be more consumer-driven than they have been at any point in the past.

- Policies are often portable, meaning the employees can take the policy with them if they leave the company or retire.

Even if consumers do not have the opportunity to purchase coverage through an employer, consumers who purchase coverage directly from an insurer can still receive many benefits from these types of policies—e.g., relatively low premiums, portability and limited medical underwriting.

Insurers are increasingly marketing these supplemental policies that pay a fixed indemnity amount (i.e., cash) after a hospital stay, a specific disease diagnosis, a disability, or an accident. The policies are typically promoted as helping cover the out-of-pocket expenses that can dramatically impact consumers.

#### Hospital Indemnity

A typical hospital indemnity plan covers copays, deductibles, prescriptions and other out-of-pocket expenses a policyholder accrues during a hospital stay. Not long ago these plans were thought to be doomed or severely restricted by the ACA. Sales of supplemental hospital policies plunged in 2012 as the industry prepared for rules requiring minimum coverage and requiring payments on a per-period

basis (e.g., on a daily or weekly basis). Instead of disappearing, however, the plans are rebounding due to guidance from the Department of Labor that it would allow benefits to be paid by medical service such as hospitalization or office visit. This reversed a previous rule that required payments on a per-period basis.

#### Critical Illness

A critical illness policy provides benefits related to an employee's expenses associated with cancer or other chronic diseases. This can help relieve the financial burden that is often associated with these diseases. It can be useful, especially when an employee must miss work due to the illness or treatments, at a time when consumers have bigger issues to worry about.

Critical illness policies can offer additional protection for consumers that have minimal coverage, or they can be used to supplement rich benefit packages. It combines elements of health and disability insurance in a simplistic design that is an attractive option for employers.

#### Accident

An accident plan can be designed to mirror the benefits of a hospital indemnity or major medical plan; however, no benefits are paid for any treatments generated by a sickness. This is often provided when employers want to offer some financial protection, but it is determined that comprehensive coverage is unaffordable.

#### Disability Insurance

Disability insurance continues to be a popular coverage for both employers and consumers. It is considered an excepted benefit, so it is not impacted by ACA regulations. The coverage can be designed to replace income for accidents only or it can cover both accidents and sicknesses. It can have short elimination periods of less than 30 days, or as long as six to 12 months for those employers looking for lower-cost options. Disability insurance is a flexible product that can fit the needs of a variety of employers.

## What Issues Remain?

The problem for both insurers and employers is that the “ideal” health insurance plans are typically unrealistic financially. For that reason, it is important for consumers to receive proper education throughout the shopping process about what they can expect to pay for any given type of coverage, and exactly what that monthly premium pays for. This might help to shape their expectations for coverage and cost going forward, and serve to make them better at shopping for and identifying the kinds of coverage they need given their unique circumstances, in terms of both financial and health needs.

Essentially, insurers that want to put their best foot forward and succeed in the emerging industry ecosystem will have to focus not only on continually developing products that fit consumers’ needs, but also determine what those needs are throughout the year. Positive and negative feedback can be used to shape policies that will prove to be more successful in meeting consumers’ evolving needs in the future.

Insurance companies generally need to recognize that the developments in their industry going forward are going to be more consumer-driven than they have been at any point in the past. This impact will likely continue to increase for several years to come, as a growing number of people who are currently uninsured come into the market and are looking for cost-effective solutions. ■

# Medicare Savings Account: Medicare's Private Alternative Low-Cost Plan Option

By Mark Peterson



Mark Peterson, FSA, MAAA, is a member of the Health Section and can be reached at [mark.h.peterson@gmail.com](mailto:mark.h.peterson@gmail.com).

## Introduction

As fiscal pressure continues to weigh heavily on the premiums of traditional Medicare Advantage (MA) plans, some insurers are looking to alternative products to attract the new wave of eligible beneficiaries. Given the combination of reduced federal funding, unit price inflation and an increased demand for services, some insurers have chosen to explore the feasibility of Medicare Medical Savings Account (MSA) plans in order to offer a low-cost option in areas where low premiums for traditional MA products are unsustainable.

In short, MSA plans are the Medicare equivalent of a consumer-directed, high-deductible health plan. The following article discusses some of the nuances of an MSA plan and offers an opinion regarding recent interest expressed by many insurers.

## Medicare Savings Accounts 101

As previously mentioned, an MSA plan is a high-deductible health plan offered by a private insurer. The standard services covered are consistent with traditional Medicare (e.g., inpatient hospital, outpatient hospital, professional, etc.). For the standard Medicare covered services, an MSA plan cannot charge a member premium. However, MSA plans may offer supplemental coverage for non-Medicare-covered benefits (e.g., dental, hearing, vision, etc.) for which they can charge a premium.

Similar to MA HMO/PPO options, only individuals who have both Medicare Part A and Part B are eligible to enroll in an MSA plan. However, Medicare individuals who are also eligible for Medicaid (i.e., dual eligible), suffer from end-stage renal disease, or currently receive hospice care are not permitted to enroll in an MSA plan.

The enrollment period is consistent with other private Medicare products. Therefore, individuals can either join when they become eligible for Medicare or during the Annual Coordinated Election Period (AEP), which occurs between Oct. 15 and Dec. 7 of each year.

Upon enrollment, a special bank account is opened on behalf of the member. The MSA plan then deposits funds into the member's account in January. The members are not permitted to deposit funds into their own accounts. The amount of the deposit is determined through a designated process similar to the MAPD bid process. The deposit is calculated by taking the difference between the Centers for Medicare & Medicaid Services (CMS) benchmark adjusted for the contract's Star rating and the MSA plan's bid (inclusive of non-benefit cost and margin). No rebate percentage is applied to the traditional "savings" between the benchmark and bid; which now represents the deposit. The MSA plan essentially gets the whole benchmark, but must fund the deposit from this difference, which could be as much as a few thousand dollars per member per year.

As needed throughout the year, the member then spends the funds to pay for approved medical care. After the end of the year, any remaining funds in the member's account are retained in the account for subsequent years. Even if the member leaves the MSA product or insurer, the balance of the MSA is portable and can be used for future medical expense.

Once the individual's expenses have exceeded the designated deductible, the MSA plan covers the full cost of additional treatment with no additional cost sharing.

MSA plans do not provide outpatient prescription drug coverage. Therefore, individuals are eligible to enroll in a stand-alone Medicare prescription drug plan (PDP). As a Qualified Medical Expense, individuals can use MSA funds to pay for Medicare Part D prescription drugs; however, such expenses do not contribute toward the MSA deductible.

## Medicare Advantage Market Tightening

Given the variety of external forces influencing the Medicare marketplace, contract year 2015 is another year of potential changes in available offerings for members. With the loss of the Medicare Star rat-

ing bonus payments for plans with fewer than four stars, decreases in the county-specific benchmarks, establishment of maximum benchmarks for counties meeting certain criteria and general core utilization and unit price trend increases, many members may be forced to shop alternative plans in order to balance premium and benefit expenses.

For example, for an insurer that had unfavorable revenue pressure and historically offered a product with no premium, the organization had limited options to maintain the product at the current premium. The plan may have been forced to:

- Reduce benefits;
- Reduce non-benefit expenses;
- Reduce profit; or
- Pair multiple plans (if possible).

