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Bundled Payment Fails To Gain A Foothold In California: The Experience Of The IHA Bundled Payment Demonstration

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Abstract

To determine whether bundled payment could be an effective payment model for California, the Integrated Healthcare Association convened a group of stakeholders (health plans, hospitals, ambulatory surgery centers, physician organizations, and vendors) to develop through a consensus process the methods and means of implementing bundled payment. In spite of a high level of enthusiasm and effort, the pilot did not succeed in its goal to implement bundled payment for orthopedic procedures across multiple payers and hospital-physician partners. The evaluation documented a number of barriers, such as administrative burden, state regulatory uncertainty, and disagreements about bundle definition and assumption of risk. Ultimately, few contracts were signed, which resulted in insufficient volume to test hypotheses about the impact of bundled payment on quality and costs. Although bundled payment failed to gain a foothold in California, the evaluation provides lessons for future bundled payment initiatives.

The Affordable Care Act has increased interest in new payment models to address gaps in quality and cost. One of the alternative models is episode-based or “bundled” payment. Under bundled payment, a group of health care providers receives a fixed payment that covers the average cost of a bundle of services. Fixing the price that providers will receive for a bundle of services gives them an incentive to reduce the number and cost of the services contained in the bundle.[1]

Bundled payment is also expected to improve the value of care by improving communication and coordination of care across providers and eliminating inappropriate, unnecessary, or duplicative services.[2] Quality improvement can be embedded in bundled payment arrangements through the use of an explicitly defined “warranty” (that is, a period after the defined episode during which the providers would be held responsible for the

treatment of associated complications), performance incentives (such as shared savings or gain-sharing opportunities), or an agreement to meet certain quality benchmarks as a condition of participation in the contract.

Bundled payment has received a lot of attention in both the commercial and public sectors during the past five years. In the public sector, the Centers for Medicare and Medicaid Services (CMS) has experimented with bundled payment with some success, and the Medicare Payment Advisory Commission, which advises Congress on Medicare policy, has long advocated bundled payment for the fee-for-service Medicare program.[1] Under the Affordable Care Act, CMS is continuing to experiment with bundled payment via the Bundled Payments for Care Improvement (BPCI) initiative, with an eye toward developing additional evidence of its impact.

Evidence is lacking on the effectiveness of bundled payment in terms of improving the quality of care, reducing its cost, or both. Existing evidence about bundled payment programs mostly comes from bundled payment designs with more limited scope that have little generalizability to current programs.[3]

Our previous study of the PROMETHEUS bundled payment system, which was developed and piloted in three communities by Health Care Incentives Improvement Institute from 2008–2011, illustrates the challenge of generating evidence on this new payment approach. Despite enthusiasm for the model among participants in the initial operational sites, numerous technical and cultural barriers prevented its successful implementation.[4]

However, experimentation with bundled payment has continued in the private and public sector. One of the most visible of the private-sector experiments has been taking place in California during the past three years.

The Integrated Healthcare Association Demonstration

In 2010 the Integrated Healthcare Association (IHA), a stakeholder leadership group in California, and the RAND Corporation, an independent and objective evaluator, were awarded a three-year, \$2.9 million demonstration and evaluation grant from the Agency for Healthcare Research and Quality. The project, called the IHA Bundled Episode Payment and Gainsharing Demonstration, was intended to implement and evaluate bundled payment for Californians younger than sixty-five who have commercial insurance.

At the beginning of the grant period, the participants included six of California's largest health plans, eight hospitals, and an independent practice association. Leaders of each of these organizations were willing to participate in a consensus process to develop a bundled payment demonstration and then to contract with other organizations to implement a pilot for orthopedic procedures. Their participation was motivated by a desire to gain experience with a new payment model that could lead to improvements in care.

Working with various technical consultants, the IHA managed a consensus-oriented planning and implementation process. The organization convened a steering committee to

set out guiding principles and to help lead the pilot (that is, to make final decisions based on consideration of technical committee recommendations).

The IHA also convened technical committees whose members were specialist physicians and representatives of health plans and hospitals. The technical committees were tasked with defining the bundles—that is, specifying which services were included in a bundle and which were excluded (for example, for a list of included and excluded services in the total joint replacement bundle see Appendix Exhibit 1A).[5] Through the committee consensus process, it was determined that the IHA episode definitions for total knee replacement and total hip replacement would include “facility, professional and medical implant device charges for the inpatient stay; a 90-day post-surgical warranty for related complications and readmissions are [*sic*] included, but other post-acute care is excluded.”[6]

The IHA and its consultants developed model contract provisions that could be used in negotiations between the health plans and hospitals. However, because of antitrust concerns, the IHA was not involved in price or contract negotiations. The parties were free to modify any of the model contract provisions except for the bundle definitions. If the parties happened to be negotiating the overall preferred provider organization (PPO) contract at the time, the bundled payment arrangements were folded in. Otherwise, bundled payment negotiations were undertaken separately.

