Research has shown that there are significant variations between high-cost and low-cost health care providers for the same episode of care.\(^1\) The use of bundled payments can incentivize high-cost providers to eliminate unnecessary services and reduce waste.\(^2\)

The use of bundled payments is growing in both the public and private sectors but is still low overall.\(^3\) Catalyst for Payment Reform’s 2013 National Scorecard on Payment Reform revealed that, within the commercial market, just 1.6 percent of payments flowed through bundled payment models.\(^4\) On the other hand, the Centers for Medicare & Medicaid Services (CMS) announced in 2015 a large-scale move towards value-based purchasing, in which bundled payments will be an important component (see description of CMS’s initiative on page 2). In addition, some states—including Arkansas and Tennessee—have brought the idea into widespread use through public/private partnerships that include Medicaid and commercial insurers (see description of the Arkansas activities on page 3).

**What Are Bundled Payments?**

Bundled payments—also known as episode-based payments—are single payments that providers receive for the services provided for a common procedure (e.g., a knee replacement or coronary artery bypass graft) or for treating a chronic condition for a specific period of time (e.g., diabetes or high blood pressure). These payments are calculated based on the expected costs for clinically defined
episodes of care. Ideally, the bundle includes the full spectrum of services needed to treat the patient during the episode of care, which may include multiple providers.¹⁵

This payment model aims to encourage providers to coordinate care as much as possible and to be thoughtful about the level of services provided. If providers deliver a lot more care than the bundle was designed to cover, that care will cut into profits or they may lose money. Furthermore, bundled payments aim to reduce the variation of prices, specifically reducing excessive prices.

While generally considered a separate payment model, partial and full capitation in a sense represent the largest “bundle” that could be assigned to providers. Under full capitation, all patient services for a year are included in the “bundle.” However, many providers are not structured to be able to handle the full spectrum of risk that accompanies capitation, whereas the smaller bundles described in this paper can be managed by a greater number of providers.

Most bundled payment models are retrospective, meaning payers pay providers after they have delivered the care. This enables bundled payment to exist in a fee-for-service reimbursement system where most payments are retrospective.¹⁶ As payment and health care delivery reform continue to evolve, it is likely that payers will begin to pay providers bundled payments prospectively, or before treatment occurs, making upward or downward adjustments at the end for quality measures and other factors.

What Does the Evidence Say?

Cost Reduction Possibilities

Early research results demonstrate that bundled payments have the potential to reduce the cost of health care, primarily by eliminating unnecessary services.

Medicare’s Participating Heart Bypass Center Demonstration, which ran from 1991 to 1996, bundled together hospital and physician services for coronary artery bypass graft (CABG) surgeries and has been extensively studied. Researchers found that this program experienced considerable savings—as high as 23 percent per case—with inpatient savings representing the bulk of the savings.¹⁷ These cost reductions came primarily from the nursing intensive care unit, the routine nursing unit, pharmacy and catheter lab. Furthermore, one study found that the cost reduction increased over time.¹⁸

A more recent program that has shown a reduction in unnecessary services is the Geisinger Health System’s ProvenCare program. ProvenCare sets a fixed payment
Arkansas Success Story

Arkansas has had success in implementing a bundled payment strategy through a public-private partnership between two insurance companies and the state’s Medicaid program. This bundled payment initiative began in 2011 when Arkansas Medicaid, the Arkansas Department of Human Services, Arkansas Blue Cross and Blue Shield, and QualChoice of Arkansas partnered to create the Arkansas Health Care Payment Improvement Initiative. These payers represented a large enough portion of the market to provide an incentive for providers to make the shift to higher-quality and more cost-efficient care. The program is not a voluntary pilot program, but rather is a systematic change in payment methodology.

The program began with five distinct care episodes—ADHD, congestive heart failure, hip and knee replacement, perinatal care, and upper respiratory infection—but due to the success in containing costs and reducing state wide variation, nine additional distinct episodes have been introduced. Arkansas created a hybrid program that pays providers on a fee-for-service basis throughout the episode of care, complemented by effective risk-adjustment strategies. At the end of the year, participating providers share either the additional per-episode costs or share the savings—as long as they meet predetermined quality standards.

The program created a provider portal showing overall quality of care and average cost that providers delivered during a set time period—typically one year. Medicaid and the private insurers use the information from the portal—along with claims data—to determine which provider has the most responsibility for a given episode. That provider will be designated the Principal Accountable Provider (PAP).

At the end of the set time period, each PAP’s average cost per episode is calculated and compared to acceptable and commendable levels of costs. If the average cost is above the acceptable level, the provider will pay a portion of the excess costs. If the average cost is acceptable but not commendable, there will be no payment changes. If the provider offers high-quality care below the commendable level, then he or she will be eligible to share in the savings with the payer.

The program resulted in decreased cost of care during the first year. A minority of the PAPs (278 of 2,000) were unable to lower their costs per episode to below the acceptable cost thresholds, while nearly twice as many (489 PAPs) were able to reduce their costs below the commendable level. This indicates that a majority of patients were provided care at a lower cost. However, these savings have not resulted in lower cost sharing for patients.

The inclusion of pay-for-performance requirements led to an improvement in state-wide quality of care. Providers received quarterly reports from the Arkansas Health Care Payment Improvement Initiative showing how they were performing on quality metrics. These reports focused on each provider’s process of care—for example screening for chlamydia and other STDs and gestational diabetes screening. These reports led providers to improve screening rates not only for those patients affected by the program, but also for patients covered by non-participating payers.

