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ICD-10

Episodes:
The future of healthcare payment?

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Episodes: The Future of Healthcare Payment?

Overview

The financing of healthcare is rapidly changing in this country. The Centers for Medicare and Medicaid Services has introduced a wide array of value-based alternative payment models including bundled payments and shared savings through Accountable Care Organizations and Pay for Performance programs. The passage of MACRA (Medicare Access and CHIP Reauthorization Act) includes the dual pathways of MIPS (Merit-based Incentive Payment System) and a variety of alternative payment models. This accelerated direction suggests a future comprised of payment models that are progressively tied to patients' health conditions and the outcomes and cost for the care of those conditions, rather than the historical fee-for-service model.

The planned migration away from traditional fee-for-service payment typically relies upon aggregating services into various groupings. This change is comparable to the shift in payment for hospital admissions, exchanging the old "per diem" to percent of charges model in favor of payment for admissions tied to a patient's diagnoses.

It is generally believed that the implementation of DRGs (Diagnosis Related Groups) in the early 1980's substantially reduced the Medicare program's expenditures for inpatient hospital stays[i] by bundling services into a single hospital encounter based on the nature of a patient's condition and in some cases, the procedures performed. Policy analysts for government programs and commercial health insurers have expressed a longstanding desire to create a similar payment model for the delivery of care across defined episodes across all healthcare settings. A variety of methodologies for achieving that end have been created and used for analytic purposes for many years, but challenges in implementing these have limited the use of these methods as part of a broader scheme for payment.

At the center of many of these approaches is the "episode of care" as the basis for payment, risk adjustment, and the measurement of quality and efficiency. This paper will attempt to describe what an episode of care is, how it is defined, and the challenges with implementation that must be considered prior to any attempt at a wide implementation nationally.

The Episode

Stedman's Dictionary defines an "episode of care"[ii] as: "All services provided to a patient with a medical problem within a specific period of time across a continuum of care in an integrated system." A number of models currently in use do not satisfy those criteria. For example, a DRG (Diagnosis Related Group) is not truly an episode of care as this definition suggests since it does not include all services and is specifically limited to an inpatient hospital encounter for that problem. Nor do most bundled payment models meet this definition since those substantially limit the bundling to specific parameters driven by an aggregation of providers or specific services, rather than by the patient's "medical problem". These parameters could include factors such as acuity, type, stage, classification, complications and a host of other disease parameters that make a dramatic difference in the risk and severity of the patient's condition.

Episodes of care currently in use are defined by algorithms that set parameters for the definition of each episode. These definitions will vary depending on the specific methodology that groups the elements of time spent, services provided, diagnoses identified and providers participating in care delivery into an aggregated experience of a patient-centric health condition.

The Episode Grouper for Medicare (EGM)[iii] as proposed in MACRA is the method for grouping claims related to the experience of a patient's health condition. While there are a number of different types of groupers, the moving parts for the logic that drive these groupers are similar. Based on the published methodology for EGM[iv] there are significant challenges in defining these episodes so that the proper data is accurately and completely attributed to the specific episode.

DEFINING THE CONDITION AND/OR SERVICE

The first step in defining an episode is to identify the condition or service that is the basis of this episode. That definition is relatively straightforward for conditions like "Abdominal aortic aneurysm". It is less straightforward for conditions like "Asthma-COPD Acute" or "Asthma-COPD Chronic" as explained below.

Challenge: Currently the conditions and procedures that are the primary basis for identifying an episode are not adequately defined. It is difficult to determine what is included or excluded from the definition of the episode. For example, which of the many pulmonary conditions should be included in "Asthma-COPD Acute"? Which pulmonary conditions are excluded? What is the specific definition of the category that might suggest why certain conditions should be included or excluded? What makes the episode of "Asthma-COPD" acute or chronic? Looking at the current "trigger" and "episode relevant" diagnosis codes for these two episodes, they are exactly the same. The proper definition of episodes will require an answer to these questions.

TRIGGER EVENTS THAT INITIATE THE EPISODE GROUPING PROCESS

CMS has defined sets of diagnosis and service codes that will trigger the creation of an episode of care within the EGM. The episode logic uses these sets of codes where certain criteria have been met. For example, one criterion might be that the trigger is the primary code on an inpatient claim, while another criterion might be that the trigger is associated with any claim code where there is an evaluation and management service. Based on the defined logic, certain diagnosis codes will trigger the creation of the episode while others will not.

Challenge: From a clinical perspective, the criteria for triggering an episode appear to be inconsistent in that they would include a number of conditions that may not clinically meet that episode definition (assuming there was a definition). Many conditions would fall outside of that episode logic, even though clinically they would seem to belong to that episode. For example, for the episode "Acute ischemic stroke" one of the triggers would be the codes for "vascular myelopathies" which would not clinically be considered an acute ischemic stroke but which would, according to the defined logic, trigger that episode. A further complication is that all of the codes used in the episode logic are currently defined using ICD-9 codes. As the health care community moved to ICD-10 as of October 1, 2015, all of this code-based logic will need to be redefined, replacing ICD-9 with ICD-10. For those of us who have spent several years redefining these condition-based code sets for a variety of edits, coverage definitions, quality measures and other processes that use aggregated codes, we know this is not a simple "crosswalk" effort. Rather, new concepts have been introduced or redefined in ICD-10 that may change the rationale for episode assignment. Also, many clinical scenarios exist where the same patient may have multiple episodes created, based on the same data. Each one of these episodes may have the same data attributed to them based on the current logic. Where does the data belong? If attributed to multiple episodes, will the expenditures and other data parameters be counted multiple times for each patient/provider associated with those episodes?

