

Defining an Episode Logic for the Medicare Physician Resource Use Measurement Program: Background Paper for the November 10, 2009 Listening Session

Purpose

As Medicare and other payers seek to improve the health care system, there is a growing need to understand how efficiently services are delivered. By improving efficiency, the potential exists to reduce the rate of cost growth and improve the value of care provided. Evidence shows that not all care leads to better outcomes, thus some portion of these current costs may be unnecessary. Quality *and* resource use measures are needed by CMS to identify improvements in Medicare's payment system to promote higher quality and lower cost care.

Resource use measurement can be defined in many ways. This listening session focuses on episodes of care as the unit of measurement. One of the key foundations of this unit of measurement is the definition of an episode of care. Several proprietary software tools are available to construct episodes from claims, but none has focused specifically on the Medicare population and their discrete episodes of care.

CMS is committed to using the best method possible to compare relative resource use and to ensuring that the methods used to do so are transparent. The goal of this listening session is to gain knowledge from those who deliver care, have an interest in measuring relative resource use, or may have created products to measure relative resource use. CMS seeks ideas on how to best define a grouper logic to create episodes for measuring resource use in the Medicare program. Feedback from this Listening Session, the current reporting program, and CMS-sponsored research will be used to inform the development of a transparent grouper product that addresses issues of importance to the Medicare program.

This paper includes:

- Background on CMS and others' efforts, including findings and future plans;
- Rationale for using episodes of care; and
- Key issues for discussion.

Background

Section 131 (c) of the Medicare Improvements for Patients and Providers Act of 2008 (MIPPA) establishes the Physician Resource Use Measurement and Reporting Program (further referred to as the "Program") that requires the Secretary to provide confidential feedback reports to physicians on resource use based on peer comparisons. CMS implemented the Program by the statutorily mandated date of January 1, 2009. Since then, CMS has continued to distribute feedback reports and has communicated changes to the Program in the following regulations: (1) Calendar Year (CY) 2009 Physician Fee Schedule (PFS) final rule (73 FR 69866 through

69869), (2) CY 2010 PFS proposed rule (74 FR 33589 through 33591), and (3) CY 2010 PFS final rule (TBD). Currently, the Program includes both per capita (total Part A and Part B expenditures for a given FFS Medicare beneficiary in a given calendar year) and per episode of care (defined by commercially available episode grouper software) measures of resource use. Sample prototype feedback reports are available at: <http://rurinfo.mathematica-mpr.com/>.

Section 131(d) of MIPPA directs the Secretary of the Department of Health and Human Services (DHHS) to develop a plan to transition to a value-based purchasing (VBP) program for Medicare payment for physician and other professional services. The Act requires a Report to Congress (RTC) no later than May 1, 2010. CMS is currently developing the RTC and is considering many different options, including which measures to include, such as episodes of care to measure resource use.

CMS has also conducted research, which is available on its website, about the applicability of the commonly used grouper tools that create the episodes. Links to these research papers and projects are at the bottom of this paper. Through these efforts, CMS has identified potential areas for further refinement of the approach to defining episodes of care.

There has been great interest in physician resource use measurement by other stakeholders as well. For example, the Medicare Payment Advisory Commission (MedPAC) has released several reports supporting measurement of physician resource use. In March of 2005, MedPAC released its report to Congress recommending that Congress direct the Secretary of the DHHS to use Medicare claims data to measure fee-for-service (FFS) physicians' resource use and share results with physicians confidentially to educate them about how they compare with aggregated peer performance. MedPAC envisioned that resource use measurement could encourage physicians to reduce the volume and inconsistency of services they provide without sacrificing quality of care, thereby improving efficiency. In addition, resource use measurement may encourage physicians to use less expensive, non-physician resources to reduce spending and use of costly services.

MedPAC further addressed physician resource use in their June 2006 Report to Congress, in which they focused on commercial episode grouper products. In that report, MedPAC focused on such issues as: differences between groupers, risk adjustment, attribution of healthcare costs to providers of care, and variation across geographic areas. MedPAC tested two commercially available episode grouper products on Medicare FFS claims data.