In addition, CMS has a number of other standardized tests that also may have restricted the plan's flexibility in developing a solution (e.g., the Total Beneficiary Cost test). Therefore, by definition, MSA plans are a potential alternative to offer a zero-premium product.

## Baby Boomers

There is little doubt that the influx of the baby boomers into Medicare will change the landscape of the marketplace. For the baby boomers that are new to the Medicare market, the concept of a consumer-directed, high-deductible product may neither be daunting nor unfamiliar, given the recent trends in the commercial markets. Baby boomers may actually welcome the opportunity to have more autonomy over their own care spectrum and choice in providers.

While the volume of MSA business has been limited in relation to the overall MA marketplace, the recent growth has definitely been noticed by a number of insurers. Very few products can boast of roughly doubling in size each year over the previous five years. With 53.7 million Medicare eligible and 16.5 million members enrolled in MA as of October 2014, the opportunity for enrollment growth is substantial for years to come.

Table 1 illustrates the total enrollment, as defined as the May cohort, over the past five years for all MSA plans.

**Table 1:**  
Enrollment in Medicare Savings Account Plans

Year	2010	2011	2012	2013	2014
Members	562	1,543	2,858	5,809	11,278

The historical membership trend could continue into 2015 and beyond as premiums for traditional Medicare products increase steadily.

## Keys to an MSA Plan's Success

There are four critical steps to a successful MSA product:

1. The MSA plan must remain attractive to an "age-in," better risk population. As the MSA plan matures, aging members will both accumulate account balances and incur benefits above the deductible. When the account balances accrue beyond the deductible, the members essentially have a 100 percent benefit, where induced utilization could emerge. The aging population will ultimately increase plan cost, which may lead to an unattractive plan offering (i.e., higher deductible).
2. The MSA plan needs to focus on cost containment at the higher spend intervals. For example, assume an MSA plan has a deductible of \$4,000. One hospital admission for a member is likely to incur approximately \$10,000 of allowable charges. Thus, there is \$6,000 of plan cost just with that one hospital admission. Therefore, active primary care intervention models and care management efforts to reduce the likelihood of hospital readmissions are critical to control plan cost.
3. An MSA plan within an insurer must have its own unique "H" contract number; and thus is tied to a specific Star rating. Due to the mem-

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There is little doubt that the influx of the baby boomers into Medicare will change the landscape of the marketplace.

ber's ability to receive services from any provider, the insurer does not have significant ability to influence physician practice patterns. Without strong physician support, the quality metrics (which drive the Star rating) are difficult to achieve. Without a high Star rating, the insurer's ability to offer a competitive product is increasingly difficult due to lower available revenue.

4. As providers are not tied to a given MSA plan (i.e., no incentives or support), the likelihood to optimally capture diagnoses of a given patient is decreased. The MSA plan's ability to properly reflect the ultimate risk of the population is challenged, which translates to a misalignment of risk and revenue for the MSA plan.

## Conclusion

With the ever-changing nature of the U.S. health care market, private insurers are constantly looking for the next product that addresses the needs of their members. This concept is especially true with Medicare as the demographics undergo a fundamental shift to a younger generation of baby boomers.

Given all of the recent challenges that private insurers face with their respective Medicare products, an MSA plan may be an appropriate alternative that combines the cost-containment mechanisms of a high-deductible health plan and the affordability of a zero-premium option. However, this product may not be for all insurers, given its operational challenges. ■

## On The Research Front

### SOA POSTS UPDATED MODEL ON LONG-TERM HEALTHCARE COST TRENDS

The SOA released an updated resource model on long-term healthcare cost trends. The SOA Pension Section and Health Section Research teams originally commissioned this model developed by Thomas E. Getzen. The model can be used as a resource for the estimation of reportable liabilities for retiree healthcare benefits under FAS 106 and GASB 45 accounting statements.

<https://www.soa.org/research/research-projects/health/research-hlthcare-trends.aspx>



# A Comparison Between the ACA Exchange and Medicare Risk Adjustment Programs

By Kurt Wrobel

With the increasing movement to individual health insurance products with no medical underwriting, the use of a risk adjustment mechanism to adjust premium based on the underlying risk of a population has become increasingly important. While pricing for a large employer group can rely on credible historical information and a stable population, the rating approaches for individual products with no medical underwriting require a pricing structure that develops an average rate for the entire risk pool with a risk adjustment methodology that accounts for the relative risk of individuals attracted to each health plan. In making this adjustment to the average payment, the risk adjustment mechanism incents health plans for providing efficient care rather than selecting a healthy population.

Although the methodology has differed among the programs, Medicare and state-level Medicaid programs have implemented risk adjustment mechanisms that have been largely successful in adjusting revenue to account for populations that differ from the average. While the extent of the adjustment and the specific technical details have been debated, most people would agree that the underlying structure of providing risk adjustment payments has been successful in adjusting revenue for health plans based on their unique population. These risk adjustment programs have also proven that a well-designed risk adjustment program can be effective in the absence of medical underwriting.

Using the other government programs as a basis, the Affordable Care Act (ACA) exchanges have also adopted a risk adjustment program for both the transitional period (2014 to 2016) and the long term (2017 and after). During the transitional period, in addition to the risk adjustment program, health plans will be offered additional financial protections through the reinsurance and risk corridor programs.<sup>1</sup> Because these additional financial risk mitigation programs will be eliminated after the initial transitional period, the risk adjustment program will become an increasingly important mechanism to ensure appropriate payment for 2017 and after.



In this article, I will compare the risk adjustment programs among the Medicare and ACA exchange programs and highlight the key differences that could lead to challenges once the risk adjustment program becomes the sole financial protection mechanism in the exchange. As I will discuss, the mechanics of the ACA exchanges will make the actual revenue associated with the risk adjustment program difficult to estimate and subject to significant change from one year to the next. These factors have the potential to impact the extent of insurance company participation once the reinsurance and risk corridor financial protections are removed in 2017.

## Medicare Risk Adjustment

As the program has evolved over several years, the Medicare risk adjustment program has developed features that have allowed health plans to have visibility into the expected revenue associated with the risk adjustment program. The specific features include:

**Prospective Risk Score Methodology.** The Medicare program uses the Hierarchical Condition Categories (HCC) risk adjustment methodology with historical diagnosis information as the basis to



Kurt J. Wrobel, FSA, MAAA, is chief actuary at Geisinger Health Plan in Danville, Pennsylvania. He can be reached at [kjwrobel@thehealthplan.com](mailto:kjwrobel@thehealthplan.com).

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adjust premium revenue for the next calendar year. Although the mechanics of the development are somewhat complicated, the broad intent is to ensure that the risk score for an individual is properly calibrated against a fee-for-service population using historical data to adjust prospective rates. Because the risk scores are based on historical data and a published methodology, the health plans can have a reasonably accurate picture of their revenue for the upcoming year. In addition, as highlighted in the upcoming discussion on the ACA exchanges, this methodology does not require a comparison with other health plan risk scores in order to determine a revenue impact.