Study Data And Methods

Evaluation

The goal of the evaluation was to determine whether bundled payment for orthopedic procedures for Californians younger than sixty-five who have commercial insurance could be implemented by health plans, hospitals, and physician organizations across the state. Implementation in a large number of organizations in California would provide an opportunity to test hypotheses about the impact of bundled payment on cost and quality and would also help address questions of how “scalable” the concept was.

We used case study methods[7] to describe the evolution of the bundled payment initiative and to understand its impact from the perspective of the diverse stakeholders in the process. The original evaluation plan included a quantitative evaluation of the impact of bundled payment on costs and quality for orthopedic procedures. However, this component was dropped because of significant delays in implementation and the much lower than expected volume of surgeries under the orthopedic bundles. Because of low volume, there would not have been sufficient statistical power to detect the hypothesized effects.

Study Population

The case study population included multiple representatives of six California health plans, five hospitals, one independent practice association, and the state regulatory agency. (A number of hospitals, after expressing initial interest, did not participate in the pilot. Others dropped out of the pilot prior to our evaluation and representatives of one hospital declined to participate in an evaluation interview). In addition, we interviewed a representative of one participating ambulatory surgery center (ASC) and four technology vendors. A number of

these people also served on either the IHA technical and/or steering committees. Finally, we interviewed five orthopedic surgeons who were associated with the two hospital systems that signed bundled payment contracts within the pilot

Appendix Exhibit 2A[5] describes the interview respondents and the topics included in the interviews. Following informed consent procedures approved by the RAND Institutional Review Board, we assured the people whom we interviewed that their responses to our questions would be deidentified and aggregated for reporting purposes.

Study Results

In spite of a high level of enthusiasm and effort among a broad cross-section of stakeholders in California, the IHA bundled payment pilot experienced a series of significant delays and was ultimately unable to achieve its objectives. Some of the problems that have been documented in the literature on bundled payment and that plagued the PROMETHEUS bundled payment pilot sites[4,8] emerged again in the IHA pilot.

For a variety of reasons, the volume of procedures reimbursed under bundled payment during the pilot period was exceptionally low. One reason is that not enough of the original “willing” organizations stayed with the pilot.

Of the six original health plans, two high-volume PPO plans dropped out altogether. These two large commercial plans withdrew because they were not confident that the pilot would lead to care redesign and lower costs. Another smaller health plan eventually decided that bundled payment was incompatible with its primary book of business (that is, the type of business on an insurer’s books at a particular time, in this case capitated contracts). This was a health maintenance organization. That left three PPO plans that ultimately executed bundled payment contracts.

Of the eight hospitals that originally indicated an interest, only two eventually signed contracts with PPO plans. Hospitals dropped out because of a perceived lack of need for the pilot in their own institutions and concerns about the time and effort involved. However, two ASCs did sign contracts with a single health plan and would have signed with additional health plans had offers been forthcoming.

Not only did hospitals drop out of the pilot, but the volume of orthopedic procedures for commercially insured adults younger than sixty-five performed in the two remaining hospitals was extremely low—only thirty-five cases in three years. The volume has been much higher in the ASCs: 111 orthopedic procedures have been reported since the pilot began. However, health plans have been slow to contract with ASCs as an alternative provider, despite their lower surgical costs compared to hospitals.

Why The Bundled Payment Demonstration Failed to Achieve Its Objectives

From the point of view of stakeholders, four primary factors, discussed below, were responsible for the failure of the IHA pilot. In the aggregate, they highlight the aspects of

design and implementation that will be critical to the success of future tests of this payment approach.

Difficulties In Developing Bundle Definitions

Stakeholders agreed that a single set of bundle definitions was necessary, and that no existing set of definitions was adequate for the pilot. However, stakeholders also reported that although the consensus process had the benefit of transparency, the time required to reach consensus on bundle definitions slowed the implementation of the pilot considerably.

One representative of a physician organization explained: “It definitely went longer than any of us thought. We felt it was important to have consistency...[but] when you peel back the onion, you find things that complicate this, and it can take a long time. When these things take a long time, people tend to lose interest and start to think it’s never going to happen.”

