SOCIETY OF ACTUARIES

HEALTH SECTION

Health Watch

ISSUE 86 • JUNE 2018

Health Watch

Issue 86 • June 2018

Published three times a year by the Health Section of the Society of Actuaries.

475 N. Martingale Road, Suite 600
Schaumburg, Ill 60173-2226
Phone: 847.706.3500
Fax: 847.706.3599
www.soa.org

This newsletter is free to section members. Current issues are available on the SOA website (www.soa.org).

To join the section, SOA members and non-members can locate a membership form on the Health webpage at https://www.soa.org/sections/health/health-landing/.

Publication Schedule
Publication Month: October 2018
Articles Due: July 13, 2018

The digital edition of this newsletter can be found at http://healthwatch.soa.org/.

2018 SECTION LEADERSHIP

Letter From the Editor

By JoAnn Bogolin

My guiding thought when gathering articles for my first turn as editor of *Health Watch* was to convince some of the clever people in the health care community to write for our section newsletter, give them a deadline, then get out of the way. The results, I believe, are terrific, providing a diverse set of topics. The articles also seem like a direct response to Greg Fann's "what to write" guidance to our community in the February 2018 issue of *Health Watch*. In his final Letter From the Editor, Greg simply stated, "Write what actuaries don't know they should know."

Up first is Colby Shaeffer and Nicholas Gersh's examination of how proposed work requirements on beneficiaries will impact enrollment in Medicaid. Starting with an assumption of who these proposed requirements would include, Colby and Nicholas outline an approach to modeling this impact and provide suggested approaches to further the understanding of it.

Next, Ed Cymerys and Dawn Motovidlak both present fresh looks at members' experiences with seeking health care. Ed discusses concierge services/digital tools and their effect on medical costs. He asks whether making health care more convenient for members is the same as increasing the cost of care. Using a study that his company performed, Ed answers this question by addressing medical trend, member engagement and utilization changes.

Dawn tackles the availability of treatment for three impactful trends rooted in mental health care: the rise in chronic conditions, opioid addiction and mass shootings. At the core of the treatment of these issues is the provider network available to members. Dawn makes a strong case for actuaries and other risk assessment individuals not taking for granted that payers have adequate networks to address the needs of their members, despite having met all regulatory requirements for those networks.

John Adler provides guidance in evaluating the results of proposals from pharmacy benefits managers (PBMs). Taking the reader through the exact challenges of evaluating proposals from multiple PBMs, John addresses the entire process starting with the initial claims request (e.g., when to allow National Drug Code substitutions) through overall net pricing (understanding the timing of savings).

Dave Dillon presents a summary of a white paper that was released as part of the Commercial Health Care: What's Next? strategic initiative. "Coverage for One and for All? The Impact of the Individual Mandate and Guaranteed Issue in the Individual Health Care Market" was written by Jackie Lee and Armen Akopyan.

This issue's interview with a leader in our community is with Paul Stordahl, senior vice president, actuarial pricing for United Healthcare commercial markets. Having known Paul for a number of years, it rings true that among the skills crucial to his development as an actuary are listening and communicating; from my experience working with him, that means listening to and communicating with clients as well as his colleagues and junior staff.

Bethany McAleer provides a broad overview of the roles and responsibilities of public health, pointing out that while most of the U.S. health care system is devoted to addressing existing health issues, public health seeks to protect the health of the population. Understanding this, the reader is taken through the span of services in the public health sector, how these services impact the population and the funding for this sector.

The last article in this issue is from Kelly Backes, Julia Friedman, Dustin Grzeskowiak, Elizabeth Phillips and Patricia Zenner. This team addresses Medicare Advantage star ratings, particularly as they pertain to new Medicare Advantage contracts. Given that star ratings determine the level of federal revenue a Medicare Advantage Organization (MAO) receives and the star rating new contracts are assigned, the authors address opportunities for improvement for new MAOs beyond the current rating levels.

Being overwhelmed by the generosity of the volunteer authors who made this issue of *Health Watch* so great and having just finished Oscar season, I offer the following quote from Winston Churchill as a thank-you to the contributors: "We make a living by what we get, but we make a life by what we give." Thank you! ■

JoAnn Bogolin, ASA, FCA, MAAA, is a member of the Health Section Council and managing director at Bolton Health Actuarial in Atlanta. She can be reached at *jbogolin@boltonhealth.com*.

Chairperson's Corner

By Sarah Osborne

Have you ever been part of an event and just known that you had witnessed something great? When Shaun White made his final drop in the half-pipe at the Olympics this winter, I sat on the edge of my seat, holding my breath, watching him execute the run that would earn him yet another gold medal. Before the score was even up on the board, I knew it was something special, and his reaction when the official result posted was priceless. Years of hard work, training and perseverance all came to fruition in that moment.

In the actuarial profession, we don't have the same opportunity for moments of greatness as Olympic athletes do when they conquer their competition from across the world, climbing the podium to receive a gold medal and standing proudly through their nation's anthem. At least, that's what I used to think before Initiative 18|11.

Early in 2017, ideas began circulating around the Society of Actuaries (SOA) regarding one of the most pressing issues in the United States—the cost of health care. Through many discussions and meetings, Initiative 18|11 was born. In fact, when the planning first began, it was Initiative 17|10, representing the fact that 17 percent of the U.S. gross domestic product is spent on health care versus 10 percent in other developed nations. Unfortunately, by the time we began to publish materials for the first event, those figures had reached 18 percent and 11 percent, respectively.

The goal of Initiative 18|11 is to bring together a broad group of health care system stakeholders, identify the major cost drivers of U.S. health care, and create an impactful plan of action. In Joe Wurzburger's Up Front column this month, you can read more about the process and some of the key contributors to making this happen. The Health Section Council is a cosponsor of Initiative 18|11, and I had the pleasure of attending the event in March.

There will be more to follow in the coming months, and we will continue to keep you updated on the initiative's progress. But what I can tell you now is the event in March was fantastic. Leaders from diverse areas of the health care system had discussions, brainstormed, and were able to challenge each other freely and respectfully. I left with a feeling of excitement, knowing I had just been a part of something great. No, it's not quite the same as winning an Olympic gold medal, but what I imagine it might feel like to begin Olympic training. The SOA and the Health Section Council have a lofty, yet not impossible, goal. Great things are accomplished when you bring together the best of the best. If we can look back someday and say that we were able to make a positive impact on health care costs for millions of people, we will have won the gold. ■

Sarah Osborne, FSA, FCA, MAAA, is senior vice president, chief actuary and analytics officer at Government Employees Health Association. She can be reached at *Sarah.Osborne@GEHA.com*.

2018 HEALTH MEETING

JUNE 25–27• AUSTIN, TX

Navigating Today's Health Trends

Save the date for the **2018 SOA HEALTH MEETING,** where you'll gain current information on the hottest issues facing health care.

SOA.org/HealthMeeting

SOCIETY OF ACTUARIES®

Up Front With the SOA Staff Fellow

By Joe Wurzburger

People often ask me what I like best about my job. After all, I have a fairly nontraditional role for an actuary. And while there are a lot of aspects of my job that I enjoy, the best part is the people. My colleagues on staff at the Society of Actuaries (SOA) are amazing, and I enjoy working with them. But what I really mean is that I love our member volunteers and the other people I get to meet through them.

In early March, I had the pleasure of going to Washington, D.C., for Initiative 18|11. It was an event that I had been helping to plan for roughly a year, and it was a massive success, at least in part, because we were able to identify action steps for our group to take to lower the cost of health care in the United States. But I don't plan to share those substantial details with you in this article. There will be plenty of time for that as the workflows resulting from the event play out. What I'd like to share with you today is the other reason that I call this event a massive success: the people.

For much of the past year, I have worked closely with two SOA volunteers whom many of you probably already know—Joan Barrett and Brian Pauley. Joan was on the SOA Board of Directors at the time this project turned from a vague idea to an actual initiative. She was the original champion of the push to make sure health costs were a high priority for the Board.

Joan, Dave Dillon and I gave a presentation about health care to the Board at its March 2017 meeting. This presentation was well-received, and Board members advised us to start a project focusing on the rising costs of health care in the United States. They noted that the SOA was in an advantageous position as a nonpartisan, nonprofit organization with a focus on data-based solutions. We could solidify our role as thought leaders by bringing together a diverse group of professionals in the health care industry to address the problem of rising costs in a way that could be truly impactful.

To carry out the Board's directive, a leader was needed. Enter Brian Pauley. Brian was nearing the end of his term as Health Section Council chair, and he was looking for a way to continue to make a significant impact as an SOA volunteer. He became the chair of Initiative 18|11, and he has done an amazing job.

Joan, Brian and I began meeting regularly, and we decided early on that we could really take this to the next level if we were able to partner with the right organization. We wanted to position actuaries as thought leaders, but we also wanted to make sure our attendees understood that the issue was much broader than where our expertise as actuaries lie. We reached out to Larry Levitt at the Kaiser Family Foundation (KFF) and were pleasantly surprised by his immediate interest in partnering with us. Our project's mission lined up well with KFF's interests, and suddenly our three-person planning group expanded to include three amazing people from the foundation: Larry, Gary Claxton and Cynthia Cox.

I can't say enough about what Larry, Gary and Cynthia brought to the experience. They were integrally involved in every step along the way. As it became clear that we were building to an in-person event, and we recognized that inviting the "right" people to the event would be key, they leveraged their networks in ways that complemented our SOA network perfectly. We collaborated to assemble a veritable who's who list of diverse thought leaders in the health care industry, and we were floored by the passionate support we received from these folks as we reached out to them.

Larry also recommended Ian Morrison to facilitate the event. If you don't know Ian, you're missing out. He led off the event

We collaborated to assemble a veritable who's who list of diverse thought leaders in the health care industry ...

by saying, "The SOA and Kaiser were looking for a Scottish-Canadian health futurist to lead this event, and luckily there aren't many of us." The line is indicative of the combination of humor and subject-matter expertise that he brought to the event. We in fact would have considered someone without Ian's pleasant Scottish brogue, but I can't imagine the event being nearly as successful with anyone else leading the way.

Not only were the people involved in the planning process amazing, but they recruited the most phenomenal group of people to attend. There were many notable names in that room, actuaries and nonactuaries alike. Attendees commented about just how diverse the group was in terms of the organizations represented and the varying perspectives brought to the discussion. I truly relished the opportunity to get to know many of them personally. I would no doubt leave out names if I tried to list them, but suffice it to say that the interaction with these folks was very gratifying on both a professional and personal level.

I'm excited to see the next steps of Initiative 18|11 play out, and we will be sure to keep you informed of its progress. In the meantime, I'd like to express my sincere thanks to Joan, Brian, Larry, Gary, Cynthia, Ian and all of the other participants. I can't wait to take the next steps of this initiative with you. ■

Joe Wurzburger, FSA, MAAA, is Health staff fellow at the Society of Actuaries. He can be reached at *jwurzburger@soa.org*.

Medicaid Work Requirements: Enrollment Impact of Different Policies

By Colby Schaeffer and Nicholas R. Gersch

Work requirements are not new to Medicaid. A number of voluntary programs have been set up by states, such as Arkansas and Indiana, that have special waivers for their Medicaid populations in light of the Affordable Care Act (ACA). This is because there is a significant able-bodied population that has entered Medicaid since January 1, 2014, when Medicaid expansion via ACA became effective for states opting to expand. Numerous attempts to repeal and replace the ACA failed in 2017. The year ended with a few reform initiatives highlighted by the Tax Cuts and Jobs Act of 2017, which repealed the individual mandate starting in 2019.

The January 2018 issue of the Society of Actuaries (SOA) Social Insurance & Public Finance Section's *In the Public Interest* featured an article on Medicaid work requirements.[1] At the time, the new administration of the federal government was completing its first year at the helm. Influential remarks made by the Centers for Medicare and Medicaid Services (CMS) had started to resonate throughout the industry and had both Medicaid directors and lawmakers interested in a number of topics, with a key focus on work requirements. Given that almost a dozen states submitted waiver proposals with work requirements, CMS then issued new guidance on how this should best apply to Medicaid beneficiaries.[2]

Most of the states already pushing the provisions for Medicaid work requirements are ACA expansion states. However, several of those states—including Kansas, Mississippi, North Carolina, Utah and Wisconsin—have not expanded Medicaid under the ACA. This begs the question: how many beneficiaries are likely to be affected by work requirements within each state?

WHO COULD BE IMPACTED?