DIAGNOSIS AND SERVICES THAT ARE CONSIDERED EPISODE RELEVANT

For each episode category, there are services and diagnosis codes defined that indicate if the claim transactional data should be attributed to an episode that has been triggered and is currently considered active or open. As defined within the EGM worksheet logic, "these codes help steer claims to an episode".

Challenge: Most of the same challenges that impact the definition of the trigger also apply to the use of these episode "relevant" codes. Many of the codes that are considered relevant to these episodes include codes related to symptoms or findings. These include "cough", "fever", "abdominal pain", "nonspecific abnormal results of other specified function study" and a wide variety of other codes that may or may not be clinically related to the defined episode, or that may apply to many different types of episodes. Similar to the trigger codes (which are also considered relevant codes) there is a significant challenge around the attribution of data to existing episodes. There is a high possibility of attributing data to an episode that may not apply clinically or to double count data within multiple episodes.

RISK ADJUSTMENT

There is little doubt that for any defined condition, there are a number of parameters about that condition that can make dramatic differences in the risk, severity or complexity of the particular condition being treated.   For the purpose of this discussion, "risk" relates to both the financial risk for care of the patient condition as well as the risk of adverse outcomes. The episode grouping methodology proposed by CMS for the implementation of APMs and MIPS under MACRA would adjust for level of anticipated risk in the episode definition and its application. Within CMS' proposed rulemaking for MACRA, there are a number of proposed approaches to risk adjustment that use other episodes, historical diagnostic data, demographics, and other parameters, but currently those methods for risk adjustment are not clearly outlined. [Note: At this writing, the comment period on the proposed rulemaking has closed. Numerous state and national organizations have offered recommendations; CMS' final rule is expected to be released in fall 2016.]

Challenge: Most risk adjustment methodologies currently in use have fallen short of the goal of appropriately risk adjusting a number of metrics. Historical claims data have typically been vague and incomplete[v], and therefore it is difficult to determine the impact of many diagnostic conditions since the level of detail to identify these variations is not included in the submitted claims. ICD-10 now offers the ability to collect more specific data about the risk, severity and complexity of the patient's condition, but there is no evidence at this time that providers will use this level of specificity. Currently, there is an insufficient body of ICD-10 historical data to include in risk adjustment approaches. Nor is there any evidence that any current risk adjustment methodologies have incorporated these parameters into their existing approach. CMS has noted that multiple episodes assigned to a patient can factor into a patient's overall risk assessment. But as there are inconsistencies in defining and aggregating codes to these episodes, those inconsistencies will influence how effectively these episodes can be used in assessing a patient's level of risk.

DEFINING THE EPISODE'S TIME FRAME

The definition of the episode of care includes a time frame. In EGM the time frame for any episode is defined around the trigger event, that is, when a claim is submitted with a code that meets the triggering criteria. This time frame includes a "closing" time for the episode as well as a "look back period" that would include data for claims *prior to* that time that met the trigger and/or relevant code definitions. These time frames vary for different defined episode categories. For some chronic conditions, the time

frame may remain open, except in cases of the death of the patient or loss of ability to track the patient's data.

Challenge: The true episode of a patient's condition understandably will vary for each condition for each patient. While a standardized window of time is needed for comparison purposes, it is important to note that this is an artificial construct. If the claim data for the patient is no longer available or the patient dies, the scope of the episode is then changed over what the standardized scope of that episode would have been. Since patients can move from provider to provider, and providers change with some frequency their practice locations and their participation in health plans and provider groups, it is difficult to assure, simply on a time basis, that the episodes are comparable, even assuming all other factors are comparable.

ATTRIBUTION

Attribution, at a high level, is the process of assigning data to episodes, providers and patients. CMS has proposed a method to define the relationship of the provider to the patient by adding additional codes to the relationship codes that are currently identified in the HIPAA 5010 standard claim transaction. CMS also has proposed using the Tax ID number to identify providers associated with claims data.

Challenge: Historically, attribution of claims for the purpose of quality and efficiency measures *at the individual provider level* has always been a significant challenge. Uniquely identifying providers within a data set requires complex algorithms utilizing master person indexing systems. These systems differentiate specific patients and providers from one another, to avoid attribution of data to the wrong person. Regardless of the complexity however, if the data needed to confirm that a provider represents a unique entity is not present within the data set, no amount of technology can reconcile that assignment process. Since provider Tax IDs, addresses, payer identifiers, names, ages, and even national provider identifier numbers (NPIs) can vary greatly for any given provider, unique identification can be problematic. Similarly it can be difficult to identify unique instances of a particular patient within claims data sets. As mentioned above, the logic that attributes data to episodes has its own challenges. The bottom line: it will be difficult to assure that episodes reliably include the proper claims, providers and patients with a significant level of confidence, once you look under the covers at what and who the episode was intended to address.