**Risk Score Adjustments to Revenue.** Health plans in the Medicare program receive an immediate risk score for each enrollee at the beginning of the plan year. This initial risk score is then updated with two additional reviews that allow updated data and additional run-out from the historical experience period. The following schedule highlights the risk analysis for the calendar year 2014:

Risk Score Basis	Applicable Payment Period	Historical Experience Basis for the Risk Score Development
Initial Risk Score	1/1/2014 to 6/30/2014	7/1/12 to 6/30/2014
Mid-Year Adjustment—Initial Risk Score Adjusted and the Risk Score Adjusted for the Remainder of the Calendar Year	1/1/2014 to 6/30/2014 (retrospectively adjusted) 7/1/2014 to 12/31/2014 (adjusted to account for new information)	1/1/2013 to 12/31/2013— with paid claims through 3/21/2014
Final Adjustment	1/1/2014 to 12/31/2014	1/1/2013 to 12/31/2013— with paid claims through 1/31/2015

**Consistency of Risk Scores.** The risk scores are also likely to be relatively consistent from one year to the next because a health plan’s Medicare population is not likely to undergo substantial change over this timeframe—relative to other populations, seniors are much less likely to move from one plan to another. In addition to ensuring a bid consistent with the underlying risk and revenue of the population, this consistency also helps the health plan ensure adequate medical management support and allow for accurate budget estimates.

The net effect of these features is a risk adjustment transfer payment that is known in advance of developing the Medicare bid and a revenue stream that can be predicted with some certainty after the open enrollment period. Most importantly, this program creates a feedback loop that ensures a health plan can make changes in operations—including contracting or medical management activities—that could influence both the quality of care and financial results.

## The ACA Exchanges

While the ACA exchanges were developed to accomplish a similar goal as the Medicare program—develop an overall payment structure that is appropriate to the risk accepted by the health plan—the mechanism is much different. While the Medicare program allows health plans to have visibility into their premium, in the exchange program, health plans are required to rely on risk scores that will not be known until after the calendar year and the actual revenue impact will not be developed until a final reconciliation is completed relative to the other health plans. In this final reconciliation, the risk scores are compared among the plans, and payments are either made or received among the health plans depending on the relative risk attracted to each health plan. The specific features are highlighted below:

**Concurrent Risk Scores.** Although the model uses a similar HCC methodology as Medicare, the model is based on the diagnosis information within

the policy year rather than from the prior period. While this approach provides a theoretically more accurate approach to adjusting premium, this mechanism does not allow health plans to have information on their own risk scores until their experience matures throughout the plan year.

**Risk Adjustment Timing.** While the Medicare model provides an immediate impact on revenue, the true impact of the ACA exchange revenue payments is not known until the risk level is compared with other health plans in the middle of the following calendar year (June 30, 2015 for the final invoice with the final settlements made later). In the meantime, unlike in the Medicare program, the ultimate revenue during the current calendar year will be unknown. This potential uncertainty in payments will also be magnified by the potential changes in the exchange risk pool and the potential for consumer switching among health plans.

- *Exchange risk pool changes.* Because the risk scores are based on a score relative to other health plans, even if a health plan was able to estimate its own risk score, it couldn't be translated into a revenue figure until it had been compared with the other plans. In the 2014 and 2015 filing, this was certainly the case as health plans had no reliable information to compare with other health plans. This limitation may improve for the 2016 filings as the actual results from the risk pool are developed and published for 2014 (this will likely vary by state). This uncertainty, however, will be mitigated by the impact of the other risk protections (the reinsurance and risk corridor) that will limit any downside associated with a misestimate of the risk adjustment payments.

The most impactful challenge will occur in 2017 once the other risk protections are removed. In order to estimate the risk adjustment impact by comparing an individual health plan's risk scores to the broader exchange pool, health plans will be required to estimate the financial impact of a risk pool that could differ substantially from the 2014

and potentially the 2015 risk pool experience (presumably, this would be the only information available in the middle of 2016 for the 2017 filing). The ultimate 2017 risk pool could be impacted by a far different participation rate caused by a higher tax associated with the individual mandate, the migration of individuals currently on the transitional plans to the exchange, and the potential for the disenrollment of the young and healthy as rates are increased to account for the elimination of two of the risk protection programs.

- *Consumer switching among plans.* In addition to the potential risk pool change, an individual health plan could experience substantial population changes from one year to the next as its net premium changes in relation to the second-lowest silver plans (see sidebar describing the effect). This population change among health plans could make the financial tracking of this population very difficult because the revenue and underlying risk of the population would be unknown during most of the year. Unlike in Medicare where the populations are fairly stable and the revenue associated with the risk score known, this switching will make the operations and pricing more difficult without the financial results to initiate change.

## Conclusion

Taken in total, the ACA exchanges provide a much different risk adjustment framework than Medicare. While the Medicare risk adjustment process can be technical, it does allow health plans to have a reasonable understanding of its total revenue—an important factor in guiding strategies to improve important aspects of a health plan's operations including provider contracting, medical management, pricing and revenue management. The ACA exchange, on the other hand, does not allow for this immediate feedback on ultimate premium levels. Instead, the risk adjustment settlement process requires health plans to wait until the middle of the next year for a final premium accounting. This delay in understanding the risk adjusted premium is particularly challenging because the changes in the broad risk pool and

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consumer switching among plans make the overall pricing estimates and a true understanding of the health risk subject to substantial error. Ultimately, these features have the potential to impact insurance company participation. Along with the typical risk associated with running a health plan—estimating trend, for example—health plans will not have visibility to key variables that will define the success in the ACA program—their true aggregate premium level associated with a population. ■

The following example from a Milliman briefing paper “The Proposed Federal Exchange Auto-Enrollment Process: Implications for Consumers and Insurers” by Susan Pantely and Paul Houchens highlights the potential for consumer switching. In the chart below, the authors highlighted the premium and subsidy level offered to an exchange participant at 150 percent of the federal poverty limit. Consistent with ACA policy, the subsidy level in this example is based on the second-lowest silver plan premium—in this case, the maximum expenditure individual is 4 percent of a household’s income or \$57. The resulting subsidy amount (\$268) can then be applied to all the plans to produce a higher or lower net premium.

ACA Component	Plan 1	Plan 2	Plan 3
Full Premium	\$300	\$325	\$350
Subsidy Amount (based on the second-lowest silver plan)	\$268	\$268	\$268
Monthly Net Premium	\$32	\$57	\$82
% of Income	2.2%	4.0%	5.7%

As highlighted above, a significant percentage differential in actual net premium levels—\$32 compared to \$57 and \$82—could prompt an individual with an income level slightly above the federal poverty limit to choose the lowest-cost plan.

This switching could be magnified over time as some health plans change premium rates to increase market share. The authors highlighted the following example where Plan 3 purposely reduced its premium and Plan 2 maintained its initial rate in an effort to increase market share.

ACA Component	Plan 1	Plan 2	Plan 3
Full Premium	\$320	\$325	\$350
Percentage Change from 2014	7%	0%	-16%
Subsidy Amount (based on the second-lowest silver plan)	\$263	\$263	\$263
2015 Net Premium	\$57	\$62	\$32
2014 Monthly Net Premium	\$32	\$57	\$82
% Net Premium Change from 2014	78%	9.0%	-61%

In this case, a member in Plan 1 where the health plan proposed a modest 7 percent increase would still see a large net premium change caused by two factors—an increase in the premium by 7 percent and a reduction in the subsidy caused by a reduction in the second-lowest silver plan (\$325 to \$320). Because the member would see the entire burden of the rate increase and the reduced subsidy, the incentive to switch to a lower-cost plan would increase significantly.