As suggested, supporters say the focus of work requirements are on "able-bodied" adults who gained coverage through Medicaid ACA expansion. However, many of the states suggesting the consideration of work requirements are not expansion states. With expansion and nonexpansion states alike pushing for these requirements, it's interesting to see how different populations are likely to be affected.

Many populations within Medicaid would be excluded from work requirements, with exclusions likely varying by state waiver program. One of the few commonalities between state waivers is that children and the elderly (over 65) are to be excluded from Medicaid work requirements. A common denominator then is to have most disabled individuals, pregnant women, and caregivers excluded from these provisions. However, some state proposals vary with their exemption requirements for disabled individuals. Those who are considered "medically frail" are often considered exempt, but this term has a loose definition. Work requirements often do not apply to those who are in the aged, blind, or disabled categories of aid. However, on the basis of whether or not a beneficiary receives Supplemental Security Income (SSI), not all disabled beneficiaries would be exempt. According to The Kaiser Family Foundation, 57 percent of disabled, nonelderly adults do not have SSI.[3] Determining the definition of disabled or "medically frail" is critical for determining work requirement exemptions, especially for nonexpansion states where there are fewer nonelderly adults in Medicaid.

Some states look at nondisabled adults as potential enrollees who would be subject to a work requirement. Wisconsin's proposal targets all childless adults. Mississippi and Kansas both have proposals that would even have requirements for caretakers of dependent nondisabled individuals over a certain age. These types of provisions could be applicable to many states and expand the number of beneficiaries that could be affected.

WHAT'S THE BUZZ?

While the ACA expansion population is often a primary target of work requirement proposals, there is some variation among approved waivers and state proposals. The big difference is what qualifies as "work" and what happens when a beneficiary does not meet the requirements. As part of Indiana's Healthy Indiana Plan (HIP) Gateway to Work, job search activities, education, training, community service, caregiving and volunteer work are acceptable participation activities that meet the 20 hour-per-week work requirement. However, proposals from New Hampshire and Utah do not consider volunteering or community service as acceptable work activities; Arizona's proposal does not accept job training; and proposals from Mississippi and Wisconsin do not count education toward work requirements.

Actual employment appears to be the only common component of work requirement activities across the states' varying proposals and approved waivers. Albeit a subtle difference, the waivers for Arkansas and Kentucky require 80 hours of work per month, whereas the other approved waiver in Indiana requires 20 hours per week. For those subject to work requirements, failure to verify participation generally results in loss of coverage for a predetermined period of time. Indiana requires suspension of coverage until the work requirement is satisfied for one full month. In the not-yet-approved state proposals, Arkansas locks the enrollee out of coverage until the beginning of the following year. Kansas limits Medicaid coverage for 36 months, regardless of some beneficiaries meeting the participation activities.

HOW DO WE APPROACH MODELING THE IMPACT?

The goal here is to take a uniform approach to modeling exposure levels to capture the variation of the impact of work requirements across all 50 states and the District of Columbia. Since the "disabled individual" definitions in proposals can be subjective and data aren't readily available for all states, this analysis looks exclusively at nondisabled adults as of federal fiscal year (FFY) 2016, using two different sources that summarize data from CMS.[4]

The next iteration is to exclude pregnant women[5] and adults with children six or younger. The threshold of age six is linked directly to the proposal that Kansas has put forward and would be considered an upper bound for the number of parent caretakers that are subject to work requirements. Finally, those who are already covered by Medicaid but working need to be excluded.[6]

The results suggest that 8.7 percent of Medicaid beneficiaries across the United States would be subject to work requirements. The split varies significantly between expansion states (10.9 percent) and nonexpansion states (3.5 percent), for a total of about 18.3 million enrollees. Figure 1 shows how the impact varies significantly by state.

> It is vitally important for all stakeholders … to have a better understanding of the number of beneficiaries who may be subject to this suddenly popular policy provision.

There are a few additional iterations to consider. Common exemptions in the proposals and approved waivers include students, former foster care children under the age of 26 and those in drug rehab programs. By far, the largest of those groups is students. Due to the subjectivity of what may qualify as "gainful education" and how exemptions may vary, this analysis is based on Medicaid survey data. The Kaiser Family Foundation surveyed 9.8 million nonworking, nondisabled Medicaid beneficiaries as to the reason they were not working and found that 15 percent said they were in school. Since this was a national figure, this assumption was applied broadly to all states. It may be considered a loose definition since it's based on survey data. Still, this should provide a lower bound range for those who may be impacted by work requirements.

With these additional iterations, the results suggest that 4.5 percent of Medicaid beneficiaries across the United States would be subject to work requirements. The split varies significantly between expansion states (5.7 percent) and nonexpansion states (1.7 percent), for a total of about 3.5 million enrollees. Figure 2 shows how the impact varies significantly by state with these final numbers.

WHERE DO WE GO FROM HERE?

Like any generalized model, these results have been developed at a high level. Experience will vary by state due to varying small details in work requirements and the impact of different state initiatives. More comprehensive data at the state level will be a better indicator of the population subject to work requirements. It is vitally important for all stakeholders (legislators, program support, advocates, health plans and so on) to have a better

Figure 1
Medicaid Member Exposure, Excluding Members in Former Foster Care, Drug Rehab and Students

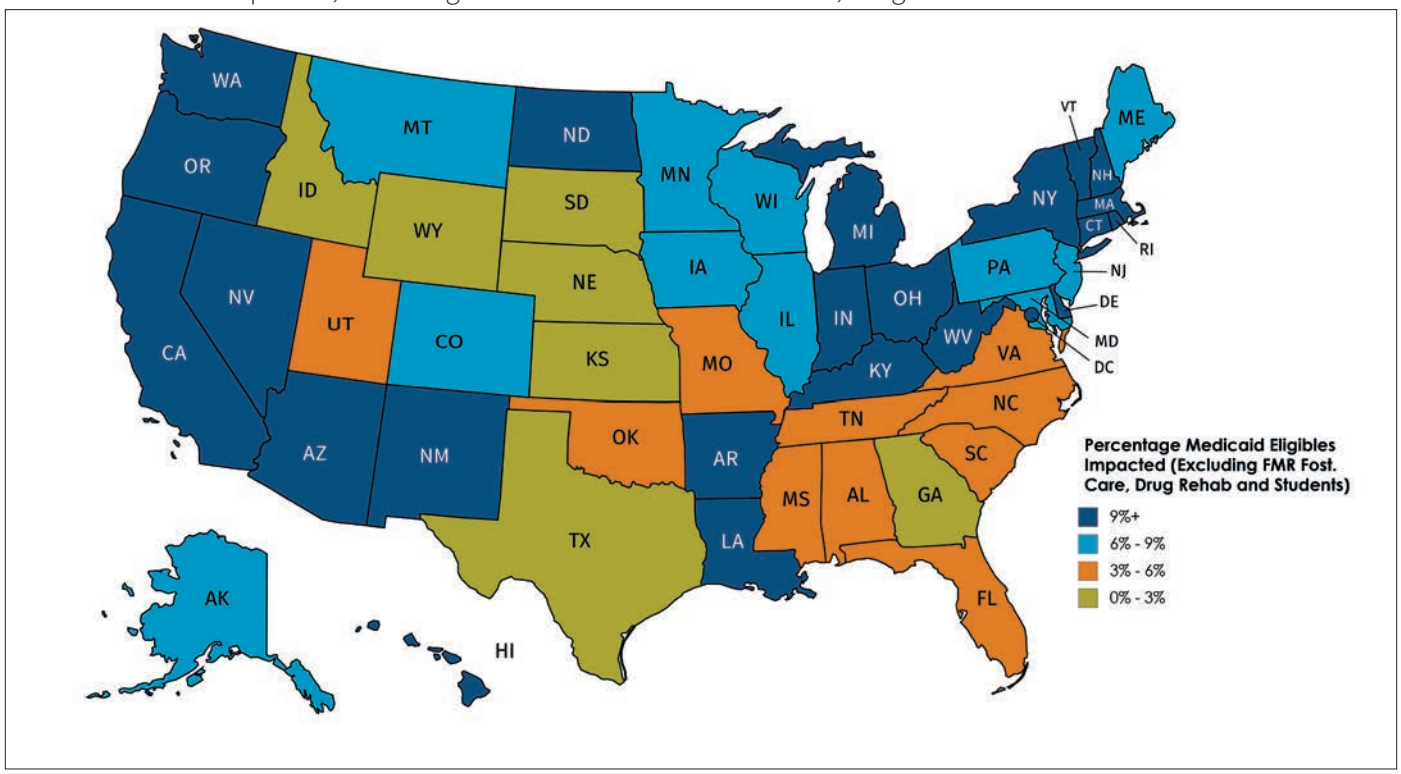
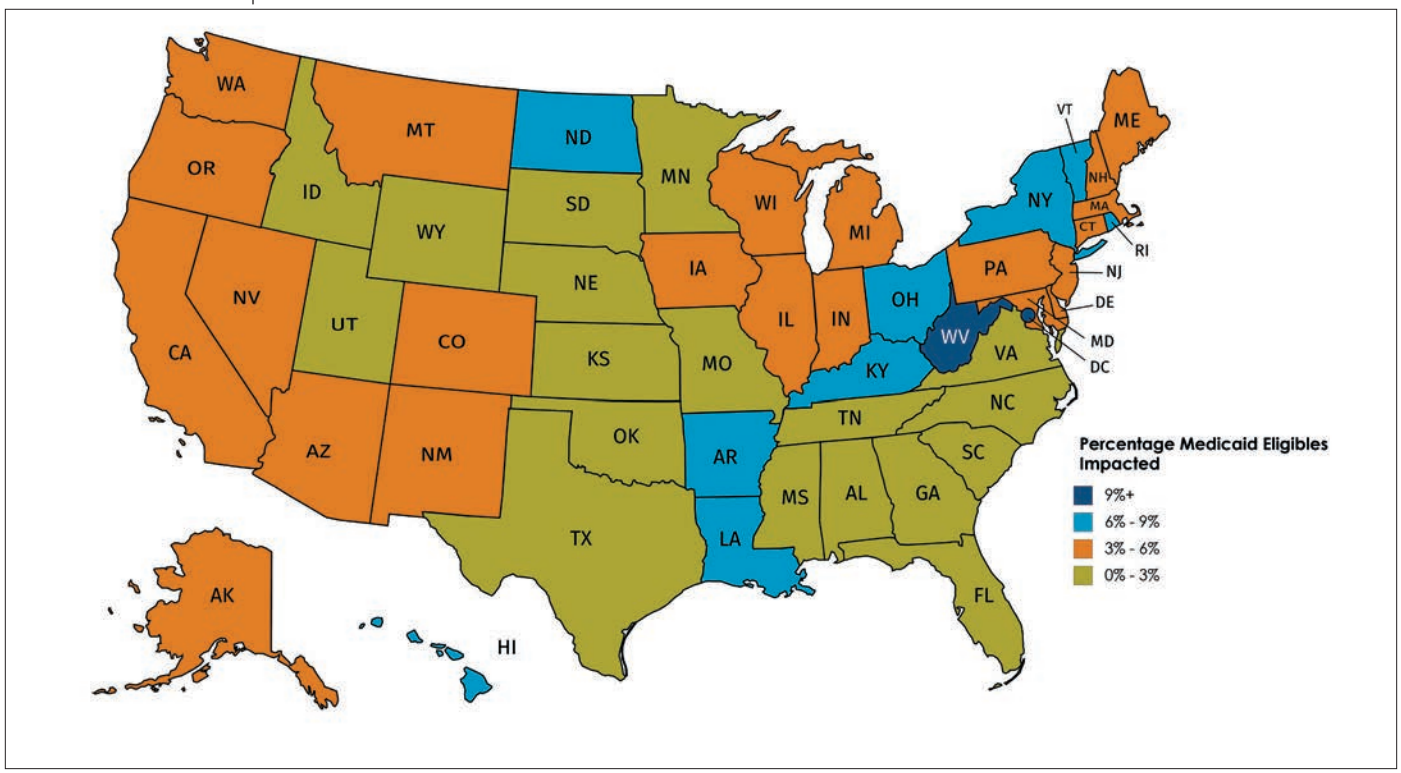


Figure 2
Medicaid Member Exposure



understanding of the number of beneficiaries who may be subject to this suddenly popular policy provision.

