

Retooling Quality Measures for ICD-10

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Plans and preparation for the October 2013 ICD-10-CM/PCS implementation center on educating the people who collect and store coded data. But equally important is educating the individuals and organizations that use these data for analysis and reporting on the quality of patient care.

Secondary uses of health data to evaluate and improve healthcare outcomes and costs have received increasing emphasis. Quality measures are now an integral part of pay-for-reporting or pay-for-performance systems at the federal, state, and local levels.

The types of measures endorsed by the National Quality Forum and those adopted by the Hospital Quality Alliance include a significant number that rely on ICD-9-CM coded data as part of their definition. A 2009 report from the Society of Actuaries finds more than 100 organizations involved in some aspect of healthcare quality measurement and reporting.¹

As with all other systems, these quality measures must be retooled for the ICD-10-CM/PCS transition.

Maintaining Measures that Use Coded Data

Coded data can be used in a variety of ways to define overall patient populations, numerator and denominator groups, or exclusions as part of a measurement definition.

The National Hospital Inpatient Quality Measure specifications are a collaborative effort by the Centers for Medicare and Medicaid Services (CMS) and the Joint Commission. The pneumonia measure set uses selected ICD-9-CM principal or secondary diagnosis codes to define the general pneumonia patient population. Individual pneumonia measures use a secondary diagnosis of cystic fibrosis to exclude patients from the denominator population.

To convert this measure set the equivalent pneumonia and cystic fibrosis diagnosis codes must be identified in ICD-10-CM. Any changes in the classification structure or coding rules used to assign specific codes also need to be identified and verified to determine if the changes will materially affect the consistency of the patient populations between the two code sets.

The heart failure measure set uses ICD-9-CM principal diagnoses of heart failure and excludes patients with selected ICD-9-CM procedures to define the patient population. The increased specificity of ICD-10-CM and, more significantly, ICD-10-PCS will also require a detailed review to determine if new codes should also be added to the measure definition.

Measures that are currently used for reporting or provider payment need to be carefully examined to determine if the conversion to ICD-10-CM/PCS will affect the measure performance or the ability to use the measure for trending or comparison of data between data captured using ICD-9-CM versus ICD-10-CM. The process of retooling and validating the comparability of measures will require expertise in a number of areas.

A Team Approach to Conversion

Because quality measures contain elements coded with ICD-9-CM, a process will need to be established for their conversion to ICD-10-CM/PCS. Some measures will be simple to convert and require only a few steps to retool because they contain limited ICD-9-CM codes and the meaning of the codes has not changed between revisions.

For example, a Healthcare Effectiveness Data and Information Set (HEDIS) measure for cervical cancer screening includes two ICD-9-CM diagnosis codes, V72.32 and V76.2. These two diagnoses have ICD-10-CM codes with equivalent meanings, Z01.42 and Z12.4 respectively.

For most measures, one ICD-9-CM code will translate to several ICD-10-CM/PCS codes because of the nature of going from the more general ICD-9-CM to the more specific ICD-10-CM/PCS. In addition, there will be instances where there is no translation between an ICD-9-CM code and an ICD-10-CM/PCS code. Measures that have lists of ICD-9-CM codes or where no identical ICD-10-CM/PCS code exists will be difficult to revise without the use of tools and a team of experts to analyze the outcome of the translation.

CMS and the Centers for Disease Control and Prevention created the General Equivalence Mappings (GEMs) as one such tool that can assist in translating meaning from one code set to the other and make the process manageable. However, while GEMs can help users understand, analyze, and make distinctions among the code sets, they were produced for implementation in electronic applications. In addition, the purpose or use case for generating the translation determines the method employed to reconcile the available choices where no equivalent ICD-10-CM/PCS code exists.

In the case of quality measures, the desired outcome is to present an all-encompassing look at the possibilities. Therefore, GEMs should not be used to convert an ICD-9-CM code to an ICD-10-CM/PCS code as they are published in a text file. They are only a starting point in the translation of coded data sets.

A team of experts is needed to analyze the outcome of the GEM application's translation. HIM professionals are essential members of the team, lending their ICD expertise and educating other members on the differences between the ninth and tenth revision. Working side by side with clinical staff HIM professionals determine which ICD-10-CM/PCS codes represent the quality measure's intent and ensure measure comparability. Another key HIM role is the analysis and selection of the GEM application for code set conversion.

National Quality Forum Examines Retooling Quality Measures

In preparation for the transition to ICD-10-CM/PCS the National Quality Forum convened a panel in the fall of 2009 to identify issues that affect quality measures due to code set changes. The panel was charged with developing recommendations for the NQF and the measurement community to guide the process for retooling existing measures and submitting new measures with code set or classification changes.

While the focus of the panel was the upcoming ICD-10-CM/PCS implementations, the panel also took into consideration expanding these recommendations to other classification and terminology changes.

For more information on the panel's work, visit www.qualityforum.org.

Beyond ICD-10-CM/PCS

Retooling quality measure code sets with ICD-10-CM/PCS allows for continuance of the status quo. However, as the industry moves forward with electronic health records (EHRs), new and improved ways to capture a measure's content are emerging.

Classification