**END NOTES**

<sup>1</sup> The reinsurance program provides financial protection to the health plan if a member has costs between above a defined threshold. The risk corridor program provides additional revenue or imposes costs on a health plan that has claims that are either substantially higher or lower than the amount built into the premium.

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# Some *Health-y* Reflections on the 2014 Annual Meeting

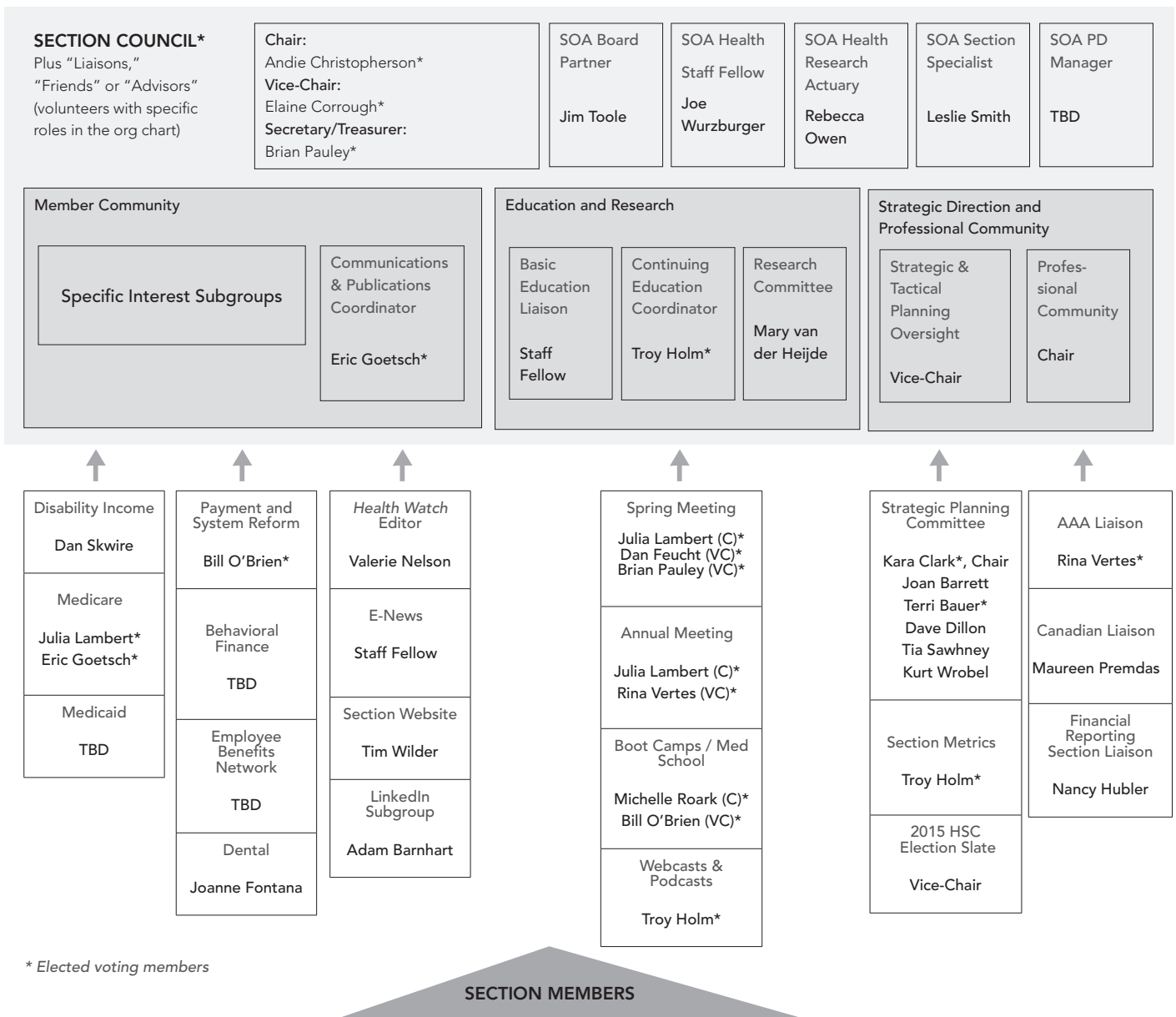
Compiled by Rebecca Owen

The 2014 Society of Actuaries (SOA) Annual Meeting attracted a large number of health actuaries this year, due in part because the timing of work for health products makes a June meeting problematic for many of us. The health sessions were well-attended and covered a lot of information, but one of the good things about the annual meeting is the opportunity to attend sessions that may not directly connect to our work as health actuaries, yet give us a chance to consider the landscape of risk from a different perspective.

At the Health Section Breakfast, the new chairperson, Andie Christopherson, laid out the structure and direction for the Health Section for the next year. Here is the schematic of the leadership team she presented:

## Health Section Council Organizational Chart 2014-2015

October 2014



Also at the breakfast we had a chance to meet the new health fellow, Joe Wurzbarger. Joe came to the SOA from CNO Financial Group in Chicago where he had worked the past nine years as the senior managing actuary and was responsible for their senior health products including Medicare Supplement, Medicare Advantage, Medicare Part D Prescription Drug Plans, critical illness, specified disease, disability income, long-term care, and other health products. He worked as a retirement actuary before changing to the health area of practice. He also was a high school math teacher before becoming an actuary. Joe graduated from Valparaiso University in Indiana.

Here are some candid, and anonymous, comments from health actuaries with differing interests and backgrounds about sessions they attended at the annual meeting:

*“It was refreshing to have practical outlines for how statistical analyses are performed with the latest tools, how the face of pharmacy is changing along with considerations for actuaries, along with other intellectually stimulating topics. While legislation often impacts much of what actuaries do, it becomes a challenge to relish meeting after meeting related to these issues. Thanks for a more varied program this year!”*

*“I have attended many annual meetings over the years and I’m always amazed at how some sessions end up speaking to me in ways that are completely unexpected. Sitting in on the three-part mini-seminar on the impact of long-term care (LTC) needs on retirement, I was struck not by only the devastation that a catastrophic illness can do to a previously sunny retirement, but the enormity of it as a societal problem. In particular, Sandra Timmermann’s presentation about caregiving really hit home for me as I am personally dealing with these issues for my father who is battling dementia. Besides her talk, the mini-seminar featured discussions ranging from potential improvements of current long-term care insurance (LTCI) products to personal stories of how retirees address declining health and resources with dignity. This is what our profession does best—applying our technical expertise to formulate solutions for the betterment of society. I encourage*

*you to read the papers from this mini-seminar which will appear in a monograph on the SOA website later this fall.”*

*“The session, ‘Communicating to Your Company’s Sales & Marketing Team and Agents,’ offered good insights on how to communicate and work with teams that have very different strengths and goals. It was interesting to hear from actuaries spending more time working in the distribution and marketing channels. The presenters included actual examples of both successful and unsuccessful strategies that were particularly helpful.”*

*“I struggle to believe this is true continuing education. I find very little new information is shared. The women’s leadership forum was the highlight of the meeting—got so much out of that, not just a rehash of what I already knew or have heard.”*