Beyond knowing the exposure risk in terms of Medicaid beneficiaries who would be impacted, the next step is to estimate the financial impact. States such as Indiana and Kentucky have already approved 1115 waivers with work requirements, and Indiana is starting to examine data from its voluntary program, which was launched in 2015 as part of HIP 2.0. This information, along with other examples, will show how much it may cost to administer work requirements and incentivize better outcomes through proper management of this initiative. The next step is to determine the breakeven cost point to see if work requirements are ultimately worth the implementation expenses and administrative burden. States with more members subject to work requirements, such as ACA expansion states, may see more financial benefit than others. ■

Colby Schaeffer, ASA, MAAA, is a vice president at Aon based in Atlanta. He can be reached at *colby.schaeffer@aon.com*.

Nicholas R. Gersch, ASA, MAAA, is an actuarial consultant at Aon based in Atlanta. He can be reached at *nicholas.gersch@aon.com*.

ENDNOTES

1 Clarkson, Jason, Amanda Schipp and Rob Damler. Medicare Work Requirements: Overview of Policy and Fiscal Considerations, *In the Public Interest*, January 2018, *https://www.soa.org/sections/social-ins-pub-fin/social-ins-pub-fin-newsletter* (accessed March 27, 2018).

2 U.S. Centers for Medicare and Medicaid Services. CMS Announces New Policy Guidance for States to Test Community Engagement for Able-bodied Adults, *CMS.gov*, January 11, 2018, *https://www.cms.gov/Newsroom/MediaReleaseDatabase/Press-releases/2018-Press-releases-items/2018-01-11.html* (accessed March 27, 2018).

3 Musumeci, MaryBeth, Julia Foutz and Rachel Garfield. How Might Medicaid Adults With Disabilities Be Affected by Work Requirements in Section 1115 Waiver Programs?, *Henry J. Kaiser Family Foundation*, January 26, 2018, *https://www.kff.org/medicaid/issue-brief/how-might-medicaid-adults-with-disabilities-be-affected-by-work-requirements-in-section-1115-waiver-programs* (accessed March 27, 2018).

4 U.S. Centers for Medicare and Medicaid Services. Medicaid Enrollment Data Collected Through MEBS, *Medicaid.gov*, n.d., *https://www.medicaid.gov/medicaid/program-information/medicaid-and-chip-enrollment-data/enrollment-mbes/index.html* (accessed March 27, 2018); U.S. Centers for Medicare and Medicaid Services. Unduplicated Number of Children Ever Enrolled [table], February 15, 2017, *http://www.medicaid.gov/chip/downloads/fy-2016-childrens-enrollment-report.pdf* (accessed March 27, 2018).

5 Smith, Vernon K., Kathleen Gifford, Eileen Ellis et al. Implementing Coverage and Payment Initiatives: Results From a 50-state Medicaid Budget Survey for State Fiscal Years 2016 and 2017, *Henry J. Kaiser Family Foundation*, October 13, 2016, *https://www.kff.org/medicaid/report/implementing-coverage-and-payment-initiatives-results-from-a-50-state-medicaid-budget-survey-for-state-fiscal-years-2016-and-2017* (accessed March 27, 2018).

6 The Kaiser Family Foundation State Health Facts. "Distribution of the Non-elderly With Medicaid by Family Work Status." Data Source: Kaiser Family Foundation estimates based on the Census Bureau's March Current Population Survey (CPS: Annual Social and Economic Supplements), 2014–2017, *https://www.kff.org/medicaid/state-indicator/distribution-by-employment-status-4/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D#notes* (accessed February, 2018).

Reducing Medical Cost Trend With Concierge Services and Enhanced Digital Tools

By Ed Cymerys

Best practices in medical trend analysis and projection break trend down into two components: unit cost and utilization. It is well-documented in pricing manuals that increasing member cost sharing will reduce utilization. Another working assumption is that the complexity of the health care system has a dampening effect on utilization. Actuaries often see lower initial utilization in groups newly added to a company's program, and as members learn how to use their benefits, utilization increases to each group's normal level. Some studies suggest that new programs are making care easier to access, resulting in higher utilization.

These principles may seem fundamental, but the way people access, navigate and engage with health care is changing every day. From concierge services to on-site clinics to enhanced digital tools, the health care system seems committed to making care as convenient as possible. In fact, in the last seven years alone, Rock Health's 2017 year-end funding report shows that $23 billion has been poured into digital health to test the role technology plays in this new health care economy.[1] The question is, will making care easier to access automatically result in higher utilization and higher costs? One recent study, *Controlling Employer Health Costs: A Collective Health Book of Business Trend Analysis*, suggests that technology, coupled with a concierge service approach, may enhance patient care while reducing costs by helping members navigate their options more intelligently.[2]

THE CONVENTIONAL TAKE ON CONVENIENT CARE

According to PwC's 2017 *Behind the Numbers* report, "Forces inflating medical cost trend stem from increases in access to care, particularly primary and behavioral health services. Convenient care settings, such as retail clinics, provide consumer satisfaction at a low unit cost. Yet their success has led to greater utilization and more spending."[3] Another study conducted by the Rand Corporation came to a similar conclusion, claiming that 58 percent of retail clinic visits for low-acuity conditions represented new utilization and that retail clinic use led to an increase in spending.[4]

These studies tell us that making care more convenient is inflating medical cost trend and aggravating the problem of waste in the health care system. According to a 2012 *JAMA* report published in the *Harvard Business Review*, 35 percent of health care spending in the United States can be attributed to waste.[5] Researchers have identified a number of categories in this waste, including but not limited to failures in care delivery and care coordination as well as overtreatment. We see specific examples of these failures in things such as the overutilization of emergency room (ER) visits. According to a 2013 study by Truven Health Analytics, 71 percent of ER visits made by patients with employer-sponsored insurance coverage are for causes that do not require immediate attention in the emergency room or are preventable with proper outpatient care.[6] Similarly a 2016 study in *JAMA Internal Medicine* by Frank S. Drescher and Brenda E. Sirovich reports that advanced imaging, such as the use of computed tomography, has increased dramatically over the last 10 years among patients with the least chance of benefitting from it.[7]

Various strategies have been tried to eliminate waste in the system, and they have had a modest impact at best. From mandatory second opinions and required precertifications to narrowing networks, plan design changes and voluntary programs to help members better understand their options—these new strategies are not moving the needle in a meaningful way. One thing they have done, however, is make the health care system more complex and frustrating than ever before.

An important observation at the heart of this problem is that members want to avoid unnecessary utilization too. They don't want unnecessary tests, unnecessary surgeries, unnecessary diagnostic procedures or unnecessary hospital stays. However, members lack the information and tools to avoid these situations.

Systems of well-coordinated care such as the Geisinger Health Plan in Pennsylvania have a long record of guiding members through the system, and Geisinger has often been held up as a model for eliminating waste. Kurt Wrobel, FSA, MAAA, chief financial officer and chief actuary of the Geisinger Health Plan points out that its clinics provide same-day access, which allows patients to see a physician quickly without going through the typical appointment process. This convenience is an effective triage for patients within the system, where their records are easily available. Same-day access avoids duplicate tests and unnecessary ER visits.

But is Geisinger's approach the only way to make care convenient for members while eliminating waste?

INTELLIGENT NAVIGATION: HOW A HIGH-TECH, HIGH-TOUCH APPROACH OPTIMIZED CARE AND LOWERED COSTS

New research also suggests that more informed members who better understand their plans make better care decisions. Today, plan sponsors are investing in a mix of better online tools, on-site clinics and third-party programs—all supported by high-touch, concierge member services to help members navigate the health care system more intelligently.

A recent study by Collective Health, a technology company that serves as an alternative to traditional health plans for self-funded employers, suggests that plan sponsors can adopt these high-tech, high-touch strategies to achieve cost savings—leveraging trust and familiarity to reduce unnecessary utilization and waste.[8]

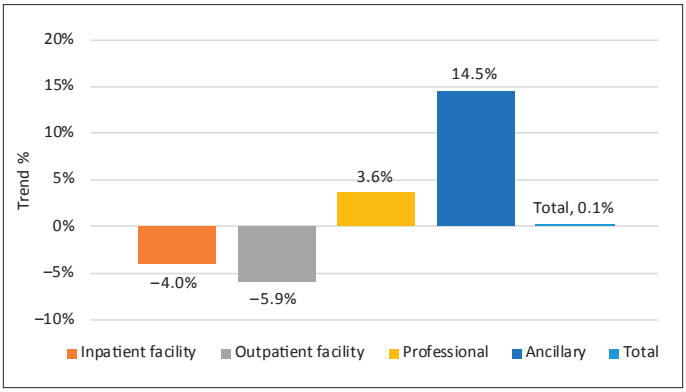
Overview of Analysis

Collective Health analyzed medical trend across its book of business. The overall calculation was completed by Frank Cheung, ASA, MAAA, head of analytics for Collective Health, and Sophie Kim, ASA, actuary for Collective Health, and peer reviewed by Susan Pantely, FSA, MAAA, who heads Milliman's office in San Francisco. Collective Health performed an additional analysis to assess utilization and care optimization—and it came to an encouraging conclusion. The organization's technology, platform, and member advocacy model, which leverages member trust and enables more informed, value-based choices, actually reduces medical cost trend. What's more, the study found that Collective Health was able to achieve these results through care optimization rather than care avoidance.

Process and Methods

Specifically, the analysis focused on all self-funded clients who were live with Collective Health as of January 1, 2016. It compared their medical spending and utilization in the first half of 2016 with that across the first half of 2017.

Figure 1
PMPM Trend by Type



Data from Collective Health. Used by permission.

The subset of employer customers examined included 33,332 members during the study period. All claims were included, and the model allows the user to normalize for demographics, geography (area) and changes in benefit design, and to truncate large claimants that exceed a defined threshold. That means the model is presented both with and without adjustments to remove the effects of an aging population, new members in areas with lower (or higher) health care costs, and changes in benefit design, among other changes.

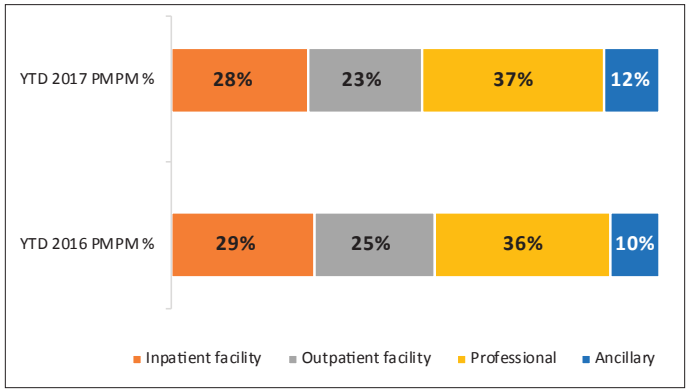
Medical Trend Results

The raw data, without normalization, revealed an overall medical trend of 0.1 percent (see Figure 1). Normalizing for demographics (aging of the population), the overall medical trend was –0.5 percent. When normalizing for demographics, geography (area) and benefit design changes, the overall medical trend was 0.0 percent (see Figure 2). These figures were significantly lower than historical client trends and market trends, which the analysis approximated to be about 5 percent.

Engagement Results

Forty-eight percent of members engaged with Collective Health during the first half of 2017. They had a medical trend of –2.0 percent with normalization and –0.7 percent without normalization. These members, who drive the majority of medical spending, are responsible for the improvements in trend over baseline, as the medical trend of non-engaged members was 6.7 percent. This finding suggests that Collective Health leverages member trust and enables more informed, value-based choices.

Figure 2
PMPM Percentage by Type



Data from Collective Health. Used by permission.

Utilization Results

The analysis showed that the medical trend was driven by care optimization, not care avoidance. Collective Health members optimized their utilization in two ways, as shown in Table 1. First, they reduced their use of four categories of services, such as advanced imaging and ER visits, that have a history of overutilization. Managed care plans have used many "tactics" (such as preauthorization) to reduce such overutilization. Second, members increased their use of behavioral health care and urgent care facilities. The underutilization of these services has historically contributed to higher overall costs as members turn to more expensive alternatives.

Table 1
Changes That Optimized Member Utilization

Services	Utilization Rate
Advanced imaging	–12%
ER visits	–5%
Radiology	–9%
Specialist visits	–8%
Behavioral health	+13%
Urgent care	+4%

CONCLUSION

Plan sponsors are investing in a mix of better online tools, on-site clinics and third-party programs—all supported by high-touch, concierge member services to help members navigate the health care system more intelligently. While these initiatives have proven to increase member satisfaction with health benefits, they are also showing the potential to be effective cost reduction strategies. Plan sponsors that provide better online tools to navigate the health care system combined with a concierge approach to member services may help achieve two legs of the "Triple Aim" of health care—enhanced patient care and reduced cost—even as they provide easier access to care. ■

Ed Cymerys, FSA, MAAA, is chief actuary and corporate strategy advisor for Collective Health in San Francisco and former senior vice president and chief actuary for Blue Shield of California. He can be reached at *ed@collectivehealth.com*.

