The Purpose, Promise, and Impact of the Original 1983 Medicare Hospital Inpatient Prospective Payment System (IPPS)

Implications for Developing a More Comprehensive Bundled Payment System Policy

White Paper

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Introduction

The purpose of this white paper is to examine the design features and impacts of the Medicare hospital inpatient prospective payment system (IPPS) to determine how and if this experience can inform the design of future bundled payment systems that are currently under consideration. Since IPPS comprises a bundled payment for a single provider, it is possible that there could be useful "lessons learned" for developing and implementing bundled payments that span across multiple providers.

Purpose of IPPS

In October 1983, the Medicare program embarked upon an historic change in how hospitals would be paid. The IPPS was explicitly designed to provide hospitals with incentives that were both competitive and market oriented. Under IPPS, Medicare hospital payments moved away from open-ended retrospective cost-based payment per service that had been used since the inception of Medicare to a prospectively-set payment for the entire discharge. Under retrospective cost-based payments, hospitals were rewarded with higher payments as they increased their costs. Under IPPS, where per case prospective payments varied by Diagnosis-Related Groups (DRGs), hospitals with low case costs were rewarded with operating gains, while hospitals with higher case costs experienced operating losses. DRG relative payments under IPPS were initially charge-based. These were later converted to cost-based payments to better align each DRG type case payment with resource use.

The most important aspect of the IPPS design was the definition of the hospital "product" to include all services provided within a DRG-based discharge bundle. Service lines that had been "revenue" centers under cost-based reimbursement became "cost" centers under DRG-based bundled prospective payment. This change in incentives caused hospitals to reassess how resources used within each case were employed. This basis of payment was highly transformative within the hospital industry, resulting in a dramatic change in how hospitals managed the provision of care.

IPPS had numerous objectives:

- To reduce hospital length of stay through purposeful discharge planning;
- To increase clinical efficiency through reducing unnecessary tests and services and implementing more selective use of staff and technology;
- To shift resources to more appropriate, inexpensive settings (e.g., outpatient and post-acute care settings, such as home care);
- To seek economies of scale at the DRG level through hospital and regional specialization; and
- To control hospital costs and health care costs more generally in order to curb Medicare and overall health care expenditure growth.

IPPS Design Features

To optimize the positive benefits and minimize unintended consequences, IPPS incorporated numerous safeguards and payment "cushions:"

- Four-year phase-in through a series of hospital-specific and federal payments, as well as both regional and national payment blends to account for large differences in hospital costs, presumably where patient severity was poorly measured by DRGs. This allowed hospitals to adjust to the new system and to design and implement new patient management systems over time.
- Additional payments for teaching hospitals and, eventually, for safety-net hospitals.
- Exemption of certain hospitals from IPPS, such as psychiatric, rehabilitation, cancer, long-term care, children's, various forms of rural, and waiver state hospitals.
- Outlier payments to protect hospitals with severely ill, high cost patients that were not well predicted by the DRG patient categorization system.
- Quality control by peer review organizations (PRO) that monitored admissions and discharges and overall adequacy of care. The PRO managers were consulted on all aspects of IPPS design during implementation.
- Claims data were made available to the public (with confidentiality safeguards) so that stakeholders could monitor, track, and analyze IPPS implementation results and make recommendations to Medicare for mid-course corrections.

IPPS Results: Intended Consequences of Hospital Prospective Payment System

As Medicare claims data were publicly released to interested stakeholders, IPPS implementation became the subject of numerous government and privately sponsored studies and evaluations. The results were well documented and directionally consistent.

REDUCTION IN INPATIENT HOSPITAL LENGTH OF STAY AND ADMISSIONS

- Hospital lengths of stay were reduced to historic levels as hospitals better controlled costs under a fixed DRG payment. Reductions in length of stay were especially evident in the early years of implementation.
- Medicare inpatient hospital payments decreased.
- Initially, hospital admissions did not increase, as had been predicted.

REFINEMENT IN HOSPITAL COST STRUCTURES

- Due to specialization of certain hospitals and the movement of less sick patients to ambulatory care settings, reported case-mix severity increased due to more accurate reporting of clinical information to reflect the severity of remaining patient populations.

