Maximizing Value through Bundled Payments

Bundled payments encourage partnerships to help providers share accountability, integrate patient care, and maximize value across the continuum.

As systems across the globe continue to implement value-based health care approaches to improve the quality and cost of care, the push for transitioning away from the current volume-based payment model has never been stronger.

Health care industry leaders agree that changing the way we pay for care is one of the biggest obstacles health care systems face today. However, two promising methods of payment reform that many payers are entertaining—capitated payments and bundled payments—are constructed in inherently different ways and will lead us down two very different paths.

The capitation model, though well-meaning, ultimately falls short in the transformation to true value-based care. In these arrangements, providers are only held accountable for overall cost and population level quality measures, not on the outcomes of individual patients based on each patient’s specific condition. This model leads providers to focus on broad high-cost areas, encouraging consolidation rather than integration and alignment across health systems. In turn, this limits patient choice and threatens competition and innovation in care delivery.

We believe the bundled payment approach is a superior model for creating and delivering value in health care. In this model, payments are contingent on achieving the outcomes that matter most to patients for each condition. The bundled payment covers all the services and facilities that are involved in treating a patient’s condition over the full episode of care. It provides strong incentives for health systems to create integrated, multidisciplinary care teams. Additionally, it encourages providers to form partnerships to better leverage existing services and technologies, and develop new solutions, to support a value-based environment for delivering care.

At Medtronic, we are committed to working with the global health community and forming meaningful partnerships to improve outcomes and better manage costs for the system. We believe that our technologies, services, solutions, and expertise we offer can play a significant role in a provider’s transition to a bundled payment model.

We’re introducing new value-based health care business models in several of our therapy solutions areas—including diabetes and cardiovascular—with the goal to expand into more.

As we move forward in this new and exciting era of transformational health care, we are collaborating and forming partnerships with like-minded leaders to accelerate the adoption of value-based health care models that ensure better patient outcomes, reduce costs, and deliver value.
OVERVIEW

While there are many uncertainties surrounding U.S. health care policy in the short term, what is certain is the continuing transformation from a fee-for-service payment approach to a more value-based approach. As health care costs continue to rise, a value-based approach is essential to align payment with clinical incentives to deliver better outcomes and lower costs. The adoption of alternative value-based models is growing in both government and private/commercial programs.

Of particular interest are bundled payment approaches—a single payment that covers all care required to treat a specific medical condition. A bundled payment is contingent on achieving condition-specific outcomes, and needs to be risk adjusted for more complex patients. Bundled payments encourage providers to focus on specific conditions, set the stage for the delivery of more integrated care, and stimulate more entrepreneurial approaches for delivering better outcomes and value for specific medical conditions.

Medtronic has fully embraced the concept of value-based health care and has developed a framework for pursuing value-based opportunities, which includes identifying specific patient cohorts, defining and baselining outcomes, and developing a sustainable business model. Medtronic is leading the way in gaining experience with value-based models in multiple geographies and disease states.

CONTEXT

In recent years Harvard Business Review has increased its focus on health care. Health care leaders face major challenges around strategy, management, talent, costs, revenue, and organizational
culture. As part of increasing this new focus, HBR launched an online Insight Center: Innovating for Value in Health Care. This Insight Center, sponsored by Medtronic, has explored global innovations and best practices for improving patient outcomes while reducing costs, with contributions of content and ideas from more than 90 countries.

At a recent private HBR and Medtronic forum on value-based health care, Medtronic CEO Omar Ishrak and other senior Medtronic leaders, along with professors Robert Kaplan of Harvard Business School and Mark McClellan of Duke University—who formerly led the U.S. Food and Drug Administration and the Centers for Medicare and Medicaid Services (CMS)—discussed the shift underway to value-based health care. They analyzed the current health care policy landscape, described the key steps to create a value-based health care system, and shared Medtronic’s perspective on creating impact through value-based health care.

**KEY LEARNINGS**

**U.S. Health Care Policy Outlook**

People are living longer, better, healthier lives largely due to medical technologies. Consider that heart disease mortality rates have fallen by more than 60 percent in the past 50 years, and there has been a 20 percent reduction in the death rate from cancer in the past 25 years. HIV—which was once fatal—is now a manageable chronic disease. With gene therapies, cellular therapies, precision medicine, IT and analytics, and breakthroughs in devices and drugs, even further progress in most diseases is expected.