ENDNOTES

1 Rock Health. 2017. *Digital Health Venture Funding: 2017 Year in Review*. *https://rockhealth.com/reports/2017-year-end-funding-report-the-end-of-the-beginning-of-digital-health/.*

2 Collective Health. 2017. *Controlling Employer Health Costs: A Collective Health Book of Business Trend Analysis.* San Francisco: Collective Health, *https://offers.collectivehealth.com/business-trend-analysis*.

3 PwC. 2017. *Medical Cost Trend: Behind the Numbers 2017. https://www.pwc.com/us/en/healthcare/publications/pdf/pwc-hri-medical-cost-trend-2017.pdf* (accessed April 6, 2018).

4 Martsolf, Grant , Kathryn R. Fingar, Rosanna M. Coffey, Ryan Kandrack, Tom Charland, Christine Eibner, A. Elixhauser, Claudia A. Steiner, and Ateev Mehrotra. 2017. Association Between the Opening of Retail Clinics and Low-Acuity Emergency Department Visits. *Annals of Emergency Medicine* 69, 4:397–403.

5 Sahni, Nikhil R., Anuraag Chigurupati, Bob Kocher, and David M. Cutler. 2015. How the U.S. Can Reduce Waste in Health Care Spending by $1 Trillion. *Harvard Business Review.* October 13. *https://hbr.org/2015/10/how-the-u-s-can-reduce-waste-in-health-care-spending-by-1-trillion* (accessed April 6, 2018).

6 Truven Health Analytics. Truven Health Analytics Study Finds Most Emergency Room Visits Made by Privately-Insured Patients Are Avoidable. Press release. Ann Arbor, Michigan, April 25, 2013. *https://truvenhealth.com/media-room/press-releases/detail/prid/113/study-finds-most-emergency-room-visits-made-by-privately-insured-patients-avoidable* (accessed April 6, 2018).

7 Drescher, Frank S., and Brenda E. Sirovich. 2016. Use of Computed Tomography in Emergency Departments in the United States. *JAMA Internal Medicine* 176 2:273–275. *https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/2477125* (accessed April 6, 2018).

8 Supra note 2.

2018 ANNUAL MEETING & EXHIBIT

NASHVILLE, TENNESSEE
OCT. 14–17, 2018

SAVE THE DATE

Staying in tune

WITH THE PROFESSION

SOCIETY OF ACTUARIES®

Why so Many People Have Untreated Mental Health Conditions

By Dawn Motovidlak

> Unlike medical issues that can be diagnosed with blood tests or broken bones that can be identified with an X-ray, there is no one-size-fits-all prescription for a mental health issue.

What leader has not been taught the anecdote to understanding and solving a problem? Asking "why" five times is the simplest way to get to the root cause of an issue. In the last two decades, the United States has been crippled by three devastating problems that just don't seem to be getting any better. When I ask "why" five times, I get the same root cause answer for all three problems.

The first problem is the constant rise of chronic conditions in the United States. In 2012, half of all adults—117 million people—had one or more chronic health conditions.[1] Statistics state 141 million people were living with a chronic condition in 2010. It is expected to be 171 million by 2030.[2] Despite the Affordable Care Act (ACA), the focus on population health, the prevalence of disease management, and the steady rise of available wellness programs and resources, why is the number of people with a chronic condition still rapidly increasing?

It's because we have not dug deep enough to figure out and address the root cause of the problem. According to the World Health Organization (WHO) and the Centers for Disease Control and Prevention (CDC), the root cause of this chronic disease epidemic is a lack of physical activity and poor nutrition, which alone or in combination contribute to obesity and its attendant consequences.[3] I beg the WHO to ask "why" a couple more times. "Why is there a lack of physical activity and poor nutrition leading to obesity?" That answer brings us a little closer to the root cause of the problem.

The second problem is the newly declared opioid epidemic. The rate of overdose deaths involving opioids has risen 280 percent between 2002 and 2015, and it's continuing to climb.[4]

The third problem is the steady climb in mass shootings during the last 20 years, with a major spike in the last decade. On average there were 6.4 shootings per year from 2000 to 2006. From 2007 to 2013 there were 16.4 shootings a year.[5] In 2017, CNN reported an average of almost 7 mass shootings per week. There were a total of 307 shootings between January 1, 2017 and November 5, 2017.[6]

With all three issues, there are arguable points that I would agree fuel these problems. Yes, many chronic conditions are genetic. Yes, opioids are overprescribed. It is relatively easy, even for those with mental health problems, to obtain the weapons used in individual and mass killings. However, these aren't the root causes of the problems, and, although we need to band together and commit to initiatives that support positive change, the problems won't be permanently solved until the real root cause is realized and addressed.

HOW MENTAL HEALTH FITS IN

About the fourth time you ask "why" to each of these three problems, the answer you get is "untreated mental or emotional health issues." I am not talking about only the one in 17 Americans who lives with a diagnosed serious mental illness such as schizophrenia, major depression or bipolar disorder. I am also speaking about the one in four American adults who experiences a mental health problem each and every year. These mental or emotional issues are most often undiagnosed and can happen to anyone at any age, with any level of education and from any culture, race, religion or socioeconomic background. They can be initiated simply by a sudden turn of events or an unexpected situation such as physical trauma; the loss of a loved one; the end of a relationship; a difficult medical diagnosis of a child, spouse or parent; or the loss of a job or income. If the feelings associated with these issues—such as stress, grief, anger, fear, sadness, moodiness, low self-esteem and loneliness—are not adequately addressed and resolved, and if healthy coping skills are not adopted, these mental health issues will be exacerbated and evolve into more chronic and dangerous threats to the health and safety of the individual, and potentially others. Over time, especially as additional life challenges are faced, it becomes increasingly more difficult to unwind and reverse the effects of ignoring these old demons.

Back to the three main problems. If there is any doubt that mental health is close to the core of these problems, let's consider the following facts:

- Mental illness is associated with an increased occurrence of chronic diseases such as cardiovascular disease, diabetes, obesity, asthma, epilepsy and cancer.[7]

- Mental illness is associated with lower use of medical care, reduced adherence to treatment therapies for chronic diseases and higher risks of adverse health outcomes.[8]

- According to the CDC, 43 percent of people with depression are obese, compared with a third of the general population.[9] One 2010 study found that people who are obese are 55 percent more likely to be depressed, and people with depression are 58 percent more likely to develop obesity.[10]

- A study published in the *Journal of the American Board of Family Medicine* found that adults with a mental illness received more than 50 percent of the annual 115 million opioid prescriptions in the United States. The study found that nearly 19 percent of Americans with mental health issues use prescription opioids, while the same is true for only 5 percent of those without a mental health condition.[11]

- At least 59 percent of the 185 public mass shootings that took place in the United States from 1900 through 2017 were carried out by people who had either been diagnosed with a mental disorder or demonstrated signs of serious mental illness prior to the attack.[12] *Mother Jones* found a similarly high rate of potential mental health problems among perpetrators of mass shootings—61 percent—when the magazine examined 62 cases in 2012.[13] Both rates are considerably higher than those found in the general population.[14]

Although mental health disorders require ongoing treatment, early diagnosis and intervention can decrease the burden of these conditions, associated chronic diseases and other risks. There is so much written about the progress that has been made in the last two decades in treating and preventing mental illness. Yet this leads us to the fifth "why" and the crux of our three problems: why are there still so many people with untreated mental health disorders?

ADDRESSING THE LACK OF CARE

I recognize the stigma and fear associated with asking for help. However, I believe there are plenty of people who are ready to get help for themselves or a loved one and can't. Many say there is a shortage of mental health providers in the United States. Insurance networks claim they have plenty of providers and their panels are full, so they are not accepting new providers. I submit that there likely is a shortage of quality mental health providers who will accept insurance.

Day in and day out my company assists individuals in connecting with qualified mental health treatment providers and resources, so I can attest that this is no easy feat, especially when left to an individual in distress. I recently read an article titled "Single Mom's Search for Therapist Foiled by Insurance Companies" that supported the frustration my team faces daily. It explained a study the authors conducted in which they attempted to get an evening appointment with an in-network mental health provider in or near a large city in California. They called 100 providers from an insurance company's provider directory; they could find only 28 who were accepting new patients and would take the insurance. Of those, only eight had an appointment time available after regular working hours.[15]

My team decided to repeat the study on the other side of the country, using a different insurance company directory. We contacted 100 providers in the Mid-Atlantic region. Twelve providers had incorrect phone numbers listed in the provider directory; nine were no longer employed at the practice and no new contact information was offered; and 33 did not answer or return a call after a message was left. Of the 46 providers we reached, 15 were not accepting new patients. Of the 31 providers

LACK OF MENTAL HEALTH PROVIDERS CRISIS

Mental Health Provider Availability Study

BHS obtained a list of 100 mental health providers located in the Mid-Atlantic region from an insurance provider directory. Our goal was to find an appointment with a counselor who accepted the insurance and could offer an evening appointment within the next three weeks.

ONLY 10 OUT OF 100 COULD OFFER AN APPOINTMENT

HERE'S WHAT HAPPENED:

Of the 100 providers, 46 could be reached

9 were no longer employed at the practice and no new contact information was offered
12 had wrong numbers
33 did not return a call after a message was left

Of those 46 providers, 31 were accepting new patients

15 were not accepting new patients

Of those 31 providers, 23 accepted the participant's insurance

3 couldn't confirm they would accept this specific insurance
5 were no longer accepting this specific insurance

Of those 23 providers, 19 could offer an appointment

4 couldn't offer an appointment in the next three weeks

Of the 19 remaining providers, 10 could offer an evening appointment

bhs

who were accepting new patients, five no longer accepted the specific insurance we were using, and three couldn't confirm that they would accept it. Of the remaining 23 providers, four couldn't offer any appointments within the next three weeks; of the last 19, only 10 could offer an evening appointment.

There are many reasons why mental health providers no longer accept insurance. The primary reason is likely because reimbursement rates provided by insurance companies are not deemed to be at an acceptable level by providers. In spite of the rising costs of all other forms of health care, mental health providers haven't seen meaningful increases in decades. The reimbursement rate from an insurance company is less than half of what a provider could receive from a private pay client. In addition, health insurance companies require a great deal of paperwork before they release payment. For every hour of counseling, it takes an additional half hour to complete and file paperwork, not to mention the time for following up, to receive payment. On top of that, there is no guarantee the provider will get paid. Unlike medical issues that can be diagnosed with blood tests or broken bones that can be identified with an X-ray, there is no one-size-fits-all prescription for a mental health issue. Each person needs something different, and what that person needs may or may not be authorized for payment by the insurance company. Finally, many issues for which an individual may seek assistance to prevent a problem from escalating into a mental health disorder are not covered by insurance. The rise of the high-deductible plan has not helped. Clients often don't understand their benefits; they show up for a counseling appointment without having met their deductible, and once they realize they can't afford the deductible, they decide they'll just live with their mental health issue, which seems easier than living with a broken bone. As a result, some clients might not fully pay their therapists, which may influence these providers' decision to stop participating in insurance networks.

When we figure out how to remove the burden associated with accepting insurance and to better reimburse mental health providers—while holding them accountable for producing quality client outcomes—we will begin to make progress in combating chronic disease, the opioid epidemic and mass violence. Until then, in my opinion, we will only continue discussing excuses. ■

Dawn Motovidlak, MSW, is president and CEO of BHS (formerly known as Business Health Services), a leading national provider of behavioral health and corporate well-being solutions. She can be reached at *Dmotovidlak@bhsonline.com*.

ENDNOTES

1 Ward, Brian W., Jeannine S. Schiller and Richard A. Goodman. 2014. Multiple chronic conditions among US adults: A 2012 update. *Preventing Chronic Disease* 11: E62.

2 Mattke, Soeren, Tewodaj Mengistu, Lisa Klautzer, Elizabeth M. Sloss, and Robert H. Brook. 2015. *Improving Care for Chronic Conditions: Current Practices and Future Trends in Health Plan Programs.* Santa Monica, CA: RAND. *https://www.rand.org/content/dam/rand/pubs/research_reports/RR300/RR393/RAND_RR393.pdf* (accessed April 6, 2018).

