Care Redesign: An Essential Feature of Bundled Payment

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ABSTRACT: The Integrated Healthcare Association conducted a demonstration of bundled episode of care payment between health plans and hospitals in California. Hoag Orthopedic Institute was an early adopter, providing orthopedic care for total knee and hip replacement procedures through bundled payment contracts with three health plans. This brief outlines the process of care redesign, an important step toward the successful implementation of a bundled payment model.

Successful implementation of bundled payment requires physicians and other providers to redesign care so that it aligns with the episode of care definition.

INTRODUCTION

The Integrated Healthcare Association (IHA) completed a three-year bundled payment demonstration in September 2013 funded by the Agency for Healthcare Research and Quality (AHRQ). The goal of the project was to encourage the use of bundled payment contracts as a means to align incentives between hospitals and physicians by providing care through a single, pre-determined payment amount for all services provided in an episode of care with a procedure or condition. In bundled payment for joint replacement, the hospital acts as the "bundler," accepting the fixed fee from the health plan and paying all professional, facility and medical implant device fees during the episode of care.

One of the initial participants in IHA's demonstration, Hoag Orthopedic Institute (HOI), is a specialty hospital for inpatient and outpatient surgical care, equally-owned by a group of 35 medical specialists and Hoag Memorial Hospital Presbyterian in southern California. Participating surgeons from HOI accepted joint replacement cases from three health plans: Aetna, Blue Shield of California, and CIGNA.

EPISODE DEFINITION—THE FIRST STEP TOWARD CARE REDESIGN

As part of the demonstration project, IHA developed ten bundled episode definitions, including five orthopedic procedures.[1] The episode definition is the heart of a bundled payment model, and is used as a tool to guide providers as they deliver care. The definition describes what is included in the episode using billing codes and DRGs, as

In September 2010, IHA was awarded a 3-year, $2.9 million grant from the Agency for Health Research and Quality (AHRQ) to implement a bundled payment strategy in California. The project, titled B*undled Episode Payment and Gainsharing Demonstration*, aimed to test the feasibility and scalability of bundling payments to hospitals, surgeons, consulting physicians and ancillary providers in the California delivery system and regulatory environment. Issue briefs, practical tools such as episode definitions and contract language, and other resources are available at **www.iha.org.**

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well as patient qualification and exclusion requirements. The IHA episode definitions for total knee replacement (TKR) and total hip replacement (THR) include facility, professional and medical implant device charges for the inpatient stay; a 90-day post-surgical warranty for related complications and readmissions are included, but other post-acute care is excluded.

Once the episode is defined, an essential next step in the bundled payment implementation process is for physicians and other providers to redesign care so that it aligns with the episode definition.

CARE REDESIGN AND BUNDLED PAYMENT

Bundled payment creates a strong motivation for hospitals and physicians to collaborate to manage a patient's care within an established budget. Successful implementation requires care coordination, an organized effort to reduce unnecessary care, readmissions, and—with joint replacement procedures—revisions (repeat surgeries). Care delivery improvements can be achieved through a process known as care redesign. For the purposes of this issue brief, the care redesign process is defined as the intentional effort to standardize the way care is delivered using best practices, evidence-based clinical practice guidelines, and literature reviews; the goal is improving efficiency and quality by reducing risks and complications, and enhancing patient function and outcomes. The end product of this work is captured in what are commonly known as care protocols. Provider variation in care delivery requires more resources—staff, supplies, equipment and associated costs—and also generates inefficiencies for the medical staff and other providers. Standardization reduces these factors; it streamlines and simplifies the care process, and bolsters a provider's ability to stay within the negotiated bundled price.

Large payers, such as the Centers for Medicare & Medicaid Services (CMS), are piloting bundled payment models that mandate the inclusion of care redesign. CMS's Center for Medicare and Medicaid Innovation (CMMI), established under the Affordable Care Act (ACA), is charged with the development and evaluation of innovative models of payment and care service delivery. In keeping with the ACA mandate, CMMI launched the Bundled Payments for Care Improvement initiative (BPCI), a three-year pilot developed to test different bundled payment models and align care delivery incentives for hospitals, physicians and other providers for fee-for-service Medicare beneficiaries. The program includes four models designed to improve care coordination across multiple settings. CMMI requires that all models include care redesign; the most ambitious of the four from a care redesign perspective, Model 2, creates episodes of care that include the inpatient stay and post-acute periods ranging from 30-90 days after hospital discharge. Implementation of this model requires coordinating care across multiple settings, including skilled nursing facilities and home health agencies—a challenging proposition given the fragmented state of the current health care delivery system.

