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Accountable Care Organizations— How Actuaries Can Get Involved

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In the first half of 2011, no topic got more buzz among health care providers than accountable care organizations (ACOs). Interest, excitement, anticipation, fear and disappointment all were part of that buzz in a short six-month time period.

At the beginning of 2011, many policy experts saw ACOs as a bright light that would start health care down the road to “bending the cost curve.” Health care executives, already interested in improving their care models, were excited about the possibility of getting bonus payments from the Centers for Medicare & Medicaid Services (CMS) for those changes. Everyone eagerly anticipated the day that CMS defined ACOs by issuing regulations on provisions in the Affordable Care Act of 2010 that established ACOs as part of Medicare.

Proposed regulations were issued on March 31, 2011, and the formerly unknown was now defined, at least in Medicare. But by June, providers’ initial poor reaction to the regulations was so widespread that ACOs were almost back where they were at the beginning of the year—a concept that sounded promising in theory, but still needed to be defined and implemented in the real world.

So if ACOs are still not significantly “more real” than they were at the beginning of 2011, why do actuaries care, and why is it important that they get involved?

Bending the Curve

Actuaries care because ACOs and their cousins, bundled payments and patient-centered medical homes, are today’s leading examples of the kind of care model and payment model reforms that are essential to bending the cost curve. And because successfully bending the curve is essential to the success of ACOs, actuaries will be essential to the success of ACOs.

In our roles as actuaries for health plans or self-insured employers, health actuaries have been the professionals responsible for understanding and projecting total health costs for populations. We have analyzed costs and evaluated population risks, found drivers of cost increases, and projected future costs. When the CEO asks “How can we reduce medical trend?” the actuary often gets the first call.

So the knowledge and skills actuaries have accumulated over the years will be important as ACOs will require a new group—health care providers—to understand and manage total population health costs. Providers will need this knowledge, and actuaries are the best situated to provide it, whether as actuaries for payers entering into ACO partnerships with providers, or as actuaries directly helping providers.

What Are ACOs?

In theory ACOs can take many forms, based on the underlying principle that an ACO is an Organization (group) of providers that agrees to be Accountable for the cost and quality of Care for a group of patients. This group of providers will reorganize themselves and their care processes to reduce fragmentation of care and manage chronic diseases better, resulting in better care for individuals, better health for populations and slower growth in costs through improvements in care.¹

In practice, this means that providers will group together, not necessarily under the same ownership structure but as part of a clinically integrated team, to accept responsibility for cost and quality of care for a group of patients. They will agree to be measured on quality outcomes for the population, and they will get paid based on their cost efficiency in driving these positive quality outcomes, not just based on the volume of services they perform.

¹See Don Berwick, “Launching Accountable Care Organizations—The Proposed Rule for the Medicare Shared Savings Program,” *New England Journal of Medicine*, March 31, 2011. <http://healthpolicyandreform.nejm.org/?p=14106>

They will be paid for this value through bonuses for reduced utilization and cost, in addition to their standard fee-for-service payments, or through global payments that are similar to capitation. These new payments will allow them to perform and get paid for new services, like care coordination, which are not currently reimbursed.

Examples of ACOs

Even with theoretical and practical descriptions of ACOs, the best way to understand ACOs is to learn how specific examples work. For further reading, you can visit the link below to read about commercial pilots such as the Brookings-Dartmouth ACO Learning Network (<http://www.acolearningnetwork.org/what-we-do/aco-pilot-sites>). Also, the end of this article is a detailed description of how ACOs would work under the proposed regulations for the Medicare Shared Savings Program.

Actuarial Knowledge That ACOs Need

The key to success for any ACO will be its ability to successfully manage the health of the population it's responsible for, across the continuum of care. To do this, it will need to use tools that actuaries are very familiar with, having used them for years in their roles with health plans or as consultants to self-insured employers.

Total Cost Analysis

Most providers, even large facilities or multi-specialty physician groups, only know a fraction of a patient's total medical history and cost—what happens to patients inside their organization. But in an ACO, they are accountable for the *total health cost* of a population. Since “you can't manage what you can't measure,” they will need ways to collect cost and utilization data on their patients across the continuum of care, analyze that data, and budget for future costs.

Actuaries, of course, do all of these things today. ACOs need actuaries to directly translate the total cost and utilization summaries, cost driver analysis and cost projections we've done for health plans and self-insured populations to the populations they're responsible for managing.