3 Fryar, Cheryl D., Margaret D. Carroll, and Cynthia L. Ogden. 2012. Prevalence of Overweight, Obesity, and Extreme Obesity Among Adults: United States, Trends 1960–1962 Through 2009–2010 [data brief]. Hyattsville, MD: National Center for Health Statistics. *https://www.cdc.gov/nchs/data/hestat/obesity_adult_09_10/obesity_adult_09_10.pdf*

4 Overdose Death Rates. 2017. National Institute on Drug Abuse. September. *https://www.drugabuse.gov/related-topics/trends-statistics/overdose-death-rates* (accessed April 6, 2018).

5 Schmidt, Michael S. FBI Confirms a Sharp Rise in Mass Shootings Since 2000. *New York Times*, Sept. 24, 2014. *https://www.nytimes.com/2014/09/25/us/25shooters.html*.

6 Willingham, A.J., and Saeed Ahmed. Mass Shootings in America are a Serious Problem—and These 9 Charts Show Just Why. *CNN*, November 6, 2017, *https://www.cnn.com/2016/06/13/health/mass-shootings-in-america-in-charts-and-graphs-trnd/index.html* (accessed April 6, 2018).

7 Centers for Disease Control and Prevention. CDC Report: Mental Illness Surveillance Among Adults in the United States, *CDC Mental Illness Surveillance*, December 2, 2011, *https://www.cdc.gov/mentalhealthsurveillance/fact_sheet.html* (accessed March 28, 2018).

8 Ibid.

9 Pratt, Laura A., and Debra J. Brody. Depression and Obesity in the U.S. Adult Household Population, 2005–2010 [data brief], *National Center for Health Statistics*, October 2014, *https://www.cdc.gov/nchs/products/databriefs/db167.htm* (accessed March 28, 2018).

10 Luppino, Floriana S., Leonore M. de Wit, and Paul F. Bouvy. 2010. Overweight, Obesity, and Depression: A Systematic Review and Meta-analysis of Longitudinal Studies. *Archives of General Psychiatry* 67, 3: 220–229. Available at *https://jamanetwork.com/journals/jamapsychiatry/fullarticle/210608* (accessed March 28, 2018).

11 Davis, Matthew A., Lewei A. Lin, Haiyin Liu, and Brian D. Sites. 2017. Prescription Opiod Use Among Adults With Mental Health Disorders in the United States. *Journal of the American Board of Family Medicine* 30, 4: 1–11. Available at *https://kaiserhealthnews.files.wordpress.com/2017/06/opioidembargo-article.pdf* (accessed March 28, 2018).

12 Duwe, Grant, and Michael Rocque. Actually, There is a Clear Link Between Mass Shootings and Mental Illness. *LA Times*, Feb. 23, 2018. *http://www.latimes.com/opinion/op-ed/la-oe-duwe-rocque-mass-shootings-mental-illness-20180223-story.html*.

13 Follman, Mark. Mass Shootings: Maybe What We Need is a Better Mental-health Policy. *Mother Jones*, Nov. 9, 2012. *https://www.motherjones.com/politics/2012/11/jared-loughner-mass-shootings-mental-illness/*.

14 Duwe, Grant, and Michael Rocque. Actually, there is a clear link between mental illness and mass shootings. *LA Times*, February 23, 2018, *http://www.latimes.com/opinion/op-ed/la-oe-duwe-rocque-mass-shootings-mental-illness-20180223-story.html* (accessed March 28, 2018).

15 Dembosky, April. Single Mom's Search for Therapist Foiled by Insurance Companies. *KQED*, July 15, 2016, *https://www.kqed.org/stateofhealth/185796/single-moms-search-for-therapist-foiled-by-insurance-companies* (accessed April 6, 2018).

The Challenges of Accurately Repricing Pharmacy Benefit Manager Claims

By John R. Adler

Each year, benefit consultants review thousands of requests for proposal (RFPs) from pharmacy benefit managers (PBMs). The degree of sophistication and method of evaluation to verify each bidder's "savings" varies widely, from a simple spreadsheet analysis to the classic historical claims repricing. The latter is the focus of this article, including how to accurately control the variables involved in verifying savings estimates from each of the responding bidders.

THE CHALLENGE

The challenge is control that results in accuracy. Two processes must be controlled:

1. The initial claims request to the PBMs
2. The claims elements after the claims are received and loaded into the data warehouse for analysis

THE INITIAL CLAIMS REQUEST

Not only should the PBM bidders be told what the rules are for the claims repricing, they should also be told what they cannot do. The claims repricing should not allow the bidders to do any of the following:

- Substitute National Drug Codes (NDCs) unless the original NDC was discontinued
- Substitute a smaller package size (with a lower average wholesale price, or AWP) for the package size of the original NDC, unless a contract provision is included that allows the smaller package size
- Move medications from one National Association of Boards of Pharmacy (NABP) pharmacy to another
- Price maintenance medications at retail 90 (90-day prescription) pricing if they have historically been purchased and priced at retail 30 (30-day prescription)
- Move maintenance medications from either retail 30 or retail 90 to mail order
- Substitute the AWP in effect on the day the claim was filled with a more recent or current AWP
- Allow the application of the Brand/Generic Algorithm (BGA) to categorize products

In addition to telling the bidders what they cannot do, it is critical for the incumbent PBM to adhere to a key requirement: the claims must include the indicator that was in place when the claim was adjudicated. Since it is possible for a PBM to replace a claims indicator, this requirement eliminates any "flipping" of claims from a generic status to a brand status, thereby improving the accuracy of the repricing comparison between the incumbent's repricing and prices provided by other bidders. Claims that are typically flipped are those subject to the proprietary BGA, DAW 5 (dispense as written code 5, which allows substitution of a generic for a brand drug) claims, and house generics.

Of particular note are specialty drug indicators, as there are typically wide variations from one PBM to another in what is defined as "specialty." Since specialty drug discounts and rebates are substantially different from those for nonspecialty drugs, it is important to know and verify what is considered a specialty medication in each PBM's repricing.

One final step before sending out the claims: have them sequenced by the data warehouse. In doing so, you are reassured that all the claims are accounted for in the bidders' responses. This also provides a comparison of the claims that are typically excluded, including compounds, bulk powders, discontinued NDCs, invalid NDCs and over-the-counter claims.

DATA ANALYSIS

The analysis phase begins once the repriced claims are received from the bidders. The following steps should be taken in the scrubbing and analysis process:

1. Verify that all claims sent are accounted for in the returned claims set.
2. Perform a comparative analysis to be sure that the types of claims—single-source generics, multisource brands and so on—are consistent among all bidders. If there are any significant variations from the original claims set, ask the bidders to reconcile and explain those variations. This will help reveal any claims reclassification by the incumbent PBM.

PRICING METRICS FOR OVER- OR UNDERPERFORMANCE

One of the critical findings from the analysis is whether the incumbent vendor over- or underperformed against its contract pricing guarantees. Why is this important?

PBMs that offer a traditional pricing model typically underperform against their contract discount and pricing guarantees, especially for generics and retail generics. If the incumbent pricing model is traditional, the savings being shown by the bidders, including the incumbent, will be overstated.

Conversely, pass-through pricing models typically overperform against contract discount and pricing guarantees. If the incumbent pricing model is traditional, the savings being shown by the bidders will be understated if the bidders are also quoting a traditional pricing model.

In either case, these variations need to be taken into account and the bids normalized to create an accurate savings estimate. To accurately measure over- or underperformance, the historical claims must be run against the Medi-Span online database, which identifies generic medications, and the discounts in all claim channels and guarantee categories determined. These data should then be compared to the contract pricing guarantees.

Finally, there is another consideration in the discount and pricing guarantee normalization: has the plan sponsor performed a contract pricing guarantee audit *and* actually recovered any discount deficiencies? If not, then the savings represented by each of the bidders stands as is *unless* the winning bidder (including the incumbent) underperforms as well. A strange twist, but one worth understanding and taking into account.

REBATES

Ideally, each bidder will assign actual rebates to every drug on an individual basis.

PBMs are not particularly fond of this practice, just as they aren't particularly fond of assigning net unit cost to each drug that has a maximum allowable cost (MAC). Both of these are considered proprietary, as they provide insight into the PBM's drug manufacturer rebate contracts and retail pharmacy MAC pricing.

If bidders refuse to assign actual rebates on a drug-by-drug basis, require that they assign the guaranteed rebate to each drug based on the channel in which it was purchased—retail 30, retail 90, mail order or specialty.

Under either scenario, it is necessary to tally the number of brand claims in each channel to identify any significant brand claims count differences between bidders. If these differences exist, they should be reconciled or the total rebate dollars could be overstated.

OVERALL NET PRICING—A SINGLE METRIC

What drives the overall savings being estimated by each bidder, and when will the plan see them? Why is this question important?

If the overall savings estimate is 10 percent, and 8 percentage points of the savings is in improved rebate guarantees, the plan sponsor will not receive the bulk of the savings until nine months after the rebates are earned.

If the plan sponsor understands this, it can set an accurate expectation of the savings it will experience in its month-to-month drug spend. It also allows the benefit manager to budget properly and avoid potential budget misunderstandings with the chief financial officer. Based on this, it makes sense to calculate the net cost per script before and after rebates.

It also makes sense to calculate an overall net discount (ingredient cost + dispensing fees + ancillary fees + administrative fees – rebates) against the total AWP of the claims set. This gives the plan sponsor a single comparative metric by which to understand each bidder's overall bid. It also gives the consultant a single metric to compare against market pricing. In the current market, this overall net discount should be in the 60–67 percent range, depending on the plan size and utilization patterns for brands/generics, retail/mail order and specialty pharmacy.

SUMMARY

Understanding and accounting for all the variables in a PBM RFP claims repricing is complex and requires foreknowledge of what to consider. The necessary steps to create an accurate representation of savings from each bidder requires control of the historical claims, control of what the bidders are allowed to do and not do, normalization of the responses, and reports to the plan sponsor that simplify the complexity of the responses and set expectations for when the savings will be realized.

Although brief, it is hoped that this article will help advance the accuracy of the savings estimated from the PBM RFP process and help create a platform for analysis that is easily understood by the plan sponsor. ■

John R. Adler is a pharmacy benefit management RFP consultant with 24 years of experience in PBM. He can be reached at *jadler@elmcgroup.com*.

Commercial Health Care: What's Next? A Health Section Strategic Initiative

By David Dillon

Excerpts from the article "Coverage for One and for All?" are reprinted with permission from the Society of Actuaries, Schaumburg, Illinois. Copyright © 2018 by the Society of Actuaries.

In June 2017, the Society of Actuaries (SOA) Health Section released a new strategic initiative titled Commercial Health Care: What's Next? This initiative was designed to be an anthology series of white papers and articles focusing on education and research concerning key issues in health care reform. This article contains a condensed summary of and excerpts from a white paper that was recently released. All articles and newly released companion pieces are located at *http://www.theactuarymagazine.org/category/web-exclusives/commercial-health-care-whats-next/*.

COVERAGE FOR ONE AND FOR ALL? THE IMPACT OF THE INDIVIDUAL MANDATE AND GUARANTEED ISSUE IN THE INDIVIDUAL HEALTH CARE MARKET

By Jackie Lee, FSA, MAAA, and Armen Akopyan, ASA, MAAA

In 2010, Congress passed the Patient Protection and Affordable Care Act (ACA) with the goal of increasing accessibility to affordable health care. One of the ACA's pillars required that insurance companies provide coverage to all customers, regardless of any pre-existing medical conditions. For this "guaranteed issue" environment to work in the marketplace, two things are required: maximizing participation among customers and carriers, and managing affordability.

A well-known component of the ACA is the individual mandate, which was intended to increase participation by encouraging continuous coverage. The individual mandate requires those without employer-provided health insurance to either buy individual coverage or pay a penalty when they file their taxes. In the context of guaranteed issue, the individual mandate is a disincentive for people to go without coverage, but it helps accomplish both goals, maximizing participation and managing affordability.

Unfortunately, the individual mandate was not strong enough. Various states' experiences in the health insurance marketplace has shown that the goals of health care reform are not fully achieved by simply maximizing participation. Participation and affordability both need to be addressed simultaneously to have a viable long-term market.

The ACA's individual mandate was not strong enough to compel all eligible uninsured individuals to buy coverage. Policymakers could consider eliminating exemptions and loopholes, strengthening enforcement and/or adding other continuous coverage provisions as options to increase participation.

Other ACA features designed to maximize participation included guaranteed issue and Medicaid expansion. Without strong continuous coverage requirements, the premiums in ACA markets have increased significantly. Contributing to these

increases were anti-selection and the Supreme Court decision that made Medicaid expansion optional for states.