However, as people are living longer and better lives, spending on health care has risen. In the United States, total health care spending is approaching 20 percent of GDP, which is not sustainable. In the mid-1970s, federal government spending on health care programs (mainly Medicare and Medicaid) was 1 percent of GDP. Today it is 5 percent of GDP and could reach 8 or 9 percent within 20 years. As spending on health care increases, the portion of government spending on education, infrastructure, and social programs decreases.

Also problematic are disparities in health and life expectancy among different socioeconomic groups, and the growth in the prevalence of chronic diseases like heart disease and diabetes. These issues show that medical technology by itself is not the main determinant of overall population health; macro policies also play a key role, and fundamentals will drive policy.

“It’s increasingly important to find ways to bring down costs and avoid unnecessary spending but at the same time continue to support innovation.”

**MARK MCCLELLAN, DUKE UNIVERSITY**
At the time of this writing, Republicans in the U.S. Congress were introducing legislation to repeal and/or replace the Affordable Care Act (ACA), while trying to keep the health insurance markets stable and avoid disruptions for those with insurance coverage. The specifics of the legislation are already the subject of intense debate, and changes are not likely to take effect for a few years. Regardless of what occurs in repealing and replacing the ACA, a fundamental long-term shift in policy is underway relating to value-based payment reforms. There is growing adoption of alternative payment models that more closely align payment with better and less costly care. This includes changing how physicians are paid, encouraging care in lower-cost care settings, using more coordinated team-based care, and providing better support for social services and nonmedical interventions that can reduce complications and costs.

“There’s steadily growing adoption of new payment models that seek to align the financing of health care with the goals of better outcomes and lower costs through improving clinical care pathways and the ways that patients are treated in other respects.”

MARK McCLELLAN, DUKE UNIVERSITY

McClellan co-chairs the Health Care Payment Learning and Action Network (LAN), a public-private collaboration with CMS. LAN has categorized payments as: 1) fee for service with no link to quality and value; 2) fee for service with a link to quality and value; 3) alternative payment models built on a fee-for-service architecture; and 4) population-based payment. LAN is seeing a great deal of movement into categories three and four, where payments are based on good outcomes and lower costs.

To date, all shared savings have been shared with providers, with no savings shared with beneficiaries. This could change in the future, with structures that incent and reward beneficiaries for helping achieve better outcomes and lower costs.

Efforts to shift from a fee-for-service to a value-based system are not easy, and involve more than just implementing a new clinical model. New organizational capabilities and competencies are needed in addition to undertaking cultural changes.

Types of alternative payment models with accountability for patient results are typically episode-based and person-based approaches.
### EPISODE BASED

Payment linked to quality and cost for a specified episode of care

**EXAMPLES:**
- Elective procedure episodes
- Hospital admission episodes
- Diagnosis-based episodes (like pregnancy or back pain)
- Chronic disease episodes

### PERSON BASED

Payment linked to quality and cost for a specific population

**EXAMPLES:**
- Accountable care organizations (ACOs)
- Medical home with population health accountability
- Comprehensive care for high-risk patients
- Specialty-based care teams with accountability
- Capitated care with population health accountability

Currently, the largest segment of alternative payment models are ACOs, which started as shared savings programs. ACOs don’t necessarily involve big, fully integrated systems; a majority of ACOs in Medicare today are primary care groups. Much of the attention paid to ACOs has involved Medicare ACOs, which are being expanded. However, most of the ACOs today are in the private sector. As a result of government (Medicare and Medicaid) and private sector activity, an October 2016 LAN survey found that 25 percent of payments to providers are now in programs where some part of the payment is tied to episode- or person-level results. Among the potential new areas of emphasis are reforms through and in conjunction with private plans.

### Defining Value

Harvard Business School professor Robert Kaplan argued that the central goal in health care must be value for patients. Kaplan, in working with Harvard professor Michael Porter, has defined value as health outcomes that matter to patients relative to the costs of delivering those outcomes.