*“I was fascinated by some of the information shared in the session ‘The Facts and Fiction of Pharmacy.’ Hearing from non-actuaries like Kathryn Bronstein and Stephen George allowed for a different perspective to be presented than in some of the other sessions I attended. One particular takeaway for me was with respect to the concept of ‘warehousing’ and how this practice by doctors may impact assumptions used by pricing actuaries; this suggests the need for additional consideration by actuaries, particularly as more specialty drugs enter the marketplace.”*

*“Maybe this shows my age a bit—the most interesting health sessions to me are usually given by non-actuaries. At the Orlando annual meeting, the session on Rx, ‘The Facts and Fiction of Pharmacy,’ was informative. Specialty drug cost has been increasing at a pace that is not sustainable long term, if left uncontrolled. With the new drugs in the pipeline, some experts are estimating that those drugs will account for 50 percent of the total Rx spend by 2020. The presenters, an RN and a PharmD, provided some very helpful facts that will help actuaries with forecasting Rx cost and trend, as well as potentially designing tactics to help mitigate the cost increase. Other interesting tidbits include the fact that certain high-cost drugs are only treating the symptoms rather than the root cause of the condition; and that the same drug may cost much less in*



Rebecca Owen, FSA, MAAA, is the Health Research Actuary at the Society of Actuaries in Schaumburg, Ill. She can be reached at [rowen@soa.org](mailto:rowen@soa.org).

*other countries. Some fundamental questions need to be answered before we are able to find a solution for the Rx cost trend—Do we need to have a price control mechanism (public or private)? What is the appropriate price to pay for those high-cost drugs and who should bear the cost? Are the high prices limiting access to the drug treatment?”*

*“One of the two that jumped out to me that I really want to go back and look at was Ryan Ferland from the ‘Deconstructing Medical Trends’ session. It provoked some thinking in terms of moving beyond just the actuarial approaches to trend analysis. I also liked the ‘If We Knew Then What We Know Now: ACA Enrollment’ session as I think it did a good job encapsulating the challenges that health actuaries are facing in the current environment. Oh, and I really liked the fish at the Presidential Luncheon.”*

*“I also thought that the management comments made by the NASA speaker (General Session) were really good. Not that they were new, because they weren’t new. But I thought he did a good job of connecting his team’s success to leadership ideas.”*

*“It was great fun running into old friends. The sessions were crisp and covered a broad range of health and other topics not found at the spring meeting. One of the many fun parts of the event was trying to figure out imaginative uses for the self-adhesive pockets SunGard left at the reception tables.”*

*“The session on the Climate Index was interesting because of what was said on weather variability manifesting itself in unusual events and what the long-term modeling reveals—there was a little quiz on the difference between weather and climate. It was also interesting that the presentation did not use the specific term ‘global warming,’ while at the same time the panelists presented enough data, discussion and illustrations to allow the audience to draw their own conclusions.”*

*“The people who did the professionalism session were able to turn a dry topic into an engaging presentation. The exchange between the panelists*

*in the ACA enrollment session should serve as a reminder that a rapidly changing environment poses challenges in keeping data timely and accurate.”*

*“One of the sessions I attended at the annual meeting was Session 85 PD ‘ACA Implementation and Strategies in 2017 and Beyond’. The content, quality of the speakers and presentations were excellent!! It was the kind of session one expects at an SOA meeting and was one of the highlights of the Annual Meeting for me.”*

Thanks to all of you who submitted quotes on the annual meeting. Good presentations of timely, topical material and engaged audiences are what make for great chemistry. See you next year in Austin! ■



# Abstracts of Health Articles from the *North American Actuarial Journal*

By Ian Duncan

**M**any health actuaries are unaware of health-related articles published in the *North American Actuarial Journal* (NAAJ). Most issues contain at least one article of interest to health actuaries. Below (and in future issues of *Health Watch*) we will publish the abstracts of relevant articles. Electronic copies of the NAAJ can be found at <https://www.soa.org/news-and-publications/publications/journals/naaj/naaj-detail.aspx>.

In the future, if articles of health interest appear in overseas journals (for example *British Actuarial Journal*; *Annals of Actuarial Science*, *ASTIN Bulletin* or the *Scandinavian Actuarial Journal*), we will publish abstracts of these articles as well.

In the forthcoming issue of the NAAJ we publish a paper on health care reform and efficiency. The author uses an economic analysis technique, Data Envelopment Analysis (DEA). DEA is a nonparametric method in operations research and economics for the estimation of production frontiers. It is used to empirically measure productive efficiency of decision-making units (or DMUs). The method is used to benchmark the performance of manufacturing and service operations. DEA is a method that assumes that if a firm can produce a certain level of output utilizing specific input levels, another firm of equal scale should be capable of doing the same. Whether this technical, economist's definition of efficiency can aid health actuaries struggling with this problem in the course of their daily work, readers will have to decide. At the least it may spark further debate between health economists and health actuaries on a topic of significant public policy importance.

## Health Care Reform, Efficiency of Health Insurers, and Optimal Health Insurance Markets

NAAJ—Volume 18, Issue 4

Charles C. Yang

### Abstract

This research examines the efficiency of U.S.

health insurers. It shows that more insurers are less efficient than in the previous sample year; however, the results suggest that the federal health care reform has no significant effect on the overall efficiency of all insurers as a whole, which is very low but does not change much over time. This research explores how to improve the efficiency of the health insurance market by proposing state, regional and national efficiency-based, goal-oriented market models and an efficiency duplicating system, and it discusses important implications to the health care compacts, the health insurance exchanges or marketplaces, and the national multistate programs. It also analyzes further moves for efficiency enhancement with regard to payment methods and the health care delivery system. One interesting finding is that the Medicaid program is very efficient because it provides support to the offering of Medicaid coverage and further expansion, which enhances the health welfare of society with fewer resource inputs from the perspective of efficiency. This research should provide important insights for state and federal governments, policymakers, regulators, the health insurance industry and consumers.

In addition to the article, there is an editorial on the subject: "Measuring Healthcare Efficiency" by Ian Duncan and Ted Frech of the University of California at Santa Barbara. ■



Ian Duncan, FSA, FIA, FCIA, MAAA, is adjunct professor of actuarial statistics at the University of California Santa Barbara. He can be reached at [duncan@pstat.ucsb.edu](mailto:duncan@pstat.ucsb.edu).

# Ebola—Not the Next Pandemic?

By Ross Campbell



Ross Campbell is chief underwriter with Gen Re Life & Health in London, England. Ross may be reached at [ross\\_campbell@genre.com](mailto:ross_campbell@genre.com).

**EVD is not airborne and so there is no credible risk of a swine flu-like epidemic.**

**T**he increasing alarm surrounding the most recent outbreak of the Ebola virus disease (EVD) is a chilling reminder of the potential for the spread of viruses to rapidly reach epidemic proportions. The virus causes hemorrhagic fever marked by severe bleeding, organ failure and, often, death. The first recorded outbreak was in 1976 and since then EVD has recurred sporadically in Central and Western Africa claiming over 3,000 lives.