The individual market is unique within the health insurance industry. Unlike the employer-group market, the individual market is not self-sustaining. Managing affordability requires supplemental funding to keep carriers and consumers in the market. Maintaining access for high-cost claimants and broad participation among lower-income consumers requires external funding and additional market support. There are several ways to strike this balance. The following are a few ideas, rather than an exhaustive list. Additionally, the current regulatory environment may need to change for some of these situations to happen.

- Allow consumers to choose from preselected essential health benefit requirements.
- Establish reinsurance funds, like the 2014–2016 transitional reinsurance program.
- Offer a lower actuarial value plan, such as a copper plan. This would require the Centers for Medicare and Medicaid Services (CMS) to update the Risk Adjustment program to maintain a level playing field.

The ACA has yet to achieve its goal of increasing accessibility to affordable health care. No sweeping reform to change a complex health care system will be perfect the first time. We must assess the strengths and weaknesses of the various provisions and make changes over time, incorporating our learnings. A study of states that have embarked on health reforms on their own has shown there is no one-size-fits-all solution, and with every change come trade-offs. The individual mandate is only one piece of the larger ACA puzzle. Policymakers must be mindful of the interdependencies among the pieces.

While promoting continuous coverage via the individual mandate or other options is an important consideration, improving affordability simultaneously is necessary to long-term market viability. Legislative options to study include strong incentives to reduce cost, promote participation and improve quality. The debate should be focused on the proper order of tackling these interconnected challenges. ■

David Dillon, FSA, MAAA, is vice president and principal at Lewis & Ellis Inc. David leads the Commercial Health Care: What's Next? strategic initiative. He can be reached at *ddillon@lewisellis.com*.

Leader Interview

With Paul Stordahl

Paul Stordahl, FSA, MAAA, is the senior vice president, actuarial pricing for United Healthcare commercial markets. He started his health insurance career with Aetna, holding a variety of roles while pursuing his professional actuarial credentials. After earning his FSA, he spent 15 years as a consulting actuary with a number of consulting organizations. In addition to his professional pursuits, Paul is active in his community, volunteering with the Special Olympics and serving on the board of directors for a small, nonprofit youth camp and retreat center in northern Minnesota.

ON BEING AN ACTUARY

Health Watch: **How and when did you decide to become an actuary?**

Paul Stordahl: I decided to pursue an actuarial career during my sophomore year of college, after I had decided to change my major from electrical engineering to mathematics. I began searching for career options that would capitalize on my strong aptitude for math and soon discovered the actuarial profession. This was before the Internet, so I actually had to send a letter to the Society of Actuaries (SOA) requesting information about the profession.

***HW*: What other careers did you consider? Or if you have had other careers, can you describe them?**

PS: My original career goal upon graduating from high school was to become an engineer. However, my college courses quickly steered me toward mathematics. Once I discovered the actuarial profession, I never considered any other careers.

***HW*: What was your favorite job before you became an actuary?**

PS: I was a camp counselor for two summers during college. I didn't make a lot of money in that job, but it was an incredible experience.

***HW*: What has been most crucial in your development as an actuary?**

PS: I started my career at a large, multi-line insurance company and then spent approximately 15 years as a consulting actuary before again working for an insurance company. Looking back, I believe the experience I gained as a consultant was most impactful in my development. In addition to the actuarial skills, I learned the importance of selling skills, which are really listening skills—listening to understand the problems that a prospective client is facing and then working to identify a potential solution (and then convincing the prospective client to hire you to implement the proposed solution). In addition to listening/selling, I learned how to communicate clearly and the importance of following through on your obligations. While I learned these skills during my time as a consultant, they have proven invaluable during my subsequent roles back in the insurance industry.

***HW*: Looking at your career as an actuary, do you see any important learning milestones or turning points in your career?**

PS: I'm sure I'm not alone in feeling that the most significant learning milestones were many of the mistakes I made. This ranged from SOA exam failures, which motivated me to study harder, to analytical mistakes or omissions that had an adverse impact for my company. One of our company's leaders once told our team that it's okay to make a mistake, just make sure you learn from it. That's advice that I repeat often—to my team and my kids.

***HW*: As an actuary, what keeps you awake at night?**

PS: As a health care actuary, the pace of change in the political and regulatory environment over the past five years has been tremendous. With each change comes a responsibility to understand the change and the impact of the change on our existing

business, to identify any new business opportunities that may arise due to the change, and ultimately, to determine appropriate business and pricing strategies. With all this change, there is one question that routinely keeps me up at night: "What have we missed?" I'm constantly worried that perhaps our interpretation of a new law or regulation is incorrect. Or that our understanding of the business impact of a change may not be accurate. Or that our expectation of how the rest of the industry will respond may not be right. Or, finally, that there may be changes we simply miss.

ON BEING A LEADER

***HW*: How much did your actuarial training prepare you for this role? What additional training—formal, informal or otherwise—did you need to be successful?**

PS: My college education and the SOA exam process formed the basis of the training needed to be successful in my role. However, these simply set the stage. The vast majority of the training that prepared me for this role was learned on the job. I think having a variety of different roles (working for both insurance companies and consulting firms) was a significant benefit to my development. Regarding the SOA exam process, I believe that one of the greatest benefits is not the material on the syllabus (although that is certainly critical learning). Instead, the process of frequently picking up a new set of study materials and learning this new subject matter at a very detailed level is a skill set that is incredibly valuable in "real life." For example, shortly after the passage of the Affordable Care Act (ACA), I was asked to help determine our company's post-reform business strategy. The first thing I did was download a copy of the law and start the painstaking process of reading through it, taking notes on key provisions and seeking input from others on areas that I didn't fully comprehend. This process was exactly the same as the one I would go through every six months while I was taking actuarial exams.

***HW*: What are the most important lessons you've learned in your role?**

PS: The most valuable leadership lesson I've learned is to support and trust my colleagues and my team. The power of the team is greater than the power of any single person. I've learned that I can't possibly know everything. The only way that I can be successful is for our team to be successful. In order for the team to be successful, they need to have the training and resources they need to get the job done right.

***HW*: Let's say you're hiring your successor. If you're presented with two actuaries with equivalent experience and training, what characteristics will help you choose one over the other?**

PS: In addition to the actuarial training and industry experience needed to lead an actuarial team, I would focus on two subtle skills or characteristics that I believe are critical for actuarial leaders: humility and listening skills. Early in my career, I was taught that it's important to convey confidence. And while this is still good advice, I believe we—as actuaries—need to be constantly aware that our view (or our analysis) may not be right. It takes humility to embrace that the collective wisdom of a team exceeds the wisdom of any single individual. Finally, we too often seek to be understood, instead of seeking to understand. Individuals who take time to truly understand the perspectives of others (particularly those with whom we may disagree) will find getting to common ground much easier than those who instead are focused on getting others to understand their own perspective.

***HW*: Describe the biggest one or two challenges that you have faced in your role.**

PS: The Affordable Care Act—no question! Volumes have been written about the actuarial complexities associated with the ACA, and I won't attempt to rehash the debate here. Prior to the ACA, pricing actuaries had to project the future cost levels of their own (both existing and future) policyholders. This environment had its own set of complexities and unknowns, but actuaries had developed approaches that resulted in tolerable risk fluctuation levels and reasonably stable pricing. The ACA ushered in an entirely new marketplace in both the individual and small group markets. Prior claim experience was virtually worthless, since a carrier's own claim experience levels were no longer indicative of its future liability. (The ACA's risk adjustment program resulted in each insurer sharing in the total average risk of the market across the entire state.) Insurers were required to estimate future cost levels without any relevant data on which to base their cost projections. Further, new entrants and the politicized environment resulted in downward pressure on premium rates. Last-minute (and ongoing) politically motivated changes to the market rules added further confusion. The results (from an actuarial perspective) were devastating. The majority of new entrants (co-ops) went bankrupt. Most carriers that participated in the individual market incurred substantial financial losses. Interestingly, while the individual market has seen dramatic instability, the small group market has been very stable. We will be debating the ACA for years to come. For this actuary, who was one of many in the middle of this, the ACA was easily the biggest professional challenge I've faced in my career.

***HW*: What advice would you give to another actuary going into a leadership position for the first time?**

PS: Listen! Don't fall into the trap of thinking that leaders are supposed to have all the answers. Instead, be focused on asking all the right questions. ■

Public Health: The Forgotten Variable in the Health Care Equation

By Bethany McAleer

While there are deep political divides in the United States on the topic of health care reform, most individuals and institutions share the goals of broadening access to quality care, improving the affordability of health care services for all and attaining better population health outcomes (increased life expectancy, lower infant mortality rates, reduced chronic illness burden and so on).

How to achieve these goals is the big question and one with which the work of health actuaries is becoming more and more intertwined. Our roles are expanding into more strategic and big-picture thinking about how the tools at our disposal can be leveraged to *impact* the health care system, not just to measure the financial effects of stakeholder decisions.

We look to adjust benefits, incentive programs, contracts and regulations to incentivize the various players to align their behavior with these goals. We consider payers, hospital systems, providers, pharmaceutical companies, government, employers and individuals as key parts of the equation. But what about public health? Public health rarely earns a mention in the health care reform debate or the inner workings of our various actuarial activities, but it plays a critical role in supporting health and well-being in the United States.

This article offers a brief introduction to the broad roles and responsibilities of public health, how it touches all of us and influences the U.S. population health. We also take a closer look at how public health operations are funded in the United States and who determines how that money is spent. From there, we consider how actuaries can contribute to public health in order to improve the reach and effectiveness of its programs.

ROLES, RESPONSIBILITIES AND IMPACTS OF PUBLIC HEALTH

Before we can begin to understand the complicated web of funding and determination of public health priorities, we need to grasp its goals and span of services. Fundamentally, public health seeks to promote and protect the health of people and their communities. While most of the U.S. health care system is devoted to treating people who are already sick, public health focuses on keeping people healthy.[1] Three primary ways in which public health systems influence our lives are as follows:

- Development of community programs
- Research and advocacy of health- and safety-promoting policies
- Dissemination of evidence-based information

Span of Services

When we think about keeping people healthy, we often focus on diet, exercise and drug use; we tend to overlook social and environmental factors that have a significant impact on both our health and our ability to make healthy choices. Some of these factors include income, education, race, family/support networks, working conditions, living conditions, community safety and stress levels. Public health organizations consider and influence all of these elements. Here are a few examples of the broad array of public health activities:

- Protecting communities from the spread of infectious disease through vaccinations, education and medical research/advancements
- Creating and monitoring standards around environmental contaminants (lead exposure, safe drinking water, air pollution and so on)

- Educating the public about the harmful effects of drug, alcohol and tobacco use and developing support programs for those struggling with substance abuse
- Researching and advocating programs that reduce violence and provide safe walking/bicycling in our communities
- Promoting policies that make healthy choices accessible and affordable (such as school lunch programs)[2]

Impacts on Population Health

Once you understand that our health status is influenced by all aspects of our lives, you begin to realize that the health care system only plays a small part in what contributes to overall population health. Yet in the United States, almost all of our health care expenditures fund the treatment of conditions, not prevention: less than 5 percent of total health care expenditures are spent on public health.[3]

According to one study, the United States could save a significant amount of money ($16.5 billion annually over five years, in 2004 dollars) on health care costs if it were to invest as little as $10 per person per year in "evidence-based programs that improve physical activity and nutrition and lower smoking rates in communities."[4] Those savings would come from preventing and/or managing the development and progression of costly chronic illnesses. Another study shows that, over a 13-year period, each 10 percent increase in strategic local public health spending resulted in a 7 percent drop in infant mortality rates and a 3 percent drop in deaths due to cancer, diabetes and cardiovascular disease.[5]

While a handful of studies show the potential financial benefits of spending more on public health, the lack of clear information on the return on investment of specific preventive and health-promoting activities makes it difficult to make decisions about how much to invest in public health and what programs should be the focus of those investments.

STRUCTURE, FUNDING AND SPENDING OF PUBLIC HEALTH

The public health system in our country is, in the simplest terms, complicated and inconsistent. There are various levels and many branches of public health, but for a basic overview let's break it up into federal, state and local (community) programs and funding.