Parties also had difficulty reaching consensus about what exclusions (for example, preexisting comorbidities and other potential risk factors such as high body mass index) would apply to the bundle definitions. Some stakeholders felt that negotiation over potential exclusions entailed gamesmanship on the part of early participants.

For example, representatives of health plans told us they were interested in broad inclusion criteria that would expand the number of patients potentially covered under each bundle. They also favored more expansive bundle definitions to lengthen the time of the episode and include more services (such as presurgical care and postacute care). In contrast, hospitals and surgeons generally sought to narrow the inclusion criteria (to include only the lowest-risk patients) and to limit the length of the episode, since including preadmission or postdischarge services would increase the need to coordinate care among a greater number of providers. Reflecting these diverging basic interests, the resulting definitions were quite conservative in terms of both patients and services included. In the pilot, the hospitals and surgeons prevailed, for example, in having the bundle definitions exclude obese patients (those with a Body Mass Index greater than 40) and also exclude post-acute and rehabilitation services.

An additional complication was providers’ concern about the unprotected financial risk that they would incur if they operated on higher-risk patients, given the decision not to risk-adjust bundled payments (adjust payments to account for the fact that some patients will be more expensive to treat), create stop-loss measures (which provide protection against unpredictable and catastrophic loss), or require the purchase of reinsurance in the contract (which involves transferring some of the risk to a third party to reduce their own risk). In the end, almost all stakeholders agreed that the bundle definitions, which represented a compromise among the parties, proved to be too narrow to capture an adequate number of procedures to make bundled payment viable.

Even before the pilot, the IHA had observed that there were a limited number of joint replacement cases in the population of people younger than sixty-five who were insured by a commercial PPO plan. Once the two large commercial PPO plans exited the pilot, the problem of low volume became more acute for the remaining participants.

Volume was a key consideration in decisions related to whether hospitals could expect to spread the costs of clinical redesign across a high volume of patients, whether physicians would be adequately incentivized to change practice patterns, and whether health plans would invest in changing their administrative procedures. Unfortunately, in the end, the answer to all of these questions was no.

One representative of a health plan summarized the problem this way: “There’s just not enough volume in those bundled orthopedic payments for a commercial population. Without bundles that focus on those medical procedures that a commercial population is likely to use, there’s no return on investment, there’s no financial incentive for us or the providers to spend a lot of time developing and administering these bundled payment programs.”

This is an interesting observation because most commercial insurers are concerned with addressing the rising costs of orthopedic procedures. However, bundled payment does not address the appropriateness question (whether a particular patient needs a particular procedure). Thus, the participating commercial payers may have been signaling that they were more concerned about an increase in the utilization of these procedures than about the cost per case.

Lack Of Trust And Competing Interests Among Health Plans, Hospitals, And Physicians

Especially early in the process, stakeholders were skeptical about the motives of various parties. One representative of a health plan said: “I think everyone was interested in the concept, but when it got to the nitty-gritty, the dollars, it became clear they had no desire to go forward. The hospitals that participated were more there to protect what they had. They weren’t looking for the cost savings like we were looking for them.”

This lack of trust and transparency may have been a legacy of aggressive negotiating over previous contracts. In any case, it became visible in the earliest discussions.

An early challenge facing the IHA pilot was the conflict in how health plans and providers viewed pricing for the bundles. Health plans expected to negotiate price reductions compared to what the hospitals were being paid under fee-for-service. However, hospitals were concerned about implementation costs and the increased financial risk they would assume under bundled payment (for example, being responsible for the cost of treating complications, such as a readmission and treatment for a surgical site infection, under a warranty). As a consequence, some sought a higher level of payment than they received under fee-for-service. Differing views persisted in negotiations between the parties and at times rendered the negotiations difficult and slow.

One representative of a hospital said: “Frankly,...the [IHA] plan participants and the provider participants were from separate perspectives. From the providers’ perspective, they wanted to keep it manageable in size and use it as a true pilot, for key learnings and to be able to share in the reward for increased efficiency instead of having that money go back to the health plan. But from the plan’s perspective, to be blunt, I think they were looking at it as, ‘How could we use this pilot as a way to lower our costs immediately?’”

To the extent that hospitals and physicians were willing to take risks and offer warranties under bundled payment, the hospitals wanted the health plans to steer higher patient volume to their facilities. They wanted health plans to do this either through benefit design changes such as lower out-of-pocket costs or by designating the facilities as centers of excellence. However, to do so would have required the health plans to file new benefit options for regulatory approval, making these changes impractical within the pilot period.