Using episodes

The definition of episodes is not merely an academic exercise. The delivery system is moving away from fee-for-service models to models that are more focused on the patient's specific conditions and overall health status, as well as the cost, quality and outcomes of treating those conditions. In that new environment, the use of episodes and their definitions will be a significant factor influencing the emerging payment methodologies.

Incentives

The alternative payment models introduced through MACRA rely upon incentives to change healthcare delivery to improve value. These incentives also play directly into the quality and reliability of data that are submitted via claims. A close look at how payment is structured within CMS' proposed rulemaking however suggests the appropriate incentives may not be well aligned. Initially, payments may not be tied to any change in quality or cost savings. The resultant shifts in outcomes will be limited by the lack of accurate attribution, proper episode definition and other challenges to collecting and analyzing data in a way that is credible to the provider. For most providers, healthcare expenditures equate to their healthcare revenue. The downside of losing revenue does not appear to be offset by shared savings

models. The WIIFM (what's in it for me) is not clear to the provider. The migration to these new delivery and payment models will require extensive changes in providers' use of time and labor, imposing associated added costs. Additional costs for new software systems also could be very substantial. For many providers, if the resultant data output does not improve reimbursement, they will see little reason to make the effort. Without accurate and actionable data that enable providers to intervene and improve care delivery and control their costs, these approaches are likely to fail.

What should providers do?

This complex amalgam of healthcare reform strategies can all seem mysterious and overwhelming for most providers. That said, these changes in payment and performance measurement will have dramatic impact on the care that is delivered, and how providers are reimbursed for the work they do. Physicians, other clinicians and their organizations have invested a great deal of time and effort in building infrastructure to understand and work with DRGs, CPT codes, payer edits, bundling rules and other payment methods historically. As episodes become a bigger part of healthcare payment and performance assessment, understanding and responding to these new models is just as important. Providers should rely on and leverage their business organizations and associations to respond on their behalf to ensure that those evolving models accomplish the goal of improved healthcare value in a way that makes sense to payers, provider and patients.

Summary

The episode of care is evolving into a key factor in the transformation of healthcare payment and assessment. Payment and quality metric models make more sense when focused on the patient-centric 'health state' and the improvement or maintenance of that "health state". Without objective evidence that services provide significant value in a cost constrained environment, blindly paying for service-driven healthcare is not a reasonable approach.

CMS' current proposals for defining and using episodes of care, while well founded in theory, fall short of addressing the challenges of definition and attribution in the current healthcare delivery environment. To fully capture the data needed to effectively apply these types of methodologies, the following requirements will need to be met:

- There must be reliable definitions of unique provider entities as well as unique patients, ideally across all data sources.
- A more stable relationship between payers, providers and patients is needed to assure some level of longitudinal validity.
- There should be a focus on reducing the burden of reporting on clinicians, while also recognizing that data requirements are an expected part of the business of providing care.
- Models for episode definition should be simplified so they are understandable, transparent and useable for all participants.
- Improved quality of claims data with better consistency of content that includes the details of the patient's condition is a critical path requirement. The data should include comorbidities and parameters of the patient's condition that identify significant differences across measurable episodes.
- Assuming the availability of more accurate and complete source data, risk adjustment methodologies will need to be refined and updated to better reflect the true risk, severity and complexity of each episode based on sufficient historical data.

- A hard look at incentive alignment is needed to assure that the desired outcome of improved value is realized. For providers, healthcare cost is healthcare revenue. The incentives to reduce cost may not be as readily apparent to providers as the incentives to increase cost (aka revenue).

Providers and their associations and organizations should take these evolving changes seriously since these will lay the groundwork for new healthcare payment and performance measurement models.

Perhaps as a first step to understanding healthcare data, a more simplified analysis of expenditures for accurately defined and clinically relevant health conditions can be used in a way that maintains transparency on the quality of data. Once the aggregation of data and the quality of this data is fully understood, the analysis can be expanded to have a more sustainable impact on improving healthcare value[vi]. In this author's opinion, current approaches seem to be a bit analysis heavy and data quality light.

> *A special thank you to Bob Perna (Director-Health Care Economics) at the Washington State Medical Association for his support, advice and input into this paper.*

[i] The impact of DRGs on the cost and quality of health care in the United States. Health Policy. 1988;9(2):117-31

[ii] http://www.medilexicon.com/medicaldictionary.php?t=29899

[iii] https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Value-Based-Programs/MACRA-MIPS-and-APMs/MACRA-Feedback.html

[iv] Currently there are two proposed grouper methods within the EGM model, Method A and Method B. The logic used to define the use of the trigger and other episode relevant codes is different but the moving parts are similar.

[v] http://www.icd10monitor.com/enews/itemlist/user/4830-josephcnicholsmd

[vi] http://www.himss.org/news/value-quality-healthcare-data?ItemNumber=48556