- Hospitals with low IPPS payments relative to their costs sought to reduce hospital costs, increasing hospital production efficiency.

MAINTAINANCE OF CARE QUALITY AND PATIENT ACCESS TO HOSPITAL CARE

- Despite concerns that patients would be discharged from hospitals "quicker and sicker," there were no systemic impacts on quality.
- Various types of hospitals were financially protected, with the possible exception of rural hospitals.

REDUCTION IN MEDICARE SPENDING

- The Medicare Trust Fund was slightly and favorably impacted
- U.S. national health care spending was only slightly affected, if at all

IPPS served as a prototype for prospective case-based payment for other provider groups in Medicare, and for other payers in the U.S., as well as internationally. Through the annual release of Medicare claims data, stakeholders were able to be better informed and understand the IPPS implementation results.

IPPS Results: Unintended Consequences of Hospital Prospective Payment System

IPPS implementation resulted in several unintended consequences. In particular, the implementation of IPPS led to the development of numerous other prospective payment systems for other Medicare providers, resulting in individual "protected" siloed payment systems (skilled nursing facilities (SNF), inpatient rehabilitation facilities (IRF), long term care hospitals (LTCH), home health agencies (HHA), etc.). Collectively, these prospective payment systems have not proven to be advantageous to the Medicare program and have not encouraged continuity of care across the siloed systems settings. The planning and coordination of patient transitions from one setting to the next have proven particularly problematic.

INCREASED UTILIZATION OF CARE FOLLOWING HOSPITAL DISCHARGE

- Medicare inpatient hospital payments decreased, but these savings came at the cost of increased hospital outpatient and post-acute care expenditures and, perhaps, hospital acute care readmissions;
- As hospital lengths of stay decreased to bring hospital costs into alignment with Medicare payments, the use of post-hospital care increased. This has been especially true for SNFs and HHAs due to increased levels of patient dependence at discharge from the hospital. Although post-acute care can represent a more effective use of lower cost settings, increased post-acute care resulted in uncoordinated patient transitions across settings and has not optimized quality or resulted in the most cost effective patient placement.
- Reduced Medicare hospital payments have also increased physician and other ambulatory care services, as patients were increasingly referred to ambulatory

care following hospital discharge. While this trend may have reduced Medicare expenditures, it has also increased beneficiaries' out-of-pocket expenditures (copayments and coinsurance).

REDUCTION IN HOSPITAL FINANCIAL VIABILITY

- Some hospitals were unable to control costs to the levels needed to maintain positive Medicare margins. Hospital Medicare margins fell over time to the point at which hospital costs are, on average, greater than hospital IPPS payments today. The trade-off between lower revenue forcing hospital production efficiency and lower revenue leading to hospital financial distress is not entirely understood.
- Hospitals with higher Medicare case costs typically were more responsive to IPPS cost control incentives than others.
- Inability to adequately control costs led to Medicare payment shortfalls. These Medicare shortfalls were occasionally offset by cost shifting to commercial payers.

IMPACT ON QUALITY OF CARE ACROSS SETTINGS

- The lack of care coordination across settings and the increased number of patient transitions resulting from site-specific prospective payment systems is not consistent with improved patient care. While numerous quality of care measures have been developed for each setting to support pay for performance initiatives, quality of care measures for episodes that track patients across settings have not yet been developed.
- Care quality may be sensitive to the overall level of Medicare spending for a given IPPS system. That is, quality may decrease as payment is reduced. The strength of this relationship remains controversial given the lack of precision in measuring case-mix, provider efficiency and cross-setting quality of care.
- More research is needed on the distinction between quality assessment and quality assurance.
- While administrative (billing) data have proven useful, quality of care measurement may eventually depend upon the use of clinical data maintained by providers.

Lessons Learned for Designing the Next Generation of Bundled Payment Systems

A recent study funded by the Agency for Healthcare Research and Quality (AHRQ) defines "'bundled payment' as a method in which payments to health care providers are related to predetermined expected costs of a grouping, or 'bundle,' of related health care services."[1] This is in contrast to fee-for-service Medicare which encourages increases in the volume of individual health care service delivery. This is also in contrast to Medicare

[1] Agency for Healthcare Research and Quality. 2012. 1. Bundled Payments: Effects on Health Care Spending and Quality; Closing the Quality Gap: Revisiting the State of the Science. Evidence Report/Technology Assessment, Number 208, AHRQ Pub. No. 12-E007-1.

siloed IPPS systems to date, which comprise single types of health care providers (e.g., hospitals, SNFs, or HHAs).