As a result, the IHA project did not include incentives for consumers to use the participating hospitals. This lack of steering of patients greatly reduced the hospitals' enthusiasm to participate.

Lack Of Technical Infrastructure For Processing And Paying Claims

Health plans' automated claims systems are set up to pay on the traditional fee schedule for physicians and per diem payments for hospitals, not to pay for bundles. Early in the IHA demonstration, it was a lack of off-the-shelf software that was identified as the problem. But even when claims adjudication software became available, low volume made the purchase of such software a nonstarter for health plans.

Seeing the low volume, health plans decided that they would have to process claims manually. This made it impossible to test automated processes for paying or denying claims submitted to the insurer within the pilot.

In addition, at least initially, hospitals lacked the capability to pay physician claims under the bundle. The IHA approached two technology vendors to help. Within a year, one vendor had developed a new software program for hospitals to pay physician claims.

Despite these efforts, claims payment continued to be a significant concern throughout the pilot. Limited volume hampered the pilot's ability to test these claims payment solutions.

Delays And Uncertainty About State Regulatory Decision Making

Both health plans and hospitals were concerned that paying physicians for the services that they independently provided to the patient under the bundle might violate the corporate practice of medicine prohibition in California state law, which prevents hospitals from directly employing physicians.[9] To address this concern, the IHA retained a law firm to develop a model contract template that defined the relationship between parties as that of a prime contractor to a subcontractor, with the hospital accepting payment for the entire episode of care and disbursing payment to physician subcontractors. In the end, however, the dominant model adopted by the participating health plans and hospitals was to split the bundled payment in two: one bundled payment for all professional services and another for all facility services.

Health plans also had to address other regulatory concerns. Regulation of health plans in California is complicated, with jurisdiction split between two state agencies, but for the PPO health plans it regulates, the California Department of Managed Health Care requires approval of all contracts between a health plan and a provider. The kinds of issues that concern the department include the parties to the contract, the services provided in

the bundle, the bundle period, the warranty, whether the health plan delegates risk to an intermediary, and how providers are paid.

In the words of the regulator: “The concern with bundled payment is that if you’re paying an intermediary who is making the payment to each downstream provider, what happens if the intermediary doesn’t pay the provider?... Our concern is if the intermediary doesn’t pay the downstream provider, is the health plan still on the hook for that payment? If [the health plan] is, that risk arrangement isn’t a particular concern for us. If the plan says, ‘it’s the intermediary’s problem,’ then we have a concern. That intermediary would seem to be functioning in some sort of insurer-like capacity.”

In addition, the Department of Managed Health Care was concerned about issues of consumer cost sharing. To preempt regulatory problems, the health plans decided to require patients to pay the lesser of what they would have paid on the fee-for-service bills and the nominal coinsurance rate due under bundled payment.

Although the IHA provided model contract templates, each of the health plans had to negotiate approval of its own contracts with the department. The first contract took approximately nine months from submission to approval. The time delay and uncertainty associated with obtaining regulatory approval for contracts added significantly to the delay experienced by the pilot participants.

Discussion

The IHA was not able to spread bundled payment across California markets, patient populations, and conditions as initially hoped. The demonstration generated substantial expertise in developing episode definitions and other technical aspects of implementation. However, little experience was gained in actually providing orthopedic services under bundled payment arrangements and learning what the requirements might be for “scaling” bundled payment approaches nationally.

The IHA pilot might have been dubbed the “no risk, no reward” experiment. It did not fail because its participants lacked enthusiasm or failed to work hard, but because design decisions made early in the process set a course from which the pilot could not recover.

Making the potential reward significant enough to stimulate both administrative and clinical changes required a high volume of patients. However, providers were not willing to accept risk for factors viewed as outside of their control (for example, baseline comorbidities of patients that increased their risk of complications). Health plans wanted lower costs. They also expected providers to undertake extensive clinical redesign and assume the financial risk for complications and readmissions, without risk-adjusted rates (to subsidize the care of higher risk patients) or stop-loss protection (to protect providers against losses that exceed certain limits). The administrative costs to health plans to automate claims adjudication would not have been justified by the potential savings.

In the end, the pilot was not implemented as planned. This left evaluators without data from which to draw conclusions about how bundled payment actually affects health care quality or costs.