Predictive Modeling

Over the last decade, actuaries have seen, and even participated in, the development of effective methods to manage a population's health, as health plans and health management companies have worked to provide these services to their clients. We know that these health management programs cost money. A key determinant of whether the program saves more medical cost than its own direct cost is the ability of the program to use predictive modeling tools to identify the patients who will benefit most from interventions.

It will be important for actuaries to help the new ACO organizations understand how to use predictive modeling to manage their populations' health. It will also be important for actuaries to continue to work with clinicians and others, as they have over the last decade or so, to improve predictive models to be even more powerful.

Practice Pattern Analysis

With more coordinated care in ACOs, providers will be able to communicate more easily and often, and learn from each other. This will enable providers to better understand and use the most effective and efficient care patterns when treating patients. An effective ACO can analyze care patterns of its physicians and find out, for example, if certain providers are using high-tech imaging for back pain earlier and more often than is indicated by evidence-based guidelines. It can then offer education and coaching to help the less-efficient providers improve.

Actuaries have been using episode grouper tools for years to analyze the practice patterns of providers in their networks. They've used these analyses to determine which providers should be in the high-performing narrow networks that all the major carriers have developed to offer more efficient care alternatives to their clients. They can help ACOs use these same tools to evaluate providers in their organization.

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Risk Analysis

To be successful, ACOs and providers will need to take on new financial risks that are borne today by payers. Taking on these risks will focus the attention of ACOs on providing the best care that patients need in a cost-efficient manner, rather than driving more procedure volume that may or may not improve health but will definitely bring revenues to the providers.

But even with focused attention on effectiveness and efficiency, the risks providers take on will be, well, risky. One or two unexpected million-dollar cases could change an ACO's income statement from a comfortable profit to a loss.

So to be successful, ACOs will need to understand the new risks that they're taking on, and they will need to develop methods to mitigate those risks so they don't take on more than they can handle. They will also need to be sure they get paid for taking on those risks.

Actuaries are risk specialists. Actuarial modeling can help ACOs understand the possible total cost variation of their populations, simply due to the random nature of adverse medical events. We can help them understand the probability that they will, due to bad or good luck, exceed their budget by X percent or beat it by Y percent. We can also help them use stop-loss insurance or risk corridors to protect themselves from fluctuations caused by large claims or bad luck.

Actuaries Need to Use Their Knowledge to Help ACOs Succeed

The concepts that will make ACOs successful—coordinating care, managing chronic illnesses, using the most cost-efficient evidence-based medicine—are not new. In various locations across the country, at least some providers have been successful with some or all of these, on their own or in cooperation with payers.

But combining many of these concepts together at once and having the provider group at risk financially for the total health cost of a population is new, at least for most of the provider groups that will be forming ACOs.

Actuaries need to be on the front lines of ACO formation, helping payers and providers make good financial agreements and analyze costs well. Without good cost analysis and projection, predictive modeling, practice pattern analysis and risk management—all the strong suits of actuaries—otherwise-successful ACOs are at risk of failure.

Get Involved

Your professional actuarial organizations are making sure that actuarial input is heard. The Society of Actuaries is a member of the Brookings/Dartmouth ACO Learning Network, and the American Academy of Actuaries has written an issue brief² and commented³ on the proposed rule for the Medicare Shared Savings Program (MSSP). But professional organizations can't do the hard work to make sure that actuarial contributions are valued by ACOs. That's up to all of us, working on actual ACO projects and ensuring that they're actuarially sound.

Medicare Shared Savings Program ACOs

Section 3022 of the Affordable Care Act made ACOs part of Medicare by establishing the MSSP. Under this program, an ACO that holds costs for a population below benchmark cost targets, while also achieving quality-of-care benchmarks, can receive shared savings bonus payments from CMS. These bonus payments, along with the opportunity to take better care of their patients, are the motivators for provider groups to form Medicare ACOs.

Who Can Form an ACO?

A group of providers that would like to form an ACO to participate in the MSSP can be an existing integrated delivery system, or it can be independent providers who agree to form an organization for the

²http://www.actuary.org/pdf/ACO_issue_brief.pdf

³http://www.actuary.org/pdf/Acad_on_ACO_prop_regs_060711_final.pdf



purpose of creating an ACO. Under the law, the only hard and fast requirement is that the ACO must have enough primary care physicians (PCPs) to provide care for at least 5,000 beneficiaries.

Beyond the PCP requirement, many different permutations of doctor and hospital groups can form ACOs. The most integrated ACOs would have PCPs, specialists, outpatient facilities, hospitals and home health agencies. But in theory, an ACO could consist of only PCPs, if it could demonstrate the capabilities required of an ACO by the regulations.