Federal

Federal public health agencies, such as the Centers for Disease Control and Prevention (CDC), are financed by federal discretionary funding, which essentially means that federal spending on public health requires congressional approval. Direct federal spending on public health is typically focused on disaster relief or mitigation (as in the cases of Hurricane Katrina or the H1N1 flu pandemic).[6] Most of the federal money set aside for public health is allocated categorically to states and localities—either through prescriptive funding or specific grants—which means the federal government prescribes how that money must be spent (such as $X for Women, Infants and Children [WIC] and $Y for infectious disease). The rest is allocated down through block grants, where states and localities have more flexibility with how to spend the money. While the latter is critical to public health department operations (filling in funding holes, allowing for flexibility in spending, creating efficiency in staffing and so on), these funding streams are often at more risk due to their not having clear advocates like the categorical funding does.[7]

> While public health funding decisions are not only about the numbers (nothing political ever is), effecting change starts with well-informed decision making.

State

State health departments (SHDs) are financed through a combination of federal funds (grants and categorical allocations, as already explained), general state funds, Medicare/Medicaid, and public health fees/fines. The proportions of funding that come from these four areas vary widely, but federal funding provides the majority in most states,[8] and public health entities must compete with other state services (such as education and law enforcement) for "general funds." Receiving a significant portion of funding through federal categorical allocation often results in SHDs developing programs based on what is funded, not what is needed.[9]

Local

Local health departments (LHDs) get some money from federal- and state-allocated funds, but, though it varies widely, most funding for LHDs usually comes from the locality itself, meaning general funds, local taxes and property taxes. Local health departments often have more flexibility in how they spend their money than SHDs do,[10] although local programs are still at risk of funding swings at the higher level. Some CDC moneys pass through to LHDs using formulas. For example, HIV prevention money is based on HIV prevalence in a specific community. This means that if a community has a low prevalence of HIV thanks to a strong preventive program, this low prevalence can translate to lower funding, which puts that effective program at risk.[11]

Funding is a real challenge for public health systems at all levels. Funding streams are unpredictable, in competition with other public services and often predetermined as to how they must be spent. There is very little consistency across states and localities as to how revenue is allocated to various initiatives, and due to the complex nature of the funding, there is little transparency to the public regarding how public health dollars are spent. These complexities, in addition to heavy administrative and reporting burdens, contribute to the difficulty of performing accurate analyses of program outcomes.

A ROLE FOR ACTUARIES

Public health institutions would greatly benefit if policymakers and other key stakeholders in the health care industry better understood how long-term costs could be curbed by expanding health-promoting programs. Until there is clear evidence that public health programs move us toward our common health goals, there will be no improvement in the funding and prioritization of these initiatives.

There is an opportunity here for health actuaries to make a difference in society by quantifying the financial value of public health initiatives. Actuarial evaluations could influence the public health debate in several ways:

- Informing public health entities how best to prioritize existing funds through the identification of programs that are (or are not) working as intended, and how much value is created per dollar invested
- Developing and disseminating unbiased information on the financial value that public health programs create in order to garner public support and secure additional funding
- Encouraging partnerships with payers and/or providers that have the ability to broaden the impact of local programs with high returns on investment

CONCLUSION

From its goals and basic structure to its key challenges, public health is a fascinating, complex and far-reaching topic, and health actuaries could play an important role in filling a major information gap both within the field and for policymakers. While public health funding decisions are not only about the numbers (nothing political ever is), effecting change starts with well-informed decision making. Actuaries have the knowledge and skills to delve into this challenging area and shed some unbiased light on what is and is not working to move us toward our population health goals.

U.S. health care costs continue to rise unabated, yet public health, which is vital to realizing the larger goal of better health outcomes at lower costs, has been largely overlooked in health care reform discussions. Without doubt, public health will be an important part of any effective U.S. health care system, and actuaries who venture into this field will truly be able to make a difference in the health of the nation. ■

Bethany McAleer, FSA, MAAA, is a consulting actuary in the Washington, DC, office of Axene Health Partners LLC. She can be reached at *bethany.mcaleer@axenehp.com*.

ENDNOTES

1 American Public Health Association. What Is Public Health? *APHA*, February 2018, *https://www.apha.org/what-is-public-health* (accessed March 28, 2018).

2 Centers for Disease Control and Prevention. The Public Health System & the 10 Essential Public Health Services. *State, Tribal, Local & Territorial Public Health Professionals Gateway*, February 2018, *https://www.cdc.gov/stltpublichealth/publichealthservices/essentialhealthservices.html* (accessed March 28, 2018).

3 Mays, G. P., and S. A. Smith. 2011. Evidence Links Increases in Public Health Spending to Declines in Preventable Deaths. *Health Affairs (Millwood)* 30, no. 8: 1585.

4 Levi, Jeffrey, Laura M. Segal, and Chrissie Juliano. 2009. *Prevention for a Healthier America: Investments in Disease Prevention Yield Significant Savings, Stronger Communities*, 3. Washington, D.C.: Trust for America's Health.

5 Mays and Smith, 1589.

6 Meit, M., A. Knudson, I. Dickman et al. 2013. *An Examination of Public Health Financing in the United States*, 15. (Prepared by NORC at the University of Chicago.) Washington, D.C.: The Office of the Assistant Secretary for Planning and Evaluation.

7 Ibid, 66–67.

8 Ibid, 21–25.

9 Ibid, 66–67.

10 Ibid, 39–41.

11 Ibid, 47.

SOCIETY OF ACTUARIES®

ACTUARIAL CPD TRACKER

Easily Track Your CPD Credits From Your Mobile Device

- Track multiple CPD standards
- Download data to Excel
- Load credits from SOA orders
- Catalog of PD offerings
- Login with your SOA account
- International-friendly

Start tracking today at SOA.org/CPDTracker

Medicare Advantage Star Ratings: Expectations for New Organizations

By Kelly S. Backes, Julia M. Friedman, Dustin J. Grzeskowiak, Elizabeth L. Phillips and Patricia A. Zenner

The Medicare Advantage (MA) program is a government-sponsored program that offers an alternative to traditional fee-for-service (FFS) Medicare where benefits are provided to Medicare beneficiaries by privatized health insurance carriers. The cost of the program is funded in large part by the federal government.

Successful Medicare Advantage organizations (MAOs) maximize federal revenue to provide enhanced benefits and/or reduced premiums to their members, which ultimately improves marketability, with the aim of increasing membership. One of the key levers to increasing revenue is achieving higher star ratings—contracts achieving 4.0 stars and above receive a quality bonus payment (QBP). Organizations considering entering the MA market should be aware of the current star rating climate, as well as short- and long-term star rating and revenue considerations. This article analyzes these considerations and demonstrates there may be opportunity for improvement beyond the current star rating levels for new organizations.

MEDICARE ADVANTAGE STAR RATING SYSTEM BACKGROUND

The Centers for Medicare and Medicaid Services (CMS) monitors each contract's quality and performance by calculating star ratings for up to 48 measures[1] that fall within five broad categories: outcomes, intermediate outcomes, patient experience, access, and process. These 48 star rating measures are aggregated into the following three star rating values:

- Part C, which replaces traditional FFS Medicare Part A (hospital and long-term care services) and Part B (outpatient and professional services).
- Part D, which provides prescription-drug coverage.
- Overall, which is a combination of the Part C and Part D star ratings. CMS uses only the overall star rating when calculating an MAO's revenue.

An overall star rating is calculated and assigned at the contract level as a number from 1.0 (low) to 5.0 (high), in half-step increments. Contracts without sufficient membership are assigned the "Low Enrollment" star rating. Contracts for new MAOs are assigned the "New Contract" star rating for the first three years of operations,[2] with the possibility of having their fourth year star rating calculated based on their own experience, provided there is sufficient membership. For example, an MAO entering the market in 2016 will be assigned the "New Contract" star rating for 2016 through 2018 and will be eligible to receive its own star rating for 2019 if membership is sufficient—the MAO would receive notification of this star rating in the fall of 2017, which is applicable for the 2019 payment year. If there is not sufficient membership, the 2019 star rating would be set to the "Low Enrollment" star rating.

Contracts assigned higher star ratings receive more federal revenue and are able to charge lower premiums and/or offer richer supplemental benefits, both of which are key to attracting and retaining members. It is critical for contracts coming off the "New Contract" star rating to achieve 4.0 stars to retain a QBP. This means operating an active stars management program in the initial start-up years, given the approximate three-year lag between star rating data collection and revenue impact.

CMS benchmarks, which are intended to reflect the maximum amount of revenue CMS will pay an MAO to provide coverage for traditional FFS Medicare benefits, significantly impact the amount of revenue an MAO receives. The federal Part C revenue, as shown in Figure 1, is the sum of:

- The bid, which is the MAO's revenue requirement to provide coverage for traditional FFS Medicare benefits
- The rebate, which is a portion of the difference (i.e., the rebate percentage) between the benchmark and the bid, and is used to fund supplemental benefits

Star ratings affect federal Part C revenue in two ways:[3]

1. Quality bonus payment (QBP): Contracts with 4.0 stars and higher receive a 5% increase in their benchmarks (10% in double bonus counties). Contracts assigned the "New Contract" or "Low Enrollment" star rating will receive a 3.5% increase in their benchmarks (7% in double bonus counties). This increase in benchmark results in higher rebates and total federal Part C revenue.
2. Rebate percentage: Contracts with higher star ratings will receive higher rebate percentages, resulting in higher rebates and total federal Part C revenue.

The 2019 QBP and rebate percentages by star rating are shown in Table 1.[4]

The current distribution of individual MA contracts by 2018 star rating is shown in Figure 2.

There are about 500 contracts in 2018, an increase of 33 contracts from 2017 to 2018. Based on a comparison of 2018 and 2017 star rating data:

- 17% of contracts are considered a "New Contract" in 2018, which is an increase of 5% over 2017.
- 34% of contracts achieved at least 4.0 stars and are eligible for a QBP in 2018, which is a decrease of 4% from 2017.
- 28% of contracts received 3.5 stars and are just below the threshold to receive a QBP in 2018. This is an increase of 5% from 2017.

Figure 1
Federal Part C Revenue for Medicare Advantage

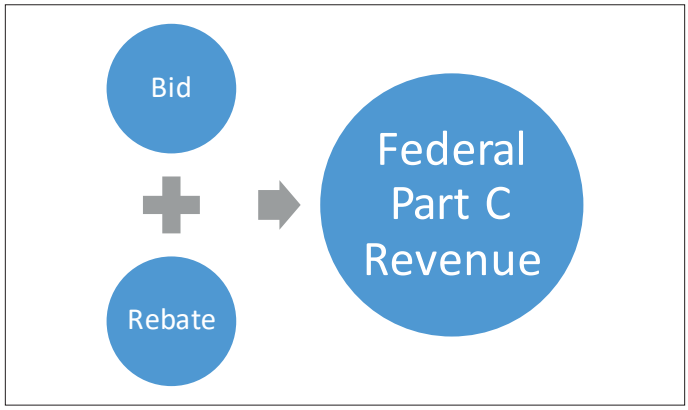


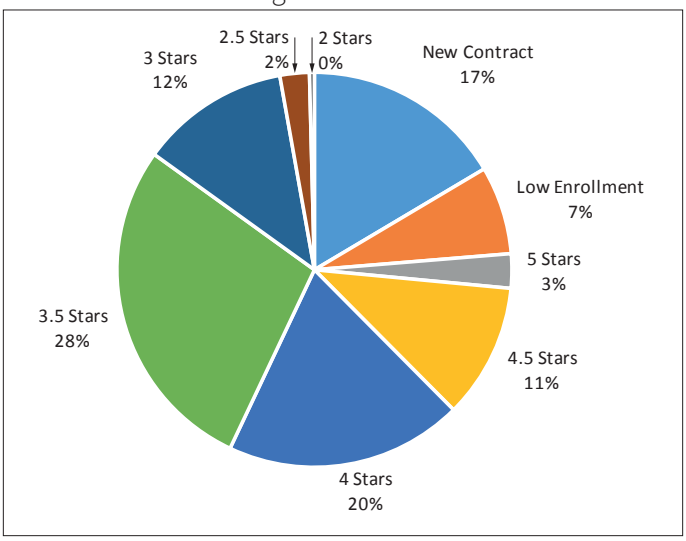
Table 1
2019 Quality Bonus Payment and Rebate Percentages

Star Rating	QBP	Rebate Percentage
4.5 or higher	5% (10% in double bonus counties)	70%
4.0	5% (10% in double bonus counties)	65%
3.5	0%	65%
3.0 or lower	0%	50%
New contract or low enrollment	3.5% (7% in double bonus counties)	65%

METHODOLOGY

We analyzed 2011 to 2018 star rating information released by CMS. We summarized star ratings of MAOs coming off the "New Contract" star rating by duration, which is defined as the number of years after a contract has come off the "New Contract" star rating. These results indicate the current level of star rating performance for new MAOs and the potential opportunity to increase star ratings above historical levels.