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\text{Value} = \frac{\text{Health outcomes that matter to patients}}{\text{Costs of delivering the outcomes}}
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Kaplan and Porter have asserted that the relevant unit of analysis for creating and measuring value is the treatment of a patient’s medical condition over a complete cycle of care. Measuring value requires analyzing:

- The **full set of patient health outcomes** over the care cycle
- The **total costs of resources** used to care for a patient’s condition over the care cycle

Thus, calculating value requires being able to measure health outcomes and calculate costs in a consistent, systematic way.
“I want to be very clear on our definitions about what we mean by the outcomes and costs, because moving to value-based health care builds on these foundational definitions.”

ROBERT KAPLAN, HARVARD BUSINESS SCHOOL

Creating a Value-Based Health Care Delivery System

Kaplan offered four steps for creating a value-based health care system.

1. **Organize multidisciplinary teams around the patient’s medical condition.** A value-based delivery system requires reorganizing how care is delivered. Instead of delivering care in a disorganized, fragmented way where patients bounce between specialists like a ball in a giant pinball machine, care delivery is organized around the patient. It is provided by focused multidisciplinary teams, such as a team specifically focused on care for a patient with diabetes.

2. **Measure and communicate outcomes by medical condition.** Today, much of what is measured in health care are process and compliance measures, which are necessary but not sufficient. In value-based health care, measures must focus on outcomes specific to the medical condition being treated. These include outcomes from the patient’s perspective, such as measures of clinical status (such as mortality and functional status), measures of the patient’s experience during the care cycle (such as how difficult it was to access the system, amount of pain and discomfort, and time to recover), and measures of the patient’s sustainability of health (meaning the long-term consequences of their therapy). The specific measures will differ based on the patient’s medical condition.

   To measure value, not only is it necessary to agree on the outcomes to measure for each medical condition, but it is necessary to understand what outcomes are achievable, based on the medical condition and a patient’s risk factors.

3. **Measure and improve costs by medical condition.** It is possible to accurately measure costs at the medical condition level by mapping all of the interventions provided in a cycle of care, determining how much time of each resource is required, and knowing the cost of that resource. When the amount of each resource used in a cycle of care is known and the cost of that resource is known, it is possible to calculate the total cost of a cycle of care.

4. **Develop bundled payments to compensate providers for treating the medical condition.** A bundled payment is a single payment that covers all care required to treat a patient’s medical condition. The payment will differ for different subsegments, such as diabetic or heart disease patients. A bundled payment has to be contingent on achieving condition-specific outcomes, and needs to be risk adjusted so that providers receive higher payments for taking on riskier, more complex patients. There must be limits of responsibility for unrelated conditions and stop-loss provisions that mitigate against outliers and catastrophic events.
Kaplan and Porter like bundles because the bundles impose accountability on providers at the medical condition level. Bundled payments drive integrated care and stimulate competition to deliver better outcomes and value for specific medical conditions. The idea is that patients can choose where to get treatment, and would choose providers with the best outcomes and value for a particular condition.

Concerns about bundled payments include cherry-picking by providers of healthier patients, which can be addressed through risk adjustments, and an increase in the number of bundled procedures, which could drive up costs. This would need to be addressed through appropriate use criteria. Providers have raised concerns about being held accountable for outcomes even after a patient leaves their care, but the approach may drive providers to become more entrepreneurial in figuring out how to partner, align, and influence other resources that aren’t directly controllable in order to achieve better outcomes.

“Bundles will foster collaboration among providers—internally and externally—and with suppliers, to deliver integrated care that produces better outcomes for patients.”

ROBERT KAPLAN, HARVARD BUSINESS SCHOOL

Impact and Opportunity

Medtronic’s chairman and CEO Omar Ishrak and SVP and chief scientific, clinical, and regulatory officer Rick Kuntz described how Medtronic is thinking about creating impact and shared Medtronic’s framework for achieving value-based health care.

In considering how to create impact in a value-based world, Medtronic assesses potential opportunities by answering three specific questions:

1. **How clearly is the desired outcome defined and is it measurable?** The entire value-based journey is about being paid for outcomes as opposed to being paid for an activity. This makes it necessary to ensure that the desired outcomes are very clearly defined and are clearly measurable.