If groups of independent providers form an ACO, they can remain independent for other purposes, and do not have to have common ownership. They simply need to form an organization that can carry out the functions of the ACO, and that organization needs to have its own governance structure.

This wide range of possible providers that can form an ACO exists because ACOs will have great flexibility in how they manage the health of their population. The key requirement is that they agree to be responsible for *total* health care costs and quality for the population, even though they do not provide all the care.

Capabilities of a Shared Savings Program ACO

To be accepted into the MSSP, an ACO must complete an application showing its capabilities to achieve the three goals of the Shared Savings Program: better care for individuals, better health

for populations and slower growth in costs through improvements in care.⁴ The application will require potential ACOs to demonstrate a number of capabilities with a fair amount of detail, but a good overall summary of the requirements is that the ACO must be:

- Patient-centered.
- Capable of coordinating care across multiple providers.
- Committed to a comprehensive physician-led quality program.
- Able to save money by effectively managing care and resources.

Population an ACO Will Be Accountable For

Medicare ACOs are defined in terms of the providers who participate in them. Medicare beneficiaries do not enroll in ACOs like they do in Medicare Advantage plans. They are “assigned” to an ACO for purposes of cost and quality measurement, after the year that is being measured has concluded. Since no one knows whether they are assigned to an ACO until after the year, patients are obviously not required to exclusively see providers in the ACO.

An ACO’s assigned population for a year is simply the group of Medicare beneficiaries that receive their primary care during the year from PCPs who participate in that ACO. If patients receive more of their primary care (basically evaluation and

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⁴See Don Berwick, “Launching Accountable Care Organizations—The Proposed Rule for the Medicare Shared Savings Program,” *New England Journal of Medicine*, March 31, 2011. <http://healthpolicyandreform.nejm.org/?p=14106>

Design Element	One-Sided Model (Yrs 1 & 2 Only)	Two-Sided Model
Shared Savings Percentage	Up to 50% of savings over 2% (some exceptions to 2% net), based on quality scoring, if Minimum Savings Rate exceeded	Up to 60% of all savings, based on quality scoring, if Minimum Savings Rate exceeded
Minimum Savings Rate	2.0% to 3.9%, based on population size	2.0%
Minimum Loss Rate	N/A	2.0%
Maximum Shared Savings	Payment capped at 7.5% of ACO's benchmark cost	Payment capped at 10.0% of ACO's benchmark cost
Shared Losses	N/A	Loss percentage times all losses. Loss percentage equals (1 minus Shared Savings Percentage). Losses capped at 5.0% of benchmark in Year 1, 7.5% in Year 2, 10.0% in Year 3.
Extra Shared Savings if FQHCs or RHCs participate in ACO	Up to 2.5%	Up to 5.0%

management (E&M) office visits) from a particular ACO's PCPs than any other provider, their statistics are assigned to that ACO for purposes of evaluating whether they've met their cost and quality targets. It does not matter whether these beneficiaries receive their specialty or facility care from ACO participants.

Shared Savings Payments

An ACO is eligible for shared savings payments if it holds actual costs for a year below targets established by CMS. These cost targets are based on historical fee-for-service costs for beneficiaries who would have been assigned to the ACO based on their PCP utilization in the three years before the ACO agreement with CMS begins. Those historical costs are adjusted for risk (using the hierarchical condition category (HCC) risk scoring method used for Medicare Advantage) and trended forward to the "agreement period" using actual (for historical periods) and projected (for the agreement period) Part A and Part B growth.

If costs come in below the shared savings targets by a large enough margin (2.0 percent to 3.9 percent, based on size), CMS can be confident they were not achieved by chance. CMS will then pay the shared savings payments, or bonuses, based on savings

achieved. ACOs can choose either a one-sided model with only gain-sharing payments, or a two-sided model, where they are responsible for loss-sharing payments in addition to being eligible for gain-sharing payments. The gain-sharing calculations work as shown in the above chart.

Quality Scoring

The shared savings calculation above shows the maximum shared savings payment an ACO can receive. It receives this maximum payment if it achieves the maximum possible quality score across five quality domains with a total of 65 quality measures:

- Patient/Caregiver Experience
- Care Coordination
- Patient Safety
- Preventive Health
- At-Risk Population/Frail Elderly Health

The quality scoring will be based on an ACO's performance against a set of benchmarks that CMS will determine. According to the proposed rule, ACOs would generally achieve between 60 percent and 100 percent of the maximum quality score. ■