Figure 2
2018 Overall Star Rating Distribution



We created a contract-level database containing year, star rating, membership, and plan characteristic information using the following data sources:

- **2011 to 2018 star rating information released by CMS.**[5] We included all individual MA plans and excluded Employer Group Waiver Plans (EGWPs), Prescription Drug Plans (PDPs), Program of All-Inclusive Care for the Elderly (PACE) plans, Cost plans, Medicare-Medicaid Plans (MMPs), and Medical Savings Account (MSA) plans.

- **2011 to 2017 membership information released by CMS.**[6] We used February membership for each year to correspond to the same year's star rating information. We used September 2017 membership information for the 2018 star ratings, as the February 2018 membership was not yet available. Note that any contracts that are new to the 2018 market did not have membership during September 2017 and are excluded from our analysis. Membership was used to quantify the size of a contract.

GENERAL STAR RATING RESULTS

The average 2011 to 2018 star rating for contracts coming off the "New Contract" star rating is 3.48 stars, which is based on 52 contracts. There are also 104 contracts assigned the "Low Enrollment" star rating in the first duration. For contracts with star ratings based on experience, this is 6% lower than the average 2018 star rating of 3.71 stars across all contracts. New MAOs increase their star ratings over time, and the initial 6% gap is closed by about one-half within four years.

For those MAOs coming off of the "New Contract" star rating:

- The initial average star rating of 3.48 stars increased to 3.60 stars in the fourth year.

- The portion of contracts rated 3.5 stars and above increased from 56% in the first year to 63% in the fourth year. This is compared to 80% in 2018 for all contracts.

- The portion of contracts rated 4.0 stars and above increased from 37% in the first year to 40% in the fourth year. This is compared to 44% in 2018 for all contracts.

- The proportion of new contracts rated 2.5 stars and lower decreased from 17% in the first year to just 3% in the fourth year. This is compared to 4% in 2018 for all contracts. This improvement is caused by initially low-rated new contracts increasing their star ratings over time or exiting the market.

STAR RATINGS BY NETWORK TYPE

The 2011 to 2018 star ratings vary by health maintenance organization (HMO) and preferred provider organization (PPO) contracts. The average 3.75 star rating for PPO contracts (12 contracts) coming off the "New Contract" star rating is 8% higher than the average 3.46 overall star rating for HMO contracts (37 contracts).

The gap in the average star rating between HMO and PPO contracts is somewhat reversed over time, with the average star rating decreasing to 3.46 for PPO contracts and increasing to 3.65 for HMO contracts by the fourth year. This results in the average star rating for HMO contracts being 5% higher than the average star rating for PPO contracts in the long term.

Large nationwide MAOs, including PPOs, often focus significant effort early on in developing star rating improvement programs. HMO contracts are more likely to be sponsored by less experienced regional MAOs. This suggests new HMO contracts have an opportunity to achieve higher star ratings earlier, perhaps immediately after coming off the "New Contract" star rating, if they are actively engaged in star rating management early on and are early adopters of industry best practices.

STAR RATINGS BY MEMBERSHIP SIZE

The 2011 to 2018 star ratings vary by membership size. "Large"[7] contracts coming off the "New Contract" star rating achieved an average 3.69 stars, which is 9% higher than the average 3.39 stars for "Small"[8] contracts.

The average star rating for both membership size groups increased with additional years of experience. By the fourth durational year, the average star rating was 3.92 for Large contracts and 3.43 for Small contracts. The difference in star rating between Large and Small contracts increased to 14%.

The observed correlation between higher star ratings and larger membership reinforces the benefits of performing well in the CMS star rating program—higher star ratings generate more federal revenue, which in turn is passed through to the membership in the form of reduced premiums and/or increased benefits, which improves marketability and membership.

BEST PRACTICES AND KEY TAKEAWAYS

Running an effective star rating management program is essential and must be implemented fully across the organization, including engaging vendors in the very early start-up stages, to maximize a contract's star rating and therefore revenue attainment. Some best practices include:

- **Education.** Identify all subcontractors delegated to manage key administrative aspects and ensure they, as well as MAO staff, are familiar with the CMS star rating program and the metrics they are responsible for.

- **Gap assessment.** The assessment should identify gaps, risks, and opportunities to assist in formulating recommendations to move toward a best practice star rating strategy.

- **Strategic and tactical plans.** Potential strategic and tactical approaches should be discussed to close the gaps identified in the assessment, and viable options for a three-year implementation plan should be determined. This includes separately addressing each of the following areas:

  - Corporate leadership
  - Engaging providers
  - Engaging members
  - Readmissions
  - Customer service
  - Healthcare Effectiveness Data and Information Set (HEDIS)
  - Consumer Assessment of Healthcare Providers and Systems (CAHPS) Survey and Health Outcomes Survey (HOS)
  - Appeals and grievances
  - Prescription drugs

- **Business plan implications.** MAOs should consider impacts of future star ratings on their business plans and the reasonableness of achieving higher star ratings in the fourth and fifth years of operation.

Successful MAOs target profitability and membership growth. The key to both of these goals is to optimize revenue. While there are a few levers to increase revenue, one of the most direct ways is to achieve a QBP through attainment of 4.0 and greater overall star ratings. Managing an effective star rating management program is essential and must be implemented fully across the organization and with vendors in the very early start-up stages to ensure the best possible star rating and revenue attainment for new MAOs. ■

Please note the opinions stated in this article are those of the authors and do not represent the viewpoint of Milliman. Kelly S. Backes, Julia M. Friedman and Dustin J. Grzeskowiak are members of the American Academy of Actuaries and meet the qualification standards of the Academy for sharing the information in this article. They relied on information from CMS, which was accepted without audit. However, they did review it for general reasonableness. If this information is inaccurate or incomplete, conclusions drawn from it may change.

Kelly S. Backes, FSA, MAAA, is a consulting actuary at Milliman Inc. She can be reached at *kelly.backes@milliman.com*.

Julia M. Friedman, FSA, MAAA, is an actuary at Milliman Inc. She can be reached at *julia.friedman@milliman.com*.

Dustin J. Grzeskowiak, FSA, MAAA, is an actuary at Milliman Inc. He can be reached at *dustin.grzeskowiak@milliman.com*.

Elizabeth L. Phillips is an actuarial analyst at Milliman Inc. She can be reached at *libby.phillips@milliman.com*.

Patricia A. Zenner, RN, is a health care management consultant at Milliman Inc. She can be reached at *pat.zenner@milliman.com*.

ENDNOTES

1 Based on 2018 star ratings (34 Part C, 14 Part D).

2 New contracts under an existing organization receive the average star rating of the existing contracts under the parent organization.

3 CMS Office of the Actuary (February 1, 2018). Advance Notice of Methodological Changes for Calendar Year (CY) 2019 for Medicare Advantage (MA) Capitation Rates, Part C and Part D Payment Policies and 2019 Draft Call Letter, Retrieved February 12, 2018, from *https://www.cms.gov/Medicare/Health-Plans/MedicareAdvtgSpecRateStats/Downloads/Advance2019Part2.pdf*.

4 The QBP may be reduced, such that the benchmark rate including any QBP is capped at the pre-ACA rate.

5 Part C and Part D Performance Data, *https://www.cms.gov/Medicare/Prescription-Drug-Coverage/PrescriptionDrugCovGenIn/PerformanceData.html*.

6 CMS (June 12, 2012), Monthly MA Enrollment by State/County/Contract, Retrieved February 12, 2018, from *https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/MCRAdvPartDEnrolData/Monthly-MA-Enrollment-by-State-County-Contract.html*.

7 Membership of 10,000 or more.

8 Less than 10,000 members.

The Role of the Actuary in Self-Insurance Released

By Hobson Carroll and Jim Mange

The Society of Actuaries (SOA) Health Section's Self-Insurance Task Force has released its white paper, *The Role of the Actuary in Self-Insurance*.[1] Written by actuaries for actuaries, the white paper identifies and describes the many ways—from advising self-insured plan sponsors to delivering risk mitigation products to self-insured plans—in which actuaries contribute to the self-insurance market for health care.

Self-insurance is, arguably, the single most important approach in the private market to financing health benefits in the United States. The Henry J. Kaiser Family Foundation (KFF) estimates that employer-sponsored health benefit plans cover about 151 million people and that 60 percent of covered workers are enrolled in self-insured plans.[2] And the self-insurance environment keeps changing. For example, the U.S. Department of Labor (DOL) released a proposed rule[3] in January 2018 that would redefine the meaning of "employer" under the Employee Retirement Income Security Act of 1974 (ERISA).

Among other things, the new rule would permit associations of employers (called association health plans) to be treated as employers under ERISA. Such associations could choose to self-insure, expanding the market for self-insurance. A deep understanding of self-insurance—both its upside potential and its downside risks—would enable actuaries to provide wise advice to their principals as the rule is finalized.

The Self-Insurance Task Force was formed in 2017 as a strategic initiative of the Health Section. Its purpose is to provide educational material that fills some of the gaps in the actuarial literature around self-insurance. In so doing, it defines terms commonly used in the self-insurance industry today, noting how some terms may have similar meanings and the same term may have multiple meanings.

Available on the Health Section's webpage, *The Role of the Actuary in Self-Insurance* covers the following:

- At an overview level, how employee benefit plans and stop-loss insurance are regulated from early regulations through to the Affordable Care Act (ACA)
- The differences between fully and self-insured plans, including the advantages and disadvantages of self-insuring
- The decisions that must be made once a plan sponsor has decided to self-insure
- How self-insured plans are managed from plan design and contribution strategy to budgeting and risk mitigation
- Self-insured plan cash flows
- Stop-loss insurance products, features, pricing, reserving and management

It also describes the many intersections between the role of actuaries and those of federal and state regulators.

As co-chairs, we owe a debt of gratitude to the members of the task force: Jeremy T. Benson, FSA, FCAS, MAAA; Kristi M. Bohn, FSA, EA, MAAA, MSPA; Michael A. Kemp, FSA, MAAA; Mehboob A. Khoja, FSA, MAAA; David E. Olsho, FSA, MAAA; Shaun L. Peterson, FSA, MAAA; Nicholas M. Sarneso, FSA, MAAA; Brent W. Seiler, FSA, MAAA; Joseph P. Slater, FSA, MAAA; Gregory J. Sullivan, FSA, MAAA; Dustin D. Tindall, FSA, MAAA; and David Wilson, FSA, FCIA, MAAA. Their writing and review made our jobs so much easier. We also want to recognize Thomas A. Doran, FSA, MAAA, and Karin M. Swenson-Moore, FSA, MAAA, for providing independent peer review. Their thoughtful comments greatly improved the white paper. In addition, we want to thank the Health Section Council, particularly Gregory G. Fann, FSA, FCA, MAAA; Geoffrey R. Hileman, FSA, MAAA; Jacqueline Lee, FSA, MAAA; and Sarah C. Osborne, FSA, FCA, MAAA, for their unflagging support. Finally, we thank SOA staff members Joe L. Wurzburger, FSA, MAAA, and Ladelia Berger for their coordination and advice as the task force pursued its mission. ■

Hobson Carroll, FSA, MAAA, is president and consulting actuary at MedRisk Actuarial Services Inc. in Katy, Texas. He can be reached at *hdc@medriskactuarial.com*.

John I. (Jim) Mange, FSA, MAAA, is president of HRMP LLC and executive vice president of Aran Insurance Services Group in Danvers, Massachusetts. He can be reached at *jmange@hrmp.com*.

ENDNOTES

1 *The Role of the Actuary in Self-Insurance* can be found on the Health Section webpage at *https://www.soa.org/sections/health/health-landing/*.

2 The Henry J. Kaiser Family Foundation. 2017 Employer Health Benefits Survey. *Section 10: Plan Funding*, October 10, 2017, *www.kff.org/report-section/ehbs-2017-section-10-plan-funding/* (accessed March 28, 2018).

3 Employee Benefits Security Administration. Definition of "Employer" Under Section 3(5) of ERISA-Association Health Plans. *Federal Register*, January 5, 2018, *www.federalregister.gov/documents/2018/01/05/2017-28103/definition-of-employer-under-section-35-of-erisa-association-health-plans* (accessed March 28, 2018).

SOCIETY OF ACTUARIES®

475 N. Martingale Road, Suite 600
Schaumburg, Illinois 60173
p: 847.706.3500 f: 847.706.3599
w: www.soa.org

NONPROFIT
ORGANIZATION
U.S. POSTAGE
PAID
SAINT JOSEPH, MI
PERMIT NO. 263