The 21st-Century Patient Is More Complicated but the Remedies Don't Have to Be: How Bundles and Other Innovations in Healthcare Payment Are Offering New Promise for Care Delivery

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Principally inspired by the Affordable Care Act (ACA), in May 2018 United Healthcare announced its intent to expand its spine surgery bundled payments program from 28 markets to 37 markets. United Healthcare has seen a 22 percent decline in readmission rates, a 17 percent reduction in complication rates, and cost reductions totaling approximately $3,000 per case in the spine surgery population after implementing bundled payments. These findings are not unique, in fact they are very consistent with the growing body of literature to support bundled payments as a viable alternative to fee-for-service, which is costly and incentivizes duplication and waste. Additionally, later this year hundreds of hospitals and doctors will commence participation in the Centers for Medicare and Medicaid Services' Bundled Payments for Care Improvement Advanced program. Employer sponsored bundled payment programs continue to evolve with both national and regional employers.

Was the goal of the ACA to free up $1 trillion dollars for tax reforms? Was the goal to improve access to care by providing universal healthcare coverage for all Americans? Or was the goal to make healthcare better?

In America the average life expectancy is 80-plus years, nearly 30 years longer than a century ago. Medical progress in the United States has been undeniable. We have reduced infant mortality rates twenty-fold and we tackled the biggest killer of women—child birth, virtually eliminating child birth-related deaths over the last century. Similarly in the area of payment reform, between 2012 and 2016 the percent of CMS payments to providers caring for patients in Alternative Payment Models (APMs) went from 0 percent to 30 percent, representing $200 billion dollars.[1] Despite this progress and paying nearly double than other wealthy nations for healthcare, in 2018 health outcomes are still unreliable at best. In fact, medical errors today represent the third leading cause of death in the United States after heart disease and cancer.[2]

While we are often quick to point to the complexity of the U.S. healthcare ecosystem as the root cause, it doesn't fix the fact that two million Americans will get a hospital-acquired infection this year. It also doesn't fix our lack of understanding as healthcare providers of just how addictive opioids are, which has been a major factor contributing to the opioid epidemic in America.

While there are major areas where we have made progress, the great opportunity today for board members and senior executives is to support and resource efforts that augment front-end discovery with systems innovation and the science of process engineering on the back end.

What Did We Learn from the Affordable Care Act?

As it turns out, what we have learned thus far is that having a regular source of healthcare, at about the five-year point, begins to have a significant and positive impact on reducing mortality rates, improving survivorship, and improving overall health. We learned that a consistent source of care is critical to how healthcare creates its value in the 21st century.

We also learned, thanks in large part to the ACA, the immediate positive impact of transparency and access to data that gives us the computational power to discover what we can do today from a health prevention standpoint that would benefit patients in five, 10, and 20 years.[3] As a result of the work of the Center for Medicare and Medicaid Innovation (CMMI), which was funded by the ACA, 30 percent of Medicare patients are being cared for by doctors and nurses who are incentivized to keep patients out of hospitals and emergency rooms. This represents a fundamental change from the traditional fee-for-service construct, which incentivizes unnecessary and sometimes harmful testing and treatment. Because providers had more access to patient data, early findings show that patients in value-based care models had lower readmission rates, lower mortality rates, and lower total cost of care. In addition, the level of patient engagement as a result of data transparency is unprecedented. Patients now represent the fastest-growing user group of electronic health records (EHRs) in the United States.

What is less clear today are the long-term consequences of high-deductible health plans and the choices patients in these high-deductible plans make to forego taking their medication and seeing their primary care provider. While seemingly a good idea for some (namely the 20-something healthy Americans), high-deductible health plans have surfaced a growing trend where a subset of patients have $2,000 to $3,000 deductibles and are limiting sometimes necessary and important care.

What's Really Going On?

In the United States, we have over 60,000 different diagnoses, more than 6,000

Key Board Takeaways

For board members, it is important to understand what a smart bundled payment strategy looks like which means asking better questions, such as:

- Do we have a bundled payment strategy?
- What evidence do we have that it is working? Is care delivery improving? Are costs going down? Are we making money?
- Are physicians leading the effort and engaged in the work?
- Do we have the technology to scale our efforts with employers and commercial payers?
- Are we getting better at managing total cost of care, and if so, how do we know that?
- What percent of our reimbursement portfolio should be comprised of new payment models?
- Are patients engaged?

