

CAPTUREPROOF: ***Bundle Payments***

INTRODUCTION

Bundled payments also known as episode-of-care payments are the focus in recent healthcare reform. They are seen as the middle ground between fee-for-service and capitation; defined as the reimbursement of health care providers on the basis of expected costs for clinically-defined episodes of care." With them come significant advantages and disadvantages.

HISTORY

A model for bundle based payments: PROMETHEUS

The Robert Wood Johnson Foundation gave grants beginning in 2007 for a bundled payment project called PROMETHEUS ("Provider payment Reform for Outcomes, Margins, Evidence, Transparency, Hassle-reduction, Excellence, Understandability and Sustainability") Payment.(1) The project developed "evidence-informed case rates" for various conditions that are adjusted for severity and complexity of a patient's illness. The "evidence-informed case rates" are used to set budgets for episodes of care. If actual quarterly spending by healthcare providers is under budget, the providers receive a bonus; if actual quarterly spending is over budget, payment to the providers is partially withheld. (2) Researchers from the RAND Corporation estimated that "national health care spending could be reduced by 5.4% between 2010 and 2019" if the PROMETHEUS model for bundled payment for selected conditions and procedures were widely used. This figure was higher than for seven other possible methods of reducing national health expenditures. (3) In addition, RAND found that bundled payments would decrease financial risk to consumers and would decrease waste. However it is important to note that The scientific evidence in support of it has been described as "scant." For example, RAND concluded that its effect on health outcomes is "uncertain." (3)

As of 2010, provisions for bundled payments are included in both the Patient Protection and Affordable Care Act and the Affordable Health Care for America Act. The former bill establishes a national Medicare pilot program which started in 2013 with possible expansion in 2016, which is consistent with the Obama proposal. The latter bill requires "a plan to reform Medicare payments for post-acute services, including bundled payments." (4)

ADVANTAGES OF BUNDLE BASED PAYMENTS

- Bundled payment discourages unnecessary care, encourages coordination across providers, and potentially improves quality. (5)

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- Bundled payment does not penalize providers for caring for sicker patients. (5)
- Removes inefficiency and redundancy from patient-care protocols; e.g. duplicate testing, delivering unnecessary care, and failing to adequately provide postoperative care.
- Encourages economies of scale (6)

DISADVANTAGES

- Not shown to discourage unnecessary episodes of care (7)
- "Episodes" of care might not apply to some types of illnesses. (8)
- It is possible that one patient may have multiple bundles that overlap each other (9)
- Academic health centers, which emphasize research, teaching, and new technologies, may be disadvantaged by bundle payments (9)
- If a patient experiences a catastrophic event, providers risk large losses. (10)

COMPREHENSIVE CARE FOR JOINT REPLACEMENT MODEL

An example of Bundle Based payments is the Comprehensive Care for Joint Replacement Model.

The Comprehensive Care for Joint Replacement (CCJR) model supports optimizing care for patients undergoing Medicare's most common inpatient surgeries: HIP and Knee replacement (also known as lower extremity joint replacements/ LEJR).

In 2014, there were more than 400,000 hip and knee replacement, costing more than \$7 billion dollars in hospitalizations alone. Despite the high volume of surgeries, there were large practice variations, patient outcomes, and expenses across institutions.

- Medicare expenditure for surgery, hospitalization, and recovery ranges from \$16,500 to \$33,000
- Complications like infections or implant failures after surgery can be more than three times higher at some facilities than others.
- No group was accountable for organizing care across the healthcare continuum.

The CCJR model is a five-year payment initiative that aims to bundle all inpatient and outpatient payments for patients who have lower-extremity joint replacement surgeries. The idea is to establish a payment arrangement that accounts for the cost of an entire episode of care. The outcomes approach, focusing on one payment to cover all costs associated with a specific episode of care is likely to be the future of how CMS will pay all of its major surgical procedures. (11)

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For a 90 day episode of care CMS will pay all inpatient and outpatient providers involved in the episode of care using the current fee-for-service model, but it will do so while holding the hospital accountable for the total cost of all delivered services. If the hospital can control costs (i.e. increase their margins against CMS's bundled price "target" for a successful episode) then it can receive a bonus payment. However, if the total cost of care (including both hospitalization and post discharge) exceeds CMS's target, then the hospital must pay back the difference and possibly be penalized. (11)

CONCLUSION

Utilizing CaptureProof for better remote monitoring and coordination of care, Kaiser Permanente showed a savings of \$7,500 per Medicare patient for total knee replacement. Given Medicare reimburses 400,000 total hip and knee replacements, CaptureProof can save Kaiser \$46.2 million and \$3 billion all Medicare hip and knee joint replacements. Better outcomes for patients, better revenue for hospitals, all through improved decision making with clear, objective data through CaptureProof.

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