The scale and spread of the current emergencies in Guinea, Sierra Leone and Liberia are of concern as the disease has claimed more lives than any previous outbreak. Cases have also now been confirmed in Nigeria and Senegal. The Centres for Disease Control and Prevention confirmed over 17,000 cases by December 2014. The World Health Organization believes its own numbers may be under reported five-fold. The current mortality rate is approaching 50 percent with an unprecedented number of health workers counted amongst the dead.

EVD is typically transmitted within small communities and health-care settings, but it has now appeared in cities as well as rural and border areas. It is also striking that this outbreak occurred almost simultaneously in three previously unaffected countries. Fears modern logistics could facilitate spread to other countries within Africa, or even internationally, have been confirmed.

WHO has therefore escalated its response in a bid to halt ongoing transmissions within six to nine months but conceded in August its Ebola Response Roadmap that accomplishing this goal will be tough as affected countries struggle to control the outbreak “against a backdrop of severely compromised health systems, significant deficits in capacity and rampant fear.”

Now, and for the first time, a person has developed symptoms whilst on U.S. soil, following a visit to Liberia. Although serious, an isolated case can be contained; such is the strength of U.S. health care. In contrast EVD cases will continue to rise in West Africa if there are “no additional interventions or changes in community behavior” according to Centers for Disease Control models. The lack of

sufficient isolation beds is the root cause for the sustained and rapid growth in new infections.

## Diagnosis and Treatment

Outbreaks of EVD occur primarily in remote areas following close contact with the wild animals that host the virus. It spreads easily between humans through direct contact with broken skin and damaged mucous membranes, during sex, infected blood and bodily fluids including sweat, or indirectly through contact with virus contaminated environments. People remain infectious as long as their blood and secretions contain the virus, typically up to seven weeks, and this risk persists even after death. Family members are often infected as they care for sick relatives or prepare the dead for burial.

A person infected with EVD complains of sudden-onset fever, intense weakness with muscle pain, headache and a sore throat. These rather non-specific symptoms suggest a mild illness and raise the possibility of many diseases, including hepatitis, typhoid fever and malaria—all of which must be ruled out before a diagnosis of EVD can be made. During this time symptoms worsen to include vomiting, diarrhea, rash, impaired kidney and liver function, and in some cases, both internal and external bleeding.

The incubation period—the time interval from infection to onset of symptoms—is two to 21 days, so some people seek help sooner than others. An EVD diagnosis is confirmed in a laboratory setting by isolating the virus in cell culture, antigen detection or enzyme-linked immunosorbent assay (ELISA). Other findings include low white blood cell and platelet counts and elevated liver enzymes.

People severely ill with EVD require intensive care in total isolation. Supportive treatment includes intravenous fluid to prevent dehydration, and maintenance of blood oxygen and blood pressure levels, as most sufferers die of low blood pressure and not bleeding. Transfusions may be needed to replace blood lost through hemorrhage and subsequent infections need to be treated. In a rural setting where the health infrastructure is weak or mistrusted, and where cultural beliefs strongly influence how people interpret symptoms and seek treatment, diagnosis and intervention are likely to be delayed.

No specific drug medication is available although new drug therapies are being evaluated. The WHO has even agreed that it is ethical, in these extreme circumstances, to treat people with experimental interventions. One is ZMapp, a serum composed of three humanized monoclonal antibodies not yet evaluated for safety in humans but already administered to a couple of patients. Another is TKM-Ebola, which has recently received FDA approval for emergency use.

## Identifying Those at Risk

Travel to Africa increases the risk of exposure to the virus. The Centers for Disease Control warns to avoid all nonessential travel to infected areas and advises those who must travel there to protect themselves by avoiding contact with the blood and body fluids of people who are sick with Ebola. The WHO has stopped short of recommending travel restrictions or border closures but admits this position is fluid.

The ease with which people travel worldwide implies infection could spread rapidly and without control, but there is no evidence of this yet. Modeling of disease and air travel patterns revealed the probability of spread beyond the African region is “small but not negligible.”<sup>1</sup> The International Air Transport Association advises that in the rare event a person infected with the virus is unknowingly transported the risk to other passengers is low. It seems highly unlikely that a person with the advanced signs of EVD—the stage when onward transmission is most likely—would be physically well enough to undertake air travel.

Health and humanitarian workers who disclose plans to travel to or from the region of concern pose an increased risk. No vaccine is currently available. Medical personnel may be infected if they fail to take appropriate precautions to avoid infection by wearing protective clothing, masks and gloves when tending to the patients. In this new outbreak, several health workers have been infected whilst treating patients with suspected or confirmed EVD and not strictly practicing infection control techniques.

Anyone who requires treatment in poorly equipped medical centers in the affected area may be exposed to re-used needles and syringes or contaminated

equipment that has been improperly sterilized. People involved in animal research or observation have an increased chance of contact. Anyone who has been butchering or eating infected animals or who comes into contact with their waste, increases their chance of infection.

EVD makes people very sick very quickly, so it seems unlikely any person who has it would slip through the underwriting net. An applicant with unexplained or unusual illness and who has visited an affected area within the preceding month should be viewed with increased suspicion.

People who survive EVD make a slow recovery, taking many months to regain their weight and strength as the virus remains in the body for weeks. Typically they suffer hair loss, sensory changes, eye and testicular inflammation, hepatitis and general malaise. Survivors often develop chronic inflammatory conditions affecting the eyes (uveitis) and joints.

## Epidemic or Pandemic?

It seems unlikely that EVD poses a threat beyond its immediate geographical location or the indigenous population and visitors working closely with them. Isolation centers, arrivals screening and modern treatment facilities would use quarantine to limit international spread and ensure that the rapid incubation of EVD experienced during the current outbreak is not replicated in other countries. A focus on basic public health and infection-control measures, not tiny supplies of costly experimental drugs, seems more likely to lead to control.

The WHO was praised for its work in containing the 2003 Severe Acute Respiratory Syndrome (SARS) epidemic in Asia albeit in wealthy nations with strong governments. Cuts in funding and altered priorities since then may have left the organization ill-equipped to respond to this new threat in nations less capable of mounting a defense. It is therefore entirely possible that the desperate situation in West Africa will continue to deteriorate.

The EVD outbreak has impacted the recovering yet still fragile economies of Liberia, Sierra Leone and Guinea. The costs associated with these outbreaks and disruption to commerce are unprecedented and likely to affect GDP—a reminder of the potential for

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epidemic disease to reach beyond the tragedy of individual loss.

In June 2009, as the number of people with H1N1 (swine) influenza reached 42,000 in 80 countries, the WHO elevated its pandemic alert to “level 6”—the highest emergency state. In the end that strain of flu proved far less deadly than was feared. Should life insurers and underwriters now be at “level 6” in response to Ebola? Despite the unprecedented dimension of this fast-moving outbreak, the evidence about its transmission and spread suggests not. Deadly though it undoubtedly is, EVD is not airborne and so there is no credible risk of a swine flu-like epidemic.