2. **Is the cohort clearly identified?** The outcomes are only as precise as the patients being addressed. For this reason, it is necessary to use statistics to narrow down the total population to a specific, well-defined, meaningful cohort.

3. **What are the variables and factors involved in producing outcomes for the cohort?** If the outcomes and cohort are clear, it is necessary to understand the care pathway, understand how easy or hard this pathway is, know how many people or partners are required, and determine the key variables and factors in achieving the outcomes. The goal is to try to understand all of the variables that can be controlled or influenced, and align the parties involved in the care pathway to work toward achieving the outcomes.
“Are you clear about the outcome? Can you measure it? Do you know who it is meant for? And how many people are involved in getting there?”

OMAR ISHRAK, MEDTRONIC

Along with these strategic considerations, Medtronic has developed the Medtronic 7-Step Value-Based Health Care Framework™ for achieving value-based health care. The idea is to have a common framework for Medtronic to evaluate potential value-based health care efforts with partners as opposed to pursuing one-off processes for different products and solutions. This framework applies to the following categories of bundled care offerings: therapy optimization, episodic care, and chronic care management.

The way Medtronic sees it, successful approaches should include:

- Selecting a disease or condition to focus on
- Developing relevant patient cohorts
- Defining outcomes measures that are meaningful to patients
- Defining the time frame
- Quantifying baseline outcomes and costs
- Determining performance and cost objectives
- Developing a business model

**EXAMPLE: TYRX™ ABSORBABLE ANTIMICROBIAL ENVELOPE**

Simple value-based health care model with meaningful impact

A subsegment of patients with pacemakers and other implantable cardiac devices are at risk for infections, which cost approximately $75,000 on average to treat. The total cost burden in the United States is estimated to be as much as $415 million.

In applying Medtronic's strategic considerations for infection control:

- The **clarity of the outcome measure is high**—either a patient gets an infection or he or she doesn’t. This is simple, clear, and easy to measure.

- The **cohort can be clearly defined**—high-risk patients receiving specific implants.

- The business model is relatively simple because the **intervention only involves one variable**—inserting the TYRX envelope.

The impact of this focused approach is high, and the solution is of interest to payers since it improves outcomes and has the potential to decrease costs by millions of dollars annually.
“We have to think about those things that align with what patients want, those things that the experts also define as the goal of their therapy, and the instruments available to measure those outcomes.”

RICK KUNTZ, MEDTRONIC

EXAMPLE: DIABETES CARE MANAGEMENT

Accountability for a complex integrated delivery system

In the Netherlands there are about 15,000 pediatric patients with type 1 diabetes. Medtronic operates a practice in the Netherlands (Diabeter) with a group of pediatric endocrinologists to manage about 2,000 of these patients.

In applying Medtronic’s strategic considerations:

• The **clarity of the outcome measure is high**, as the accepted outcome measure is A1C levels.

• The **cohort can be clearly defined**—children with pediatric type 1 diabetes.

• There are many variables to be managed, but they can be **managed and controlled centrally** with expert staff that has focus and scale.

The impact of this focused approach is high, as Diabeter is able to reduce costs by more than 9 percent, generating savings of about $650 per patient. This totals about $10 million per year just among this group in the Netherlands, making the global potential far greater.

FURTHER DISCUSSION

*Harvard Business Review* editor in chief Adi Ignatius and health care leaders from organizations in the United States, Canada, Mexico, Brazil, and Chile raised several topics for discussion. Among them:

• **Role of employers.** Major employers have the ability to disrupt the health care system by embracing bundled payments for specific medical conditions and directly negotiating deals with providers that deliver better value. Major companies such as GE and Walmart are beginning to do this, and the practice is gaining momentum among employers that have the buying power to help.

• **Global trends.** Value-based approaches are emerging in countries around the world, including DRGs in the Netherlands, episode-based payments for some surgical procedures in India, and population-based approaches in the United Kingdom. McClellan said, “Everybody is moving generally in this direction,” and he believes there may be some global convergence, although it will take time.