Future payment bundles could encompass varying numbers and types of providers, varying time periods, and varying degrees of risk adjustment to make Medicare payments fair and reasonable across bundled payment episodes.

Conclusions

The lessons learned from prospective payment that can inform bundled payments are:

- The design of the bundle is critical to program success. Current payment bundling objectives are essentially the same as for the original hospital IPPS, but are generally being applied across multiple provider settings. The Centers for Medicare & Medicaid Services (CMS) has made claims data available under data use agreements to support stakeholder participation in bundled payment policy development and design.
- Prospectively-set payment successfully encourages and rewards efficiency. The fundamental premise of bundling has been proven and sustained. Thus, it seems reasonable to assume that more inclusive bundles will provide greater cost control as individual providers become cost centers within larger episode bundles. As a result, Medicare Trust Fund solvency will likely be extended under payment systems that bundle payments across numerous providers and achieve cost control.
- Formal collaboration and linkages across hospitals, physicians, and post-acute care providers will need to be considered under a bundled payment system. This could mean one long and extensive bundle, or a series of hospital and post-acute care bundles linked together. Hospitals, physicians, and post-acute care providers are all paid separately under the current system and are not incentivized to coordinate—these relationships will take time to form and to achieve efficiencies through better patient management and continuity of care.
- Specialization within setting under bundling may be appropriate. This specialization should facilitate the cost effective and clinically appropriate placement of Medicare patients, one setting to the next (i.e., LTCHs might specialize in ventilator patients and joint replacement patients might be treated more frequently in the home, as clinically appropriate).
- Risk adjustment needs to be carefully addressed. To date, regression-based approaches to identify cost-drivers have been used to design prospective payment systems with some success and could provide the basis for risk adjustment under more comprehensive payment bundling. The task is difficult, however, as bundle costs vary with the complexity of the patient pathway within the payment bundle (e.g., the number of and sources of care received by the patient) and the clinical

underpinnings of patient placement in the various post-acute settings is not well understood.

- Provider case-mix measurement and reporting will continue to be carefully monitored under bundling, as it has been with the various IPPS systems. The measurement and reporting of case-mix acuity has proven to be one of the most controversial policy concerns of IPPS implementation.
- MS-DRGs will likely be used as the patient categorization system providing the first level of risk adjustment to bundled payments, but MS-DRGs were not designed to predict resource use outside of the hospital. Further risk adjustment will need to be considered within each MS-DRG category. That is, MS-DRGs will need to be augmented with some form of functional or health status measurement, preferably taken at hospital discharge.
- While quality is a concern and must be considered, the evidence to date is that prospectivity has not decreased patient quality. Under bundling, there is reason to believe care continuity and care transitions can be improved, and the number of hospital readmissions can be reduced, all of which would improve patient quality.
- The extent to which Medicare pays most provider costs will need to be monitored under Medicare bundled payment. Under-payment relative to provider cost could ultimately impact care quality.
- Episode level quality-of-care measures do not now exist and will need to be developed. Various payment "cushions" will also be essential to system design:
    - Payment blends
    - Payment transitions
    - Outlier payments
    - Provider exclusions
    - Exclusions for especially high risk cases and providers treating them
    - Payment adjustments for teaching and disproportionate-share hospital (DSH) status as appropriate

In summary, and most importantly, the experience with IPPS has shown that providers can respond quickly to new payment incentives, if the incentives are phased-in and payments are designed to protect providers treating high cost patients.

Just as the DRGs represented a large departure from past payment policy, that level of change may be needed now. David Cutler states that "the effect of multiple large policy changes may substantially differ from those effects of small trial of single interventions."[2] Payment bundling is just such an approach.

[2] Cutler, D., Davis, K., and Stremikis, K. 2010. The Impact of Health Reform on Health System Spending. *Commonwealth Fund*. Pub. 1405. Vol 88.

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