Follow the updates here;

<http://www.who.int/csr/don/archive/disease/ebola/en/>

<http://wwwnc.cdc.gov/travel/notices/warning/ebola-liberia>

<http://wwwnc.cdc.gov/travel/notices/warning/ebola-guinea>

<http://wwwnc.cdc.gov/travel/notices/warning/ebola-sierra-leone> ■

#### ENDNOTES

- <sup>1</sup> Gomes MFC et al., “Assessing the International Spreading Risk Associated with the 2014 West African Ebola Outbreak,” PLOS Currents Outbreaks doi:10.1371/currents.outbreaks.sd818f63d40e-24aef769dda7df9e0da5

# EXAMINING THE EVIDENCE

In this *Health Watch* issue we premiere a new regular column: “**Health Watch Examining the Evidence.**” The authors are Tia Goss Sawhney and Bruce Pyenson. The authors share an interest in health research and evaluation and routinely troll actuarial, public health and clinical literature. Their intent is to help us critically examine the evidence supporting common assumptions within the actuarial or the larger health care community and to think deeper about health care issues. They will provide copious endnotes for our continued learning and, sometimes, their personal thought-invoking opinions. They, and *Health Watch*, welcome your feedback.

## Enhanced Primary Care Leads to Reduced Hospital Use and Saves Costs—Or Does It?

By Tia Goss Sawhney and Bruce Pyenson

Government policymakers and many others consider the increased use of primary care to be essential to achieving health care’s triple aim<sup>1</sup> of improving the patient experience of care, improving the health of populations, and reducing the per capita cost of care. Many recent health policy initiatives are consistent with this strategy, such as the Centers for Medicare & Medicaid Services (CMS) “Comprehensive Primary Care Initiative,”<sup>2</sup> which involves Medicare, commercial payers and Medicaid, and the provisions of the Affordable Care Act (ACA) that increase primary care reimbursement for Medicaid.<sup>3</sup> Barbara Starfield of Johns Hopkins, one of the giants in the study of the value of primary care, shows that evidence for the value of primary care has been accumulating for decades.<sup>4</sup>

Today’s primary care differs from the solo-practitioner, community doctor of decades past. Patient-centered medical homes (PCMHs)<sup>5</sup> and health homes<sup>6</sup> are recent, widely promoted concepts, built on earlier primary care case management (PCCM)<sup>7</sup> programs, all of which build on the HMO primary care “gatekeeper” of the 1980s. PCMHs are said to be the “cornerstone” for emerging Medicare, Medicaid and commercial accountable care organizations (ACOs).<sup>8,9</sup> PCMHs, health homes and

ACOs made their health system debuts in 2006 to 2010 and are still rapidly evolving. Commercial payers, who until the implementation of ACA were often not required to pay anything for asymptomatic health screening exams, now must pay the full cost of such procedures,<sup>10</sup> and primary care “quality” metrics set expectations for the delivery of health screening exams and testing.<sup>11</sup> Compared to the past, today’s primary care has less focus on acute illness and more on prevention, screening, and care for chronic conditions.

Consumers and payers are asking a lot of today’s primary care providers. Primary care providers should be located in close proximity to the patient’s home, culturally sensitive and ideally multilingual, available for emergent needs around the clock, and able to provide an appointment in days, if not hours. They should provide a comprehensive range of public health and medical services in a personalized, “patient-centered” fashion: health risk assessment, counseling and screening for patients without any apparent medical conditions; initial evaluation and treatment of emergent conditions; routine management of many chronic conditions; the development and maintenance of comprehensive care plans; and the coordination of the multispecialty care and care transitions of the most complex patients.<sup>12</sup> They



Tia Goss Sawhney, DrPH, FSA, MAAA, is the director of data, analytics and research for the Illinois Department of Healthcare and Family Services. She can be reached at [tiasawhney@yahoo.com](mailto:tiasawhney@yahoo.com).



Bruce Pyenson, FSA, MAAA, is a principal and consulting actuary with the New York City office of Milliman, Inc. He can be reached at [bruce.pyenson@milliman.com](mailto:bruce.pyenson@milliman.com).

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should employ a team approach, with nurses, care coordinators, social workers and community health workers on-site or readily available who integrate behavioral and physical health. Within the Medicaid and Medicare realms, the teams may also be tasked with addressing the social and economic determinants of health, including social isolation and food and housing instability. We will refer to these expectations as “enhanced primary care.”

Many assume that the extra cost of enhanced primary care will be paid back through decreased use of hospital, specialist and other care. The assumption seems to be the “reverse balloon theory.” The balloon theory says that constraining medical spending in one area will result in more spending elsewhere—pushing the balloon in one spot creates a bulge in another. The belief seems to be that more services in primary care will automatically reduce other services. While we are enthusiasts for Starfield’s work, enhanced primary care is a new concept and there are a plethora of PCMH models; the evidence that has emerged so far has been mixed and the positive evidence is often weak.

Recent evidence is summarized by the Patient-Centered Primary Care Collaborative in “The Patient-Centered Medical Home’s Impact on Cost & Quality: An Annual Update of the Evidence, 2012-2013,” published in January 2014.<sup>13</sup> The collaborative is committed to promoting the success of PCMHs, yet the evidence it presents is still mixed. Other recent research includes a 2014 *Journal of the American Medical Association (JAMA)* article reviewing the multipayer experience of National Committee for Quality Assurance (NCQA) medical homes in southeast Pennsylvania. Comparing the results to non-medical home practices the JAMA study found limited improvements in quality and no association with reductions in utilization of hospital, emergency department or ambulatory care services or total costs over three years.<sup>14</sup> Another 2014 article proclaims “Total Cost of Care Lower among Medicare Fee-For-Service Beneficiaries Receiving Care from Patient-Centered Medical Homes.”<sup>15</sup> The abstract is also positive. However, beyond the abstract, the results are quite mixed, including no explanation as to how costs are lower

while hospital admissions including case mix are not different.

Even mixed results may not be as good as they seem. Positive research results should always be considered with some skepticism. System change sponsors, providers and researchers are more likely to submit positive results for publication than negative results. Of course, human psychology clouds interpretation: negative results may be due to bad luck, lack of data, or too short of an evaluation period, but positive results are the result of good methods and programs. Publication bias is real.<sup>16</sup>

And within complex systems, it can be very challenging to disentangle the impact of a single change from the impact of all the other changes and ongoing forces. For example, recently a highly favorable analysis of the impact of Illinois Medicaid’s Primary Care Case Management (PCCM) program appeared in the *Annals of Family Medicine*.<sup>17</sup> While the PCCM program has improved access, enhanced primary care relationships, and gotten more money to underpaid primary care providers, Illinois Medicaid staff (including an author of this article) attributed the favorable outcomes to other causes. They feel that much of the low trend in Illinois Medicaid costs was likely due to the state’s fixed (non-trending) fee schedule rather than PCCM.

Enhanced primary care might not yield the hoped-for reduction in hospital care and savings for some of the following reasons:

#### **Generalizability**

- What worked in a small demonstration project for a targeted population or motivated care providers is not necessarily generalizable to large populations and large systems of providers.<sup>18</sup>

#### **More Is More**

- Care begets care. Every patient encounter presents opportunities for more tests, more drugs, more referrals, and more care in general—whether or not that care is necessary.<sup>19</sup> For example, the patient who can quickly and easily get access to a doctor for a common

cold will too often get an antibiotic prescription. More access to an inefficient system will produce a bigger inefficient system.