The Government Accountability Office (GAO) has also examined physician resource use. In a recent report, GAO recommended that CMS develop a system to identify physicians with inefficient practice patterns and provide confidential feedback to improve efficiency.¹

¹ GAO. *Medicare Per Capita Method Can Be Used to Profile Physicians and Provide Feedback on Resource Use*, GAO-09-802. (September 25, 2009).

The private sector has also contributed to the effort to consider these types of metrics. The National Quality Forum (NQF) formed an efficiency measures steering committee that developed a framework for measuring cost of care. Under a Robert Wood Johnson Foundation grant, the Brookings Institution and the American Board of Medical Specialties has chosen twelve conditions (a subset of the AQA priority condition list) for which they are developing episode definitions. Several commercial organizations have also contributed to this work through their long-standing research and application of grouper tools.

Why Episodes?

CMS is conducting a variety of activities to develop and disseminate resource use metrics, primarily focused on building episodes of care. Episodes of care are defined by grouping software that combs through claims and groups them into clinically similar episodes. These episodes usually include costs of care for an individual beneficiary across settings of care. Other metrics such as per capita and per service measurement can also be used.

- **Per capita.** Researchers and others have often compared the costs of care for specific populations based on per capita costs. Some researchers have used per capita Medicare costs for certain conditions to assess geographic variation in Medicare spending. CMS has used per capita costs for patients of several group practices to calculate savings associated with improved care management in the physician group practice (PGP) demonstration.
- **Service –specific.** Another measure of resource use is related to specific services. For example, it is widely agreed that some costly re-admissions could be prevented with better care management and, thus, represent inefficient care delivery. Concern has also been voiced about potential overuse of imaging services. However, each of these examples has issues related to determining the circumstances under which the specific service should be considered appropriate or not.
- **Episodes.** Much of CMS research efforts have focused on measures associated with episodes of care, that is, a series of separate, but clinically related services delivered over a defined time period. Episodes are difficult to define because of differing opinions regarding which services should be grouped together. Further, because they are often defined by a particular condition, episodes may not capture the important interactions among conditions. However, if defined appropriately, they may provide some advantages over per capita or service-specific measures, such as being more likely to:
 - Compare similar patients as they are defined by similar procedures or conditions;
 - Capture the multiple ways in which services can be combined and substituted to produce the best outcome at a lower cost; and
 - Encourage improved coordination across settings included in the episode.

This listening session focuses on the key building block for measuring resource use using episodes—defining the episode.

Issues For Discussion

CMS research has found that there are several unique characteristics of the Medicare population and program that provide challenges for identifying discrete episodes. Our goal is to develop a grouping tool to address the unique attributes of the Medicare population, settings of care, and payment system. CMS is committed to being as transparent as possible with providers, beneficiaries, policymakers, and researchers by sharing our grouper methodology with the public. Below are the issues upon which input is needed:

- **Multiple clinical conditions.** A significant portion of Medicare beneficiaries have multiple conditions that are treated at the same time in one physician or hospital visit. Yet, episodes of care are often defined by the diagnosis found on the claim. For example, a hospitalization may occur because of coronary artery disease (CAD), but the patient may have a complication in the hospital for diabetes. Further, a patient may have Chronic Obstructive Pulmonary Disease (COPD) and Congestive Heart Failure (CHF) at the same time and may go to see a physician for both clinical conditions but the physician may code the visit differently for different visits. Grouper logic could address these issues in different ways. It could focus primarily on one condition, but explicitly include adjustments for co-morbid conditions. Another approach might be to identify clusters of conditions and create episodes based on commonly occurring clusters. From a clinical perspective, what is the most appropriate way to build episodes that address this issue?
- **Post-acute care (PAC).** Medicare beneficiaries who are hospitalized often use post-acute care in the form of home health, skilled nursing, inpatient rehabilitation and long-term care hospital services after they are discharged from the hospital. Yet, existing grouper logic is neutral on the sequence of services and relies predominantly on the presence of certain diagnoses or procedures on claims to link claims into episodes. In general, should post-acute care claims be grouped with the episode that contains the hospitalization that preceded it? If so, how long after the hospitalization or subsequent post-acute care should this grouping logic be applied? Would this be applied regardless of post-acute setting?
- **Length of a chronic episode.** By definition, chronic conditions are ongoing and open-ended. To construct an episode to measure resource use, a practical time convention is needed. A 12-month period, usually a calendar year, has been used to group claims of the same diagnosis type into a chronic condition episode. Is this convention suitable for resource measurement? Should a chronic episode represent only maintenance visits and services, or should it include acute exacerbations of the chronic condition?