Impact on Quality

Bundled payments are likely to have an impact on the quality of care provided. The elimination of unnecessary services and effective use of care coordination can improve patient outcomes, as well as reduce out-of-pocket costs and time spent getting medical care. On the other hand, a primary concern with bundled payments is that providers will skimp on needed care or avoid sicker patients in order to be as profitable as possible.

According to a RAND analysis, there have been few studies examining the impact of bundled payments on health outcomes. A few promising studies, such as those examining the Medicare CABG demonstration, found no reduction in quality. But the institutions involved in the program were already perceived as high-quality providers, so the results may not be generalizable.
Fortunately, bundled payments and quality metrics are distinct policy considerations that can be seen as natural partners. When bundled payments are combined with quality of care measures, a few studies suggest that quality of care can be enhanced. For example, ProvenCare resulted in all patients in Geisinger receiving all 40 of the CABG best practices recommended by the American Heart Association and American College of Cardiology. This led to significant reductions in all complications, especially in hospital-acquired infections and unplanned readmissions.

Other health care delivery innovations—such as Accountable Care Organizations (ACOs) and patient-centered medical homes (PCMHs)—could help improve the efficiency of bundled payments. These providers may be more vertically integrated, and therefore capable of managing a full episode of care in a coordinated fashion. For example, Arkansas and Tennessee have promoted the creation of PCMHs to complement their bundled payment initiatives, and the American Hospital Association has identified ACOs as appropriate organizations to receive and facilitate bundled payments. In general, improved use of effective electronic health records and increased patient engagement can also improve care coordination.

Not every provider system is well equipped to participate in a bundled payment arrangement. Where providers are decentralized, it may work best to start with a shared savings payment arrangement and work toward bundled payment as the delivery and coordination of care becomes more seamless.

How and When is Bundled Payment Most Likely to Work Best?

Pick the Right Episode or Condition

To best achieve cost savings, bundled approaches should be used for only appropriate episodes of care and conditions. For example, bundles should be applied to fairly routine procedures, with well-defined beginning and end points—such as coronary artery bypass and total knee and hip replacements—and avoid those that have more arbitrary procedures and time frames. The progression of the condition should, to a large extent, be within the control of providers. For greatest impact, the episode or condition should exhibit price variability and compressible rates of defects and overuse. If there’s no variation, then bundled payments are of more limited use except as a mechanism to reduce excessively high prices.

Match to the Right Type of Provider

When a bundle of services involves more than one type of provider, the goal of better care coordination will likely be realized if pathways for coordination already exist.

For example, Geisinger is well-known for having a highly integrated delivery system and that doubtlessly contributed to its success with its ProvenCare model. Many providers have experience with taking on full financial risk and are well positioned to manage a large volume of bundled payments.
Consumer Considerations

Bundled payments can be an effective tool against rising health care costs. Used strategically, they can improve health care value for consumers, especially when combined with these additional considerations:

- Quality metrics should play a role in how payment for a bundle is structured and evaluated in order to properly incentivize providers to reduce unnecessary care while discouraging reductions in necessary care.\(^\text{35,36}\) Consider complimentary pay-for-performance incentives to encourage attention to quality and ensure that best practices are followed when a bundle is structured.

- Adjust payments for patient severity so providers do not have an incentive to avoid sicker patients.

- Share savings with patients. A portion of these cost savings must be passed on to consumers.

Research has shown that if these payment measures are appropriately handled, it is likely that the savings will be shared between payers, providers and consumers.\(^\text{37}\) Patient cost-sharing should be adjusted to mirror the changes realized in the way that insurers pay providers. For example, instead of paying a copay for each procedure or physician visit, the patient should pay a single payment for the bundle of services.

Conclusion

When it comes to combating the rising cost of health care and improving the value of care, bundled payments is an important provider payment reform that should be expanded.\(^\text{38}\)

The use of bundled payments by themselves will not eliminate all unnecessary care, lower costs and improve quality. This model is most effectively implemented alongside other key provider payment reforms and quality of care measures will need to play a key role. Further, global budgeting should be used to track overall impact on costs to ensure that the savings from bundling aren’t being made up with higher payments elsewhere.

Notes


11. Ibid


13. Davis (May 2014).


17. Ibid

18. Ibid


22. Peikes, Deborah, et. al., “Effects of Care Coordination on Hospitalization, Quality of Care, and Health Care Expenditures Among Medicare Beneficiaries,” JAMA, Vol. 301, No. 6 (February 2009).


28. More information on ACOs and PCMHs can be found at healthcarevaluehub.org.

29. Burns (October 2012).

30. American Hospital Association (May 2010).

31. More information on electronic health records can be found at healthcarevaluehub.org.


33. Balilit, Burns and Houy (May 2013).

34. Bertko and Effros (2010).


36. Many areas of clinical care do not have well established national guidelines, and developing appropriate quality metrics in these areas may be difficult. Bertko and Effros (2010)


38. Burns (October 2012).

---

Alex Sass, policy intern, and Lynn Quincy, Hub director, authored this report. We are grateful for review by Francois de Brantes, executive director, Health Care Incentives Improvement Institute, but any errors remain the responsibility of Consumers Union.