1 Centers for Medicare & Medicaid Services (CMS), "Alternative Payment Models (APMs) Overview," 2017 (available at CMS.gov).
2 Martin Makary and Michael Daniel, "Medical Error—The Third Leading Cause of Death in the U.S.," *BMJ*, 2016.
3 Deirdre Baggot, "The Bundled Payments for Care Improvement Program: A Hospital Analysis," *Becker's Hospital Review*, February 2013.

drugs, and more than 4,000 surgical techniques and procedures that we are attempting to deploy regardless of one's ability to pay. In any given city, providers typically receive payments from as many as 60 or more payers all paying completely different. And for patients with a chronic condition, the current system is so administratively burdensome that patients report feeling overwhelmed with the number of bills they received each month.[4] Fee-for-service isn't just expensive and unreliable, it is exhausting—for patients, physicians, and nurses.

The Evidence

With a bundled payment, one single payment is made for all of the care and services related to a specific clinical episode or condition. While bundled payments as a viable alternative to fee-for-service has been under investigation for more than 30 years, most studies in this reimbursement model have been in the areas of cardiac and orthopedic elective procedures due to their high overall total cost of care.[5] Largely influenced by the ACA, over the last five years we have seen both private payers and employers broaden their interest beyond elective procedures to include oncology care, post-acute care, and chronic disease bundles.[6] There has also been an increase in the number of studies in chronic diseases such as diabetes, asthma, and congestive heart failure, as well as oncology, maternity, and pediatrics.[7]

Assessing Areas of Organization Vulnerability in the Run to Risk

The five most common areas of vulnerability for healthcare organizations include the following.

1. Physician Engagement

While many hospitals and health systems have very strong relationships with their medical staff, one cannot assume that this is the case. The quality of your relationships with physicians will predict your level of success with managing bundles, ACOs, or any APM. When physicians are not engaged, nothing changes and silos will continue to drive a care delivery model predicated on waste, duplication, and mediocre clinical outcomes.

2. Big Data and Complex Analytics Necessary to Manage Total Cost of Care

In April 2018, CMS announced that, in its continued efforts toward data transparency, it would be making Medicare Advantage data publicly available in much the same way it has over the last few years with Medicare fee-for-service data. CMS has released more data in the last three years than it has in the 30 years prior in an effort to help providers understand how to begin to manage populations over time. However, while the physical world is three-dimensional, most patient data remains trapped in two-dimensional pages and screens. This gulf between the real world and the digital world prevents doctors, nurses, and patients from exploiting the volumes of information now available to us.

In the near term, a lack of ability to provide physicians and other care team members with information to make decisions at the point of care is a gap for many healthcare organizations. For example, information regarding cost and clinical variation at a provider level is often a big ask for hospital analytics teams, and more than 90 percent of the time it's a manual data pull that may take weeks to complete. Like it or not, physicians today who are trying to do the right thing for their patients don't learn of the patient's outcome until many months after the patient has gone home. The feedback loop is typically one year in most cases. There are a number of vendors (some better than others) that, for a fee, may either sell you their solution or do knowledge transfer and help you build this competency. Giving physicians bad data is worse than giving them no data, so in this area it is better to go slow and get it right while you build this competency. The end game is building competency to predict and prevent clinical variation. Risk mitigation is not defined as having it all figured out—instead it is about clear progress in building competency over time.

3. Pervasive Need for Care Transformation

Often within the same medical group the process for prepping a patient for surgery can be radically different. There is a pervasive lack of understanding when it comes to systems innovation across healthcare. While technology, AI, telemedicine, apps, and other solutions will help, there are some very simple fixes that need to occur in terms of standardization that will enable your success, such as showing physicians their data compared with their internal peer group in an effort to reduce clinical variation, adding metrics to service line report cards related to cost and clinical variation, updating your order sets and protocol to reflect 21st-century medicine, being more prescriptive with discharge ordering, setting expectations with patients around post-discharge care, and patient engagement with respect to medication adherence and ER avoidance. Small fixes can net big returns.