Despite the failure of the pilot, somewhat surprisingly health plan, hospital, and physician participants continue to be interested in bundled payment arrangements, provided the implementation problems that plagued this pilot project (and others) can be solved.

One hospital representative concluded: “Despite the low number of patients, I do think it’s worth it.... This is where health care is shifting. Our participation in this has given us such a leg up on things. We’ve accomplished so much in terms of...defining what the flow should look like, how to identify these patients, how to track for readmission.... All of that may not be apparent when you look at the five patients seen to date, but it’s caused us to think critically about what’s needed to care for these patients in this type of a model.”

One interesting and unexpected result was the strong interest from ASCs. Initially, IHA staff did not focus on outpatient surgery. However, health plans saw value in the ASCs, because they typically charge much less than hospitals for equivalent procedures. IHA staff did add an ASC representative to the consensus process, and one ASC signed a contract with one health plan for a 40 percent reduction over the hospital price.

Lessons For Future Bundled Payment Programs

The IHA Bundled Episode Payment and Gainsharing Demonstration generated a number of lessons that could increase the likelihood of successful implementation of bundled payment programs in the future.

Ensure Sufficient Volume

Bundled payment requires significant changes to processes used by providers and payers to deliver and pay for care. Without adequate volume, there is no strong incentive to make needed changes. Volume can be increased by focusing on common conditions or procedures, including multiple large payers and providers in the program, and limiting exclusions. Inadequate patient volume was the single largest factor driving the disappointing outcome of the IHA pilot.

Implement Appropriateness Criteria

The pilot did not directly address the issue of appropriateness of the treatment for specific patients. However, some literature suggests that bundled payment may encourage the overuse of bundled procedures.[10] In turn, this suggests that future bundled payment programs might benefit from explicit attention to the issue of appropriateness, either through the implementation of appropriateness criteria or, at a minimum, by requiring that providers use shared decision making (which actively engages the patient in determining the appropriateness of the surgery – or timing of the surgery – based on both the scientific evidence and their own preferences).

Find Acceptable Methods For Managing Risk

Providers and payers understandably have competing interests in the distribution of financial risk. In the IHA pilot, provider risk was mitigated by excluding higher-risk patients, which contributed to lower volumes. Alternative methods such as risk adjustment and stop-loss protection could be used to limit risk without decreasing volume.

Ideally, bundled payment programs should incentivize providers based on performance risk (that is, factors that are within their control) and adjust or control for insurance risk (factors that are outside of providers' control).

Keep The Bundle Definition Simple

Defining when bundles of services start and stop and which services are included and excluded can be challenging and can lead to overly detailed, complicated bundle definitions. This can cause delays in implementation and increase the technical difficulty of administering bundled payment programs.

Simpler bundle definitions may be less satisfying conceptually. However, they provide a more achievable starting point for the programs.

Identify Technical Solutions For Administering Bundled Payments

Claims adjudication for bundled payment has been a major barrier to the programs' administration. Manual adjudication of bundled payment claims, in which bundled cases are flagged and processed outside of payers' normal automated systems, limits the ability to scale a program. Automated solutions are being developed, but they were prohibitively expensive in the IHA pilot.

Future bundled payment participants should not underestimate the difficulty and cost of administering bundled payments. The IHA pilot produced a number of tools, including bundle definitions and model contract language, that could be used in the administration of other bundled payment programs. (These tools can be found at www.iha.org.) However, the barriers that limited the successful application of these tools in the IHA pilot would need to be addressed.

Incorporate Changes In Benefit Design

Providers had limited incentive to participate in the IHA pilot, in part because there was no aspect of the program that steered patients to participating providers. Changes in benefit design such as decreased out-of-pocket responsibility could increase patient volumes for participating providers.

Conclusion

Bundled payment programs are currently being tested by Medicare and commercial payers alongside many other payment and service delivery reforms. Given the poor results from the PROMETHEUS and IHA pilots, it is reasonable to ask what the rationale is for pursuing bundled payment any longer. One reason is that our simulation modeling work^[11] and the

work of others[12] suggest that bundled payment has great promise for controlling health care costs. Tellingly, participants in both demonstrations remained generally supportive of the bundled payment model, assuming that solutions to early barriers could be developed for future applications.

There remains a strong conceptual basis to support a role for bundled payment in bending the cost curve in the health care system. Still, there is limited evidence that bundled payment will achieve its promise. However, if health plans, hospitals, physician organizations, and others incorporate the hard-won lessons learned from the early pilots, the potential and promise of this payment model may yet be realized.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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