- Patients who already have their health under control and have little room for improvement may be big consumers of the enhanced primary care services, in part because they are more willing to engage.
- The evidence for some screening exams and testing is weak and may not consider cost as a factor.<sup>20</sup>

### It's Hard, Very Hard

- We are still avoiding “no.” Telling a patient or a provider that care is unnecessary and may even be harmful is difficult.
- Health status and risk are linked to patient behavior, and behavior is extremely hard to change, probably more so among the socially and educationally disadvantaged.

### Incentives May Not Be Aligned or Sufficient

- Provider incentives are complex and paid long after the delivery of care. Social learning theory teaches us the importance of clear expectations and immediate reward (or consequences) for eliciting behavior change. Yet today's health care incentives are often based on indices of dozens of elaborate metrics and paid long after care is delivered.<sup>21</sup>
- Attempts to be fair can backfire. For example, risk-adjusted provider contracting attempts to recognize that some physicians have more complex patients than others. But it can mean that providers receive more money by affixing more diagnoses to a patient—a simple incentive for providers to understand and operationalize.
- Quality metrics are focused on the masses rather than the relatively few patients who are most at risk of high costs. Meeting these quality metrics can increase costs. For example, many of the Medicare ACO's “Patient/Care Giver Experience” and “Preventive Health” quality of care measures could well increase costs.<sup>22</sup>

### Savings Perspective

- Cost savings may not be realized for many years and accrue to a different payer, but the required care may increase short-term costs.
- Quality of life or length of life may improve rather than cost.

### Wrong Venue

- Population health is more dependent on public health than clinical care. The root cause of much disease lies not in the presence or absence of primary care, but in our societies and education.<sup>23</sup> The medical neighborhood concept is promising because it connects with public health and referral issues.<sup>24</sup>

These obstacles may explain why the emerging evidence around enhanced primary care suggests a tenuous causal connection among the triple aim's goals—improving the patient experience of care, improving the health of populations, and reducing the per capita cost of care.<sup>25</sup>

Finally, it is worth noting the health care systems are complex and challenging worldwide. The following quote is from an article in the *Bulletin of the World Health Organization*<sup>26</sup> discussing health system reform in developing countries, particularly Africa:

*Performance-based financing (PBF) is an intervention that is gaining significant momentum as a solution to poor performance.... Results indicate that PBF can ... have positive effects on health service utilization. The increasing use of PBF and its perceived benefits is now leading proponents to promote it as a strategy to address structural problems and to introduce more generalized health system reform.... We believe that the current optimism for such a strategy is unsubstantiated and underestimates important constraints to its implementation. It also risks falling into the trap of seeking a “magic bullet” solution to improve complex social systems.*

There are many reasons to support primary care. However, we suggest that enhanced primary care, like PBF, isn't a magic bullet and won't dramatically improve a complex and often dysfunctional U.S. health system. ■

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## ENDNOTES

- <sup>1</sup> Institute for Health Improvement: <http://www.ihl.org/Engage/Initiatives/TripleAim>.
- <sup>2</sup> <http://innovation.cms.gov/initiatives/comprehensive-primary-care-initiative/>.
- <sup>3</sup> <http://www.medicaid.gov/affordablecareact/provisions/provider-payments.html>.
- <sup>4</sup> Starfield, B., L. Shi and J. Macinko. Contribution of Primary Care to Health Systems and Health. *Milbank Quarterly*, 83.3 2005: [http://www.commonwealthfund.org/usr\\_doc/Starfield\\_Milbank.pdf](http://www.commonwealthfund.org/usr_doc/Starfield_Milbank.pdf).
- <sup>5</sup> According to the National Committee for Quality Assurance (NCQA): "The patient-centered medical home is a way of organizing primary care that emphasizes care coordination and communication to transform primary care into 'what patients want it to be.' Medical homes can lead to higher quality and lower costs, and can improve patients' and providers' experience of care." The NCQA started recognizing (accrediting) PCMHs in 2008: <http://www.ncqa.org/Programs/Recognition/Practices/PatientCenteredMedicalHomePCMH.aspx>.
- <sup>6</sup> "The Affordable Care Act of 2010 created an optional Medicaid State Plan benefit for states to establish Health Homes to coordinate care for people with Medicaid who have chronic conditions. CMS expects states health home providers to operate under a 'whole-person' philosophy. Health Homes providers will integrate and coordinate all primary, acute, behavioral health, and long-term services and supports to treat the whole person." <http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Long-Term-Services-and-Supports/Integrating-Care/Health-Homes/Health-Homes.html>.
- <sup>7</sup> "Primary care case management (PCCM) is a system of managed care used by state Medicaid agencies in which a primary care provider is responsible for approving and monitoring the care of enrolled Medicaid beneficiaries, typically for a small monthly case management fee in addition to fee-for-service reimbursement for treatment. States began enrolling beneficiaries in their PCCM programs by the mid-1980s to increase access and reduce inappropriate emergency room and other high cost care. State use of PCCM grew steadily during the 1990s" (and beyond): <http://aspe.hhs.gov/health/reports/pccm/index.htm>.
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- <sup>9</sup> ACOs first emerged in the 2006 to 2009 period and were formalized within the ACA of 2010 as a pilot method for generating Medicare cost savings. ACO and ACO-like organizations now partner with Medicare, Medicaid and commercial insurance plans: [https://www.nahu.org/legislative/containing\\_costs/ACOWhitePaper.pdf](https://www.nahu.org/legislative/containing_costs/ACOWhitePaper.pdf); <http://pcmh.ahrq.gov/page/foundational-articles>; <http://www.pcpcc.org/content/history-0>.
- <sup>10</sup> An ACA qualified health plan requirement: <https://www.healthcare.gov/what-are-my-preventive-care-benefits/adults>.
- <sup>11</sup> Examples include the eight Medicare ACO preventative and screening measures: <http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/sharesavingsprogram/Downloads/ACO-NarrativeMeasures-Specs.pdf> and the four Medicaid "adult core" screening measures: <http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/Medicaid-Adult-Core-Set-Manual.pdf>.
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- <sup>19</sup> See Kaestner, R., and A.T.L. Sasso. Does Seeing the Doctor More Often Keep You Out of the Hospital? *Journal of Health Economics* (2014), <http://dx.doi.org/10.1016/j.jhealeco.2014.08.003>, for a discussion and analysis of care begetting care.
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INTERNATIONAL SYMPOSIUM

## 2014 Living to 100 Symposium Monograph

Presentations from the 2014 Living to 100 Symposium are now in an online monograph at [livingto100.soa.org](http://livingto100.soa.org). The symposium brought together thought leaders to discuss the latest theories, research and implications on longevity and quality of life. Topics discussed included:

- The evolution of retirement;
- Work flexibility for a graying workforce;
- Business implications of living longer;
- Lifestyle and longevity; and
- Mortality trends and projection methods of older age.

The Living to 100 Symposium featured actuaries, demographers, physicians, academics, gerontologists, economists, financial planners, researchers and other professionals. This monograph will help to continue the conversation about how to address living longer, the impact to social support systems and the needs of advanced-age populations.



Visit [livingto100.soa.org](http://livingto100.soa.org) to learn more.



# Health Watch

475 N. Martingale Road, Suite 600  
Schaumburg, Illinois 60173  
p: 847.706.3500 f: 847.706.3599  
w: [www.soa.org](http://www.soa.org)