- Physician services. Another grouping issue may arise when the diagnosis recorded on a physician claim differs from those shown on a hospital inpatient claim. This may result in the physician care being grouped into an episode separate from the hospitalization. Should physician services that occur during a hospital stay or other institutional setting always group to the same episode regardless of diagnoses? Are there some circumstances where it is reasonable for them not to?
- Risk-adjustment. It is important that physicians whose patient mix may be more severely ill not be disadvantaged by their resource measures. However, it is also important that any risk-adjustment method limit its adjustment to the severity of the patient or other characteristics the patient may have and not rely too heavily on the types of services to adjust payments. Otherwise, the risk-adjustment may adjust out the variation that episodes are created to capture and not correctly distinguish between healthier patients and physicians who provide better care. For example, if the risk-adjusted method relies on services, such as hospitalizations, to determine patient severity, a physician who better manages patients to prevent hospitalizations could be at a disadvantage even though he or she may have more severely ill patients.
- Other. Are there other issues that may not have been identified in this list in regards to defining episodes that are important for consideration?

CMS would greatly appreciate feedback on these issues related to defining episodes of care. CMS intends on issuing a Request For Proposal in the next few months and will use the input received from this Listening Session and the findings from research related to the above issues to guide the work.

Issues Related to How Episodes are Used For Comparisons

This Listening Session is focused on the logic for defining episodes, however, how episodes are used is also of importance. CMS also seeks comment on those issues as it is anticipated that the logic created in this contract will need to be tested based on how well it works for comparisons. Therefore, comments on issues related to attribution, benchmarking, utilizing quality measures, and creating composites will also be solicited.

CMS Research on Episode Grouper Software

Clinician Feedback on Using Episode Groupers with Medicare Claims Data.

Fred Thomas, Ph.D., Craig Caplan, M.A., Jesse M. Levy, Ph.D., Marty Cohen, M.P.A., James Leonard, M.P.H., Todd Caldis, Ph.D., and Curt Mueller, Ph.D.

http://www.cms.hhs.gov/HealthCareFinancingReview/Downloads/Thomas_WE_Sep_2009.pdf

Need for Risk Adjustment in Adapting Episode Grouping Software to Medicare Data.

Thomas MaCurdy, Ph.D., Jason Kerwin, and Nick Theobald, Ph.D.

<http://www.cms.hhs.gov/HealthCareFinancingReview/downloads/09SummerPg33.pdf>

Evaluating the Functionality of the Symmetry ETG and Medstat MEG software in Forming Episodes of Care Using Medicare Data.

MaCurdy, T., Kerwin, J., Gibbs, J., Lin, E., Cotterman, C., O'Brien-Strain, M., & Theobald, N. (2008-A). Acumen, LLC, August 2008.

<http://www.cms.hhs.gov/Reports/downloads/MaCurdy.pdf>.

Prototype Medicare Resource Utilization Report Based on Episode Groupers.

MaCurdy, T., Theobald, N., Kerwin, J., Ueda, K. (2008-B). Acumen, LLC, November 2008.

<http://www.cms.hhs.gov/reports/downloads/MaCurdy2.pdf>