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Bundled Payments for Surgery - Will They Reduce Healthcare Costs?

By Chuck Dinerstein — August 30, 2017

Courtesy of taxrebate.org.uk [1]

Secretary Price of HHS has delayed implementation of a new payment methodology, bundled care for coronary artery bypass surgery (CABG), which provides a fixed payment for all the services from just before admission until 90 days after discharge. Bundled payments, or a single payment for a unit of service, comes from an assembly line sensibility and has only been tested on surgical care, specifically hip and knee surgery. With a bundled payment, hospitals or health systems accept the risk because both savings and losses accrue to them, not the Center for Medicare Services (CMS). [1]

In this week's JAMA Surgery, a study [2] from Michigan's Value Collaboration, a group of 76 (73%) of Michigan's hospitals shows the component costs captured in bundled care and how those costs are varying across their collaborative. The details are more pertinent to health economists, but it provides a window on how our public money is spent. The study, really a financial analysis, looked at 5,910 patients over a three-year period ending in 2015. As you would expect, there was variation in payments and services provided. Medicare places these payments into four categories. Consider the components and what drives their difference in costs.

Index hospitalization – refers to the hospital stay for the CABG procedure itself. Medicare's payment to the hospital is based upon 1) the procedure being done, in this case, everyone has CABG, and 2) patient's co-morbidity - how sick the patient is based upon their history. Sicker patients require more hospital services and are paid at a higher rate, so it is not surprising that co-morbidities determined index hospitalization payment. After all, that is how the system was designed. Forty-six percent of all the variability in bundled payments are due to patient co-morbidities. Co-morbidities are pre-existing conditions, based on diagnoses made in the past;

upcoding to make the patients appear sicker, as some insurance companies have been accused [3] of by the Department of Justice, is almost impossible. We cannot alter pre-existing conditions, so this driver of cost variability is not reducible.

Professional services – these are the payment to physicians for surgery, anesthesia, reading imaging studies and for office care and consultation during the entire period of care. [2] Twenty-four percent of the cost variation was due to physician services. Surgeon's payments vary in a small range based on the actual procedure performed (CABG can be done several ways) with little variation. Likewise, anesthesiologists are paid at a set rate with some small change due to, once again, patient co-morbidities. Radiologists are paid a set fee to read studies; their payment variation is negligible at 1.4% of the total variation. The driver of physician payment variation, accounting for 16.7% of the bundle's variation, are the payments made to doctors, acting as consultants. Consultant fees are regulated varying by how intense, and frequently care is provided, and generally, all consultants earn similar amounts. The variability lies in the number of consultants utilized. Why and from whom we seek consultation is a relatively unexplored area of care. Consider a patient with hypertension, elevated cholesterol, and diabetes, three frequent comorbidities associated with CABG. Why does one physician ask for help from a hospitalist and another call both a cardiologist and an endocrinologist for the same issues? Do we have any evidence that the number of consults correlates with better outcomes?

Post-discharge care – these are services aiding patients in their recovery and accounts for about 17 percent of the payment variation. In prescribing follow-up care physicians consider [4] the patient's cognitive and functional abilities, their family/companion support, their current housing as well as their capacity to obtain medications and transportation for follow up care. Family support, shelter and the ability to get to the physician's office are not readily modified and are necessary for safe post-discharge care. As expected, CMS also regulates this space concerning eligibility and payment; payment variations are due to the setting in which follow-up and rehabilitative care are provided. [3] 'High cost' hospitals had twice as many patients in inpatient rehabilitation than low-cost hospitals which distributed more patients to home health services and outpatient rehabilitation. The literature does not answer the question of whether inpatient rehabilitation has a better outcome than home health or outpatient rehabilitation. A focus on determining the best setting for post-discharge care remains enigmatic and the factor that can best control these costs.

Readmissions – the cost for patients readmitted to the hospital within the 90 days after surgery for any reason. Ten percent of cost variations are due to readmissions. Readmissions are expensive; they can double the cost of care and CMS has instituted significant penalties [4] for readmissions. The rationale for penalizing readmissions is that somehow the care during hospitalization or afterward was deficient, frequently it acts as a penalty for not choosing the right post-discharge setting. Teaching hospitals and hospitals caring for a larger percentage of low-income Medicare beneficiaries seem to be responsible for the greatest number of readmissions.

Here is the bottom line, when we look at the cost of care, it is the comorbidities, the patient's pre-existing conditions as well as the patient's support systems (both regarding family/companion support and financial means), that drive the variation in cost. These are not factors we can regulate away; they are not waste easily trimmed. Developing a one-size fits all bundled payment

program is difficult. Assembly lines require identical inputs in creating identical outputs at a fixed rate and cost. Humans are not identical, comorbidities are the variation of input and drive cost variation. Cost savings may result from changing how we use consultants and what care we provide after discharge, but studies have yet to show us the best way forward.

Notes

[1] This is not entirely accurate. CMS does take 50% of savings for themselves, and the rest is returned to the hospital/health systems. The spending over the bundled payment is borne only by the hospital or health systems involved.

[2] The episode of care begins three days before admission and ends 90 days after discharge.

[3] Inpatient rehabilitation requires 15 hours of active rehabilitation a week along with physician supervision as well as an expectation that patients will actively participate and improve. Outpatient rehabilitation is less intense, and home health care provides similar services to patients designated home bound, unable to travel to their care.

[4] Hospitals can have up to 3% of their payments, for all patient care, not just readmissions taken back by CMS. Currently [5], 79% of all hospitals are being penalized a 0.58% penalty typically. While readmissions have been trending down in the five years since the penalties were instituted, the number of hospitals penalized has risen from 64 to 79%, and the amount of money returned to CMS (or lost by the hospitals) has also increased from $290 million to $528 million (82% increase)

Links

[1] https://www.flickr.com/photos/59937401@N07/5856891713

[2] http://app.jamanetwork.com/#page=issuesContainer

[3] https://www.acsh.org/news/2017/02/21/department-justice-believes-united-healthcare-defrauding-medicare-10885

[4] https://www.uptodate.com/contents/hospital-discharge-and-readmission

[5] http://www.kff.org/medicare/issue-brief/aiming-for-fewer-hospital-u-turns-the-medicare-hospital-readmission-reduction-program/