ICD-10's Impact on Quality Measures

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Each year there has been a significant increase in the number of quality measures being used for public reporting across provider settings. Additionally, many of the new healthcare reform initiatives include quality measure reporting in their requirements. A small subset of National Quality Forum-endorsed quality measures were converted to electronic measures (eMeasures) format and published in the Centers for Medicare and Medicaid Services' meaningful use final rule.

A guidance document on transitioning clinical quality measures from abstracted to eMeasures was published by the HIMSS NQF Task Force in January 2012. The report emphasized eMeasures depend on data standards and healthcare organizations need to prepare for more structured and standardized data within the EHR.[1]

While ICD-10 was not selected as a data standard in stage 1 of the Medicare and Medicaid EHR Incentive Programs, it is included in the stage 2 proposed rule released in February. With that probability, eMeasures will use ICD-10 in addition to other terminologies and classifications such as SNOMED CT, LOINC, and RxNorm. The set of retooled eMeasures submitted to the Department of Health and Human Services in December of last year included ICD-10 codes.

Organizations that have not started to evaluate the impact ICD-10 will have on their quality measure data should start now.

The Benefits of Greater Specificity

Quality measurement developers are finding ICD-10 provides detail where none existed before. This expansion means improved data for use in assessing patient severity, the quality of care received, and patient outcomes.

An example of ICD-10-CM specificity not available in ICD-9-CM can be found in the fracture codes. A measure may require reporting each occurrence of a hip fracture. However, ICD-9-CM codes identify only the hip fracture. On the other hand, ICD-10-CM codes provide detail on laterality and further specificity on type of encounter-that is, initial or subsequent.

On the procedure side, ICD-9-CM is limited to the general site of the fracture, whereas ICD-10-PCS is much more specific, as shown in the sidebar at below.

ICD-10 Detail on Fracture Site

A Patient WITH a diagnosis of displaced right intertrochanteric fracture has an open reduction with internal fixation procedure performed. The following ICD-9-CM diagnosis and procedure codes would be assigned:

- 820.21, Displaced intertrochanteric fracture
- 79.35, Open reduction of fracture with internal fixation, femur

However, ICD-10-CM codes provide more detail about the fracture diagnosis and procedure:

- S72.141A, Displaced intertrochanteric fracture, right femur, initial encounter for closed fracture
- 0QS604Z, Open reduction of fracture with internal fixation, right upper femur

ICD-10 Definition Changes

ICD-10 will impact quality measures in ways that will be felt for many years after the implementation. Most quality measurement reporting is on a quarterly basis but includes comparative and trending data that span calendar and fiscal year

periods. This means that measures reported using ICD-10 data will be either co-mingled with ICD-9 data, such as a calendar year report, or be compared to prior periods for trending.

Over time the ICD-10–based data will replace the ICD-9 data, but during the interim period it will be necessary to understand what differences may be introduced in measures using ICD-10. In addition to the increased specificity, there are also important definition changes taking place that will impact measures. The following examples illustrate these changes.

Pressure ulcers are a significant condition used in quality measures for public reporting and as a healthcare-acquired condition with payment provisions. In ICD-9-CM there are two different sets of codes: one to identify the location of the ulcer and the other to indicate the stage or severity. There are only nine codes for location, including upper back, lower back, heel, or ankle.

Under ICD-10-CM the stage and location are combined into a single code, and there are more codes to specify location as well as laterality (right versus left). Measures evaluating patients with stage 3 and 4 pressure ulcers will need to identify all the new ICD-10-CM location codes specified as stage 3 and 4.

Myocardial infarction codes have undergone a definition change as well. Under ICD-9-CM a myocardial infarction is coded as acute if it has a duration of eight weeks or less. This time period is four weeks under ICD-10-CM. In addition a new three-character category code has been created to identify a second acute infarct occurring in the four-week time period.

Measures using myocardial infarction codes will need to be reviewed to determine what ICD-10-CM codes to include, and the time period change will need to be considered when comparing ICD-10 measures to their ICD-9 counterparts when differences in volume or outcomes are noted.

Situations like these will need to be evaluated for all quality measures to determine if there could be a significant difference in the composition of the measure and whether these measures are even comparable.

In the long term, as more clinical data are captured under ICD-10, measures will be refined to take advantage of the increased specificity such as procedure-based measures. ICD-10-PCS provides greater specificity for identifying procedures by approach, location, and device use. Stratifying or focusing a measure based on the type of approach, such as open versus laparoscopically, will offer greater insight into process of care and outcomes like infections or mortality.

As measures are refined and modified to take advantage of ICD-10's specificity, they will move further away from comparability with older ICD-9 data and require that end users understand how these changes will affect the patient population and intent of the measure.

Preparing Quality Measures for ICD-10

So what can be done to prepare for transforming quality measures to ICD-10? As with the other aspects of the ICD-10 implementation, planning is the first step. Planning should encompass both internal performance measures used within the organization as well as measures reported externally.

Everyone is learning ICD-10, and a thorough review of the code set conversions and measure specification changes based on ICD-10 will increase the accuracy and completeness of the revised measure definitions. Each organization will need to determine what effect these updated definitions may have on its data and identify potential issues that should be addressed.

Planning should include:

- Educating measure stakeholders on the change to ICD-10 and soliciting support for the measure review process.
- Creating a team to review measure data definitions, code set conversions, and the impact of ICD-10 on each measure. This team should include coders with ICD-9 and ICD-10 training, analysts, and clinicians.
- Developing and prioritizing a measure review plan starting with measures that have the most significance for your organization in terms of patient volume and condition and treatment classifications most changed in ICD-10.
- Creating a data set for high-risk measures containing both ICD-9 and ICD-10 coded data to evaluate the impact of ICD-10 on the measure. This activity can provide other benefits to the organization in terms of giving coders experience in ICD-10 coding, determining documentation improvements to take advantage of ICD-10 increased specificity, and starting to assess the productivity impact of using the new classification.

- Preparing an assessment report for each measure summarizing findings from the review team, recommendations for measure definition changes needed to support the ICD-10 code set, and education plans for measure end users to understand the potential impact ICD-10 will have on the use of their measures.

Note

1. HIMSS National Quality Forum Task Force. "Transitioning Clinical Quality Measures (CQM) from Abstracted to Electronic Measures (eMeasures) Guidance Document." January 2012. www.himss.org/content/files/PSQO/Transitioning_CQM_Abstracted_eMeasuresGuidance.pdf?src=winews20120118.

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