4. Infrastructure and Competency in Managing Care Transitions

There are two major phenomena that make transitions of care challenging and risky both clinically and financially that most organizations are still trying to figure out. First, the post-acute care workforce is largely under-educated and we have not done enough to support their knowledge development. Second, EHRs are largely non-existent in the post-acute care environment, which at least in part contributes to unnecessary return visits to the ER. Add to that the fact that leadership roles historically turn over much more rapidly in the post-acute care environment as compared with acute care, which can impede systemic and sustainable change that is so needed in many post-acute care facilities. Making sure your post-acute care partners have the tools necessary to manage total cost of care is important to assess at the outset. If your post-acute network is still under construction, it may make sense to select a population with fewer or no care transitions at the outset and dial up clinical complexity as your network and infrastructure allow for.

4 Margarida Azevedo, "Pilot Program to Help CF Families Navigate Care Systems Reports Initial Success," *Cystic Fibrosis News Today,* April 29, 2016.

5 Deirdre Baggot and Cleo Burtley, "Bundled Payments: How Seemingly Small Innovations in Care Delivery Can Lead to Big Financial Rewards," *BoardRoom Press,* The Governance Institute, April 2013; Peter S. Hussey et al., *Bundled Payment: Effects on Health Care Spending and Quality: Closing the Quality Gap: Revisiting the State of the Science,* Evidence Reports/Technology Assessments, No. 208, Agency for Healthcare Research and Quality, August 2012.

6 CMS, APMs Overview, 2017.

7 Laura A. Dummit et al., "Association between Hospital Participation in a Medicare Bundled Payment Initiative and Payments and Quality Outcomes for Lower Extremity Joint Replacement Episodes," *JAMA,* September 27, 2016; CMS, "Notice of Proposed Rulemaking for Bundled Payment Models for High-Quality, Coordinated Cardiac and Hip Fracture Care," 2016 (available at CMS.gov); CMS, "Episode Payment Models: General Information," 2017 (available at CMS.gov); CMS, APMs Overview, 2017.

5. The Ability to Influence
This work requires administrative and physician leaders who are visionary and who have influence with their peers. All too often I see physicians for whom leadership is their "Plan B" volunteering to lead this work. You need senior administrative leadership who can remove barriers and break down silos and you need a physician who has broad influence (ideally still practicing) in the organization, as every department from IT to revenue cycle to care management will be critical to your success.

The purpose of identifying risks is to guide you in your planning so that you prioritize improvements in the five areas of risk identified above.

> "What does it even look like to be agile at scale with bundles or risk-based reimbursement?"
> *—CEO, Academic Medical Center, East Coast*

Implementing Bundles

Big Gains with Relatively Simple Fixes

Why is it that while some organizations seem to be drowning in the complexity of knowledge that exists today, others are making big gains with relatively simple fixes?

Since 2012 with the launch of CMS's largest test of bundled payments, hundreds of organizations have learned first-hand the powerful cultural shift that occurs as a result of implementing new payment models. Qualitative and quantitative analyses of programs succeeding with bundles reveals several key similarities among participating sites.

Keep it simple. The population, strategy, approach, plan, execution, and evaluation should be as straightforward as possible while you scale up your competency to manage clinical and actuarial risk. Keeping it simple also applies to the population under consideration. The most predictive factor in managing total cost of care for an episode or patient or population is the number of care transitions. Patients who are cared for at home pose much less clinical and actuarial risk as compared with patients who access post-acute care.

Take an accurate diagnostic of your organization's strengths and weaknesses. When it comes to managing clinical and actuarial risk, having a good understanding of strong and weak areas will inform your path forward. Most organizations think they understand where clinical and cost variation exists but struggle to get after the *why* of clinical and cost variation. The winning strategy is to deeply understand what your organization is good at or find out who is good at whatever it is that you aspire to be. The diagnostic informs what is needed or missing and ultimately informs the care model necessary to drive superior quality and ensure your success with APMs.