THE CARE REDESIGN PROCESS AT HOAG ORTHOPEDIC INSTITUTE

The bundled payment model sparked the implementation of new practice patterns at HOI, moving surgeons away from a fee-for-service payment model that does little to foster care collaboration to one that requires ongoing coordination. HOI physician leadership understood that without a care redesign plan, the bundled payment model would falter, and cause fiscal failure for all parties. HOI opened in 2010, initially without bundled payment contracts. As HOI began to develop the capability to accept bundled payment for hip and knee replacements, practice variations among surgeons and hospital staff became evident, with the potential to become a financial liability. The infection prevention and performance improvement committees evaluated physician performance on quality and outcomes and generated comparative data, all of which pointed to the need to reduce practice variation through care redesign.

During the start-up phase of HOI, five orthopedic surgeons convened a series of meetings to begin the process of drafting a care redesign plan, including developing and refining care protocols for TKR and THR procedures. Pre-admission, surgical, and post-surgical phases of the procedures were identified, and clinical steps from each were captured in process flow maps. Next, the physicians discussed each stage by comparing historical practice patterns, often consulting references for current evidence-based clinical practice guidelines such as the Joint Commission's Surgical Care Improvement Project (SCIP) measures. Once the physicians completed drafts, other HOI stakeholders—including anesthesiologists, hospitalists, and staff from infection prevention, rehabilitation, nursing and administrative departments—reviewed their work and

provided input on the protocols. While standardization is important, most of the final care protocols offer more than one pathway to allow for variances in patient needs. For example, the pain management protocol provides several care delivery options, depending on the patient's individual needs. All care protocols for TKR and THR were completed after several physician meetings, totaling approximately 50 hours of time and effort to plan, develop and finalize these tools. Information technology staff built the protocols electronically, making them available in real time to physicians and other medical staff who carry out orders. Training sessions were conducted for all medical staff, including physicians and mid-level practitioners.

On an ongoing basis, HOI has monthly performance improvement meetings with orthopedic surgeons, anesthesiologists, hospitalists, hospital administration and front line staff. Quality and outcomes data are reviewed through the metric dashboard at these meetings, along with comparative benchmark and patient satisfaction scores, and any process improvement needs. New physicians complete mandatory two-hour training for compliance with care protocols, usually held on a one-to-one basis. A wide range of staff are involved with quality and process oversight of the protocols, with review and updates by physicians, hospitalists, nurses, pharmacists, physical therapists, case managers, and dietary staff. Onsite and online training on content or process updates are widely communicated. HOI's significant and ongoing investment of effort in care redesign helped to establish a culture that contributed to the broad acceptance and consistent use of care protocols.

STANDARDIZING CARE AT HOI

Two priorities for HOI emerged to ensure that the bundled payment rate could cover the cost of TKR and THR —a medical implant device purchasing strategy and the development of care protocols. The protocol shown in Figure A is one example from HOI's protocol set that provided an important path toward standardizing care.

Care Processes—Infection Protocol

Prior to the development and implementation of care protocols, some HOI surgeons varied in their approaches to management of patients needing surgery who tested positive via nasal culture for Methicillian-resistant Staphylococcus aureus (MRSA), a virulent staph infection. Instead of decolonizing a positive MRSA patient with an antibiotic nasal ointment regime and subsequent re-testing, some physicians would schedule surgery for a MRSA-positive patient but pre-operatively order Vancomycin, a strong antibiotic known to help reduce risk for MRSA-positive patients. HOI's review of the evidence pointed to decolonizing the patient of MRSA and performing surgery on a negatively-tested patient as the best approach for reducing the risk of surgical site infections (SSI). The final MRSA protocol calls for screening and decolonization, and is now used by HOI surgeons. As shown in Figure B, SSI rates have fallen since the implementation of the care protocol, dropping from 1.01% in fiscal year 2011 to 0.42% in fiscal year 2012 and < 0.25% in fiscal year-to-date 2013.

Purchasing—Medical Implant Device

Medical implants can be a significant component of the total cost of joint replacement procedures. In a fee-for-service environment, physicians have little need to pay attention to the device cost. By contrast, bundled payment includes the device, motivating physicians to reduce the number of implant options to generate more competitive vendor pricing. For HOI, a crucial aspect of effective care redesign for TKR and THR involved an assessment of medical implant devices used for procedures. During the care redesign process, comparative data were used to make decisions to narrow the number of vendors and medical devices used for joint implants. Once there was consensus, contracts were negotiated between the device vendors and the hospital, under the direction of the surgeons and with the support of the hospital supply chain team. By decreasing the number of device vendors, HOI was able to streamline the inventory and quality control process, case set up, and training —efficiencies that further reduced the procedure cost.

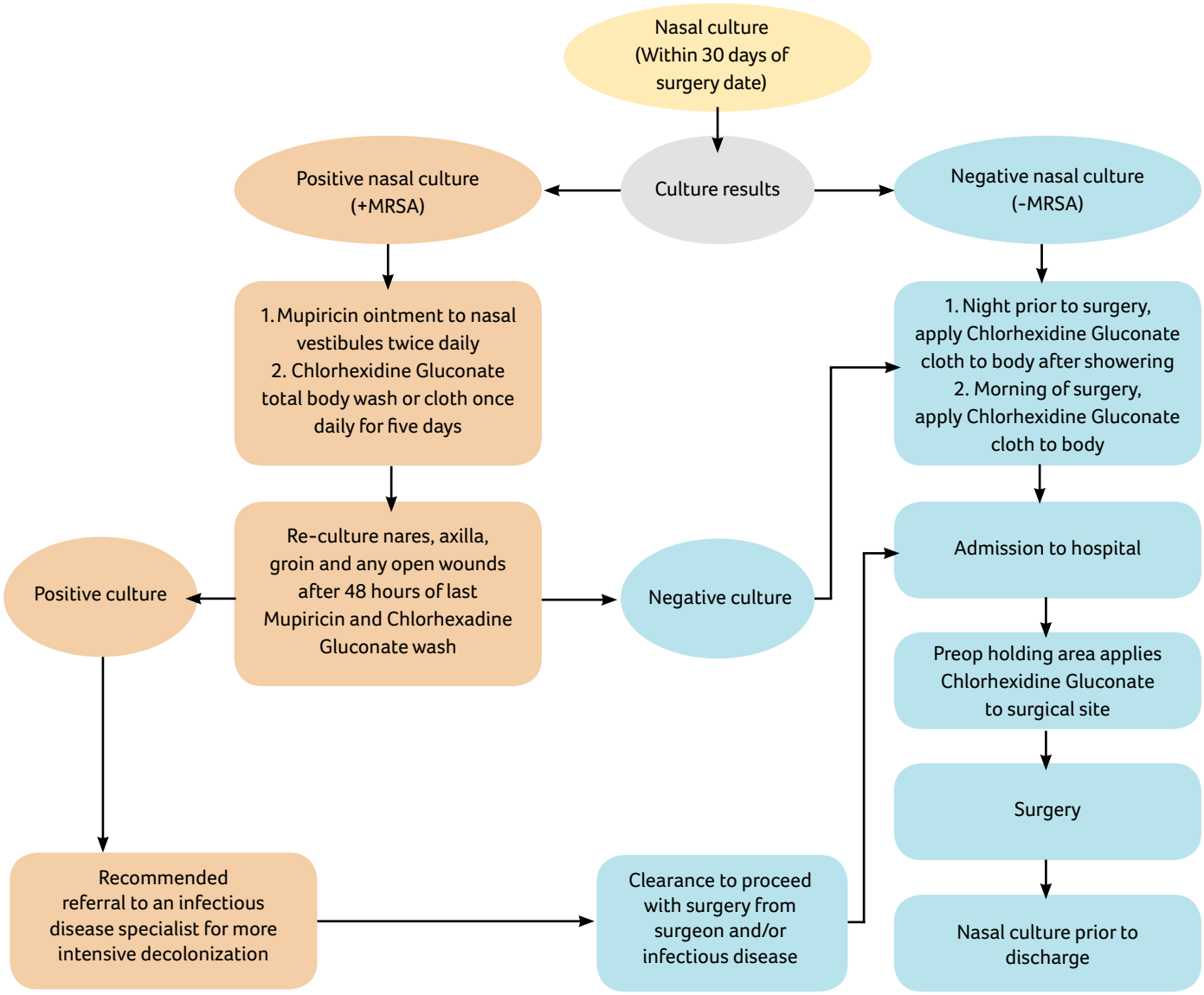
LEADERSHIP AND COMMUNICATION

HOI physician leadership strategies were necessary to drive the redesign process with the orthopedic surgeons, other medical providers, and hospital administrators—entities that have historically operated in distinct health care domains with long-standing cultural differences and divergent business models. As outlined below, communication played a central role—both among physicians, and between physicians and the hospital—as did comparative data on provider performance.

Physician-Hospital Communication—To stimulate interest in care redesign, the physician leadership

Figure A

HOAG ORTHOPEDIC INSTITUTE
PRE-OPERATIVE MRSA SCREENING PROTOCOL FOR
TOTAL HIP AND KNEE REPLACEMENT SURGERY

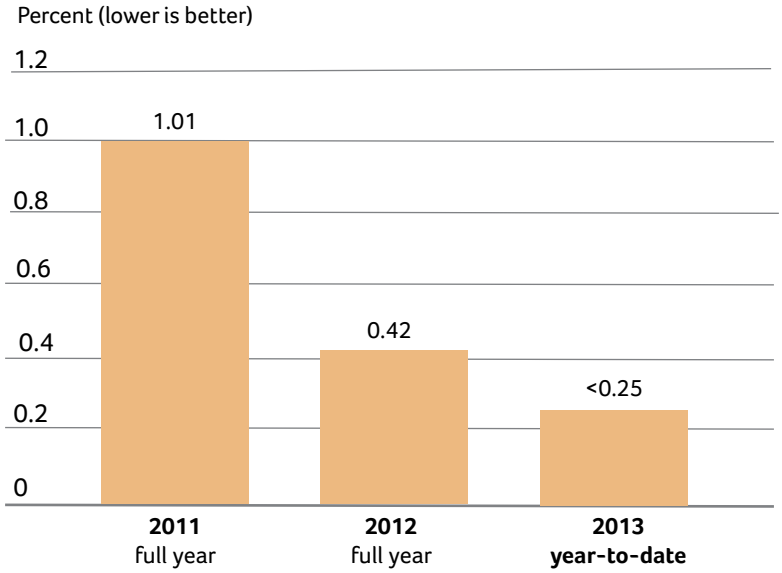


launched a continuous stream of formal and informal communication between the physicians and hospital administrators and arrived at a shared understanding of the bundled payment model, its value, and the key elements of successful implementation. Hospital and physician collaboration, especially around the medical implant device purchase strategy, created pricing transparencies across care settings and provided participating surgeons access to claims data, payer reimbursement and outcomes data that supported care redesign.

Physician-to-Physician Communication including the review of data for outliers, was particularly effective in generating support for process changes. For example, after HOI care protocols were approved and adopted, physician compliance was initially inconsistent, as some surgeons did not immediately alter their existing practice patterns, and early data on infection rates (see Figure B) demonstrated variations in compliance with the SCIP measure for pre-operative antibiotic ordering. In response, physician leaders regularly engaged in peer-to-peer discussions and interventions, along with HOI's infection prevention medical director as needed, and often used physician comparative data to support discussions.

Figure B

HOAG ORTHOPEDIC INSTITUTE
OVERALL SURGICAL SITE INFECTION RATE



CONCLUSION

Successful implementation of bundled payment—risk-based reimbursement in the form of a single payment for all services provided in an episode of care—requires careful attention to care processes. Focusing solely on operational and administrative changes, such as claims adjudication and contracting, misses a core element of the model—coordination of care across all providers involved in the episode of care. Physician champions are well positioned to drive a bundled payment strategy, as the model requires that providers pivot from the more traditional approaches to practicing medicine in a fee- for-service environment to a more collaborative approach that emphasizes standardization of care processes.

As an early implementer of bundled payment, HOI leaders engaged in frequent and spirited discussions, bringing along surgeons, hospital administrators and staff—and ultimately leading to the full adoption of care protocols. The financial alignment of shared risk and reward through HOI's joint venture reinforced the coordination incentives inherent in the bundled payment model. For other business models, gainsharing can incentivize physicians through bonus payments when program benchmarks are met or exceeded.

As bundled payment initiatives gain momentum through the CMMI Bundled Payments for Care Improvement initiatives and private programs, those undertaking or considering an episode of care approach would be well-advised to integrate care redesign into implementation planning.

Notes

1. See IHA Issue Brief #7, May 2012 Commercial PPO Episode Selection and Definition in IHA's *Bundled Episode Payment and Gainsharing Demonstration* for more information on episode definition development. IHA episode definitions are publicly available at www.iha.org

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