



Value-Based Purchasing (VBP) of Medical Devices

A Statewide California Initiative

Overview

New medical devices offer substantial improvements in the quality of life and reduction in risk of mortality for patients with serious conditions but also are responsible for part of the rapid escalation in health care costs. These medical devices, and the specialty procedures and service lines that depend on them, offer a major opportunity for improvements in value to the extent hospitals and physicians embrace efficient technology adoption and purchasing. Improvements in quality and efficiency can be furthered by (1) better data and benchmark standards on use and price, both locally and across the state, (2) improved hospital purchasing strategies, which in turn require physician cooperation and the diffusion of best practices among hospitals, and (3) new payment methods that "bundle" together the payments for the physician, the hospital, and the medical technologies.

Building on a pilot project in Orange County, IHA has initiated a statewide project to improve the assessment and purchasing of implants used for major orthopedic, spine, and cardiac procedures. This project is designed to stimulate collaborative initiatives among hospitals, physicians, and health plans to promote better data collection, quality improvement, and payment methods. The intent of the project is to pioneer and then diffuse these methods statewide in much the same manner as the IHA pay-for-performance initiative sparked initiatives in payment reform. Sustainable initiatives to expand insurance coverage must be accompanied by programs that attenuate health care cost growth; cost moderation initiatives, in turn, must focus on the specialty sectors such as orthopedics, spine surgery, and cardiology as this is where most of the dollars are spent and where costs are rising the fastest.

The project is grant-funded; there are no direct costs to hospitals to participate.

Project Focus and Methods

The project is gathering and analyzing 2008 data from California hospitals pertaining to use, quality, and cost for 14 high-volume and high-cost orthopedic, spine, and cardiac procedures. Approximately 158,000 patients undergo these procedures in California each year. Additional data are being obtained on patient demographics and severity of illness, hospital resource use, and insurance payer. These data will be used to create benchmarks and identify patterns for best performance in terms of device costs, total procedure costs, quality metrics, resource use, and reimbursement.

In collaboration with the California Hospital Association (CHA) and participating hospitals, IHA convenes meetings to highlight benchmarks and best practices. Valid benchmarks stimulate collaboration among hospitals in methods for assessing new clinical technologies and for purchasing them on the basis of value.

The project will pilot a bundled case rate or "episode of illness" payment method for these technology-intensive procedures, using insurer claims data. Device-intensive surgical procedures lend themselves most naturally to bundled payment and the multi-stakeholder structure of IHA offers a promising context within which to overcome problems of data and incentives. This payment method will draw upon the experience of the IHA in analyzing hospital efficiency using episode groupers as part of its pay-for-performance project.

Specific Objectives

Data Collection and Analysis. The VBP project develops uniform data collection and analysis processes for California hospitals with respect to medical device use, cost, patient mix, comorbidities and complications, quality, insurance coverage, and other factors. We work with Aspen Health Metrics in the data collection and benchmarking process for 2008 data.

Using these hospital data, the VBP project will develop benchmarks of median and best performance overall and by type of hospital (e.g., size, region). Project stakeholders will be able to examine patterns of cost as a function of volume, payer mix, and patient demographics. We will develop and distribute a report on cost, complications, revenues, and other factors by hospital; individual hospitals will be able to see their own performance and the median and best-performing hospitals in their region and statewide (the identity of the comparison hospitals will be masked). No part of this effort includes public reporting of individual hospital performance.

Identification of Best Practices. Working with participating hospitals and the CHA, the program convenes forums to encourage coalition-building and improvement in device evaluation, purchasing, and utilization. These meetings bring together hospital administrators and materials purchasing departments, operating room directors, and physicians, plus leaders from medical device firms, health plans, governmental entities, and other stakeholders to discuss the data and stimulate mutual learning and cooperation.

Bundled Payment Method. The medical device program will pilot a bundled payment method for procedures that involve surgical implants, based on "episode of care" measurement and methods that combine the hospital, the physician, and the device. This payment method will use claims data from one or more major health insurance plan(s) in California. The episode-based payment method will be piloted with a subset of project hospitals that are interested in testing this payment methodology and the experiences with these initiatives will be documented and disseminated to health plans and provider organizations. It is possible that the payment method will be structured as a bonus program for hospitals and physicians that obtain leading standards of efficiency rather than an immediate change in the flow of funds from insurers to individual providers (in order to minimize disruption as methods are evaluated and confidence is gained concerning data comparability).

For further information on the IHA Medical Device Program, contact Weslie Kary, Program Director (wkary@iha.org) or James Robinson, Senior Director (james.robinson@berkeley.edu).