Be smart about the investment. Both over- and under-investing have their consequences. A strategic approach to outpacing Goliath requires smart investments, given the real truth that technology is not there yet and EHRs have not been the panacea we all thought we were buying. Having studied more than 60 value-based payment technologies and solutions over the last 10 years, my assessment is that most are still in the MS-DOS phase of their evolution. Telemedicine, apps, care redesign, and the infrastructure to manage big data tend to be the areas of investment most organizations make at the outset. Make sure your investment makes sense for the market and the population under consideration.

Consider strategic value partnerships. There are several areas today where strategic partnerships are the difference between rapid market entry and new revenue growth and the alternative. The number one cause of death both in the United States today and the world is high blood pressure. One billion people worldwide suffer from hypertension and yet only 14 percent of individuals with high blood pressure have it diagnosed and under control. The medications that control high blood pressure have been around for decades and cost pennies on the dollar. However, with few exceptions, our delivery system has one way in which you can control your blood pressure: make an appointment and go into a physician's office for an in-person visit with a provider. In most cases, this is the only way the provider will work with you. Does a doctor really need to be involved every few weeks or can a patient text with his or her nurse or health coach to manage this condition?

Evaluate your strengths and gaps with respect to managing total cost of care. For example, what partnerships are needed for your organization to better manage the cardiac population? What technologies, systems innovation, analytics, contract management, and care management solutions or partners would give you speed to market?

The volume of knowledge and skill in healthcare and medicine today has exceeded human capability. You simply can't know it all, which is why the role of Alexa, AI, and other emerging system innovations offer new hope for improving health outcomes in America. While technology continues to emerge, doctors, nurses, social workers, and health coaches—who figured out long ago that computer systems don't break down silos—are identifying their gaps, finding partners, and quietly dividing and conquering, causing a revolution along the way.

Make sure patients are empowered and accountable co-creators of their health experience. Measuring and delivering what an empowered patient truly wants and needs hasn't been something providers have been very good at historically. In any value-based care model, the ways in which providers have engaged (or *not* engaged) with patients in the past makes for an untenable path forward. A hospital in Boston, against the guidance of its legal counsel, pioneered the concept of "Open Notes" whereby patients were allowed full access to read and edit their medical record. The findings have surprised many administrators and providers. Patients are more engaged, and these highly engaged patients have assisted in the reduction of medication and other errors in their EHR.

Put in the hours and follow the evidence. For several years, I have written about the importance of following the evidence when it comes to bundle selection. Programs that are succeeding first and foremost are doing so because they have committed the time and resources to building the muscle necessary to manage total cost of care for a bundle. Selecting bundles and APMs that have been well studied and are well supported will ensure that your move to risk-based care delivery won't break your organization.

Recently I read an article where the author categorized several disease conditions based on "high risk" and "high reward." The author put forth, for example, that sepsis is an episode of care that is both high risk and high reward. But sepsis is only high risk given its low price point, relatively small sample size for most organizations, and the complexity of the patient. In addition, the literature to support that bundles work in the sepsis population is nearly nonexistent. Alternatively, the impact of primary care on reducing unnecessary readmissions in the congestive heart failure

population is clear. Make certain that your approach to new payment models is evidence-based.

Manage big data. We will see our biggest area of system innovation over the next 10 years as a result of new access to information and better tools with which to make clinical decisions. Big data's impact is undeniable in value-based care and building the competency to manage big data is a strategic imperative today. One huge benefit of participating in pilots with public and private payers is the unprecedented access to data and the ability to get smart about managing risk. While there are many vendors that will sell you a solution to manage big data, with few exceptions, most are still in the MS-DOS phase of evolution.

Trust the algorithm. Underpinning every successful bundle is an algorithm. A checklist. A playbook for delivering a reproducible cost and quality outcome. Organizations that are succeeding with bundles and/or population health management are *not* doing so by "trusting their gut." They are evidence-based, protocolized, highly reliable environments where the patient's voice is heard the loudest.

Demand destruction. Yes, it's true, we are getting better at readmission avoidance and getting better at avoiding duplicative testing and treatment. Yes, there will be demand destruction, but if we are really honest, it is not revenue we want anyway. We want revenue from taking the best care of patients and giving them only what they need and nothing that they don't need for their whole life. Demand destruction will hit skilled nursing facilities, inpatient hospitalizations, inpatient procedures, diagnostics, and therapeutics the hardest. Smart leaders don't have their head in the sand, they are facing demand destruction head on. They are planning for it, budgeting for the revenue loss related to continued outmigration of orthopedics and backfilling the revenue loss with a value-based business model that brings new value to a marketplace. Payers don't actually care where you reduce cost or waste; that is for your team to determine and get after.

Prioritize and Focus

The board needs to understand that the only way to succeed with managing total cost of care is with adequate focus. Healthcare organizations that are thriving are doing so because leadership has given this the priority and focus that it deserves. Organizations that have not done well with managing total cost of care have not committed to the work at hand. Payment reform offers the opportunity to reconceive your business model.

The healthcare landscape today poses both complex challenges and tremendous strategic opportunity to pioneer new ways of delivering healthcare value. If industry transformation requires anything of board members and senior executives, it is focus. The onus is on you to help your hospital or health system make strategic decisions that best enable a future where your organization is able to manage total cost of care for a population and do it well. What those hospitals and doctors who signed on to test bundles with CMS and other payers have found is that by narrowing their focus, breaking down the problem into manageable parts, and getting help where needed they are perfectly capable to tune their systems to get better results and it doesn't have to be some complex remedy.

The Governance Institute thanks Deirdre M. Baggot, Ph.D., M.B.A., RN, Healthcare Payment Policy Expert; Former Lead, Acute Care Episode (ACE) Demonstration, St. Joseph Hospital in Denver, Colorado; and Former Expert Reviewer, Bundled Payments for Care Improvement (BPCI), Centers for Medicare and Medicaid Services, for contributing this article. She can be reached at Deirdre.Baggot@ucdenver.edu.

The APM No-Go Zone

While I acknowledge the research and innovation necessary to scale Alternative Payment Models, having implemented new payment models in more than 200 organizations with employers, commercial payers, and public payers over the last 10 years, I believe we have an obligation to be smart with how we go about investigating alternatives to fee-for-service. My no-go zone includes:

- **Small populations.** It doesn't matter how interesting the idea is. If you don't have enough of a sample size to distribute the risk, everyone loses. Ideally a population of no less than 150 patients per year is my threshold for ensuring adequate consideration of the actuarial risk, and in chronic disease the number of cases necessary may be even higher.
- **Gaps in clinical performance.** Given the retrospective nature of data, gaps in quality performance take 12–18 months to fix, no matter if the root cause is process or outcome related. So while you may believe you have resolved your high readmission rates in a particular population, you must plan for payers to not see it for up to a year or more in many cases. A better strategy is to put the population on an evidence-based protocol and validate that indeed the gap in clinical performance is a thing of the past and only *then* take risk.
- **Low price point.** Taking clinical and financial risk will require investments in care redesign, telehealth, care navigation, claims analysis and reporting, etc. This is not about a race to the bottom. Taking on financial risk assumes that you can provide not only a better clinical outcome but also a better cost outcome. Building agile models to scale requires the courage to move beyond historical cost-shifting exercises and be willing to pay for and value the importance of gold-standard care redesign and care management. If payers aren't willing to pay for care management, most chronic disease DRGs, for example, will likely be too low a price point for a bundle and would be better managed in a per member per month (PMPM) construct.
- **Unnecessary actuarial risk.** Doctors don't like to lose clinically or financially. Particularly early on, it is mission critical that care teams are able to be successful both financially and clinically. Most executives and clinicians believe that they can "do better" than their historical performance and better than their competitors. If the population is losing money today, go fix that problem first. In my experience, hospitals and doctors have a low tolerance for losing money or owing money. Therefore, make sure that you are stacking the deck in your favor at the outset as much as possible. You can always scale up complexity once you have a foundation of success from which to build on.
- **Lack of physician support.** New payment models should be a tool to further integrate clinically with your medical staff. The work necessary to drive the clinical redesign is real and requires physician leadership, enthusiasm, and engagement. You can't scale care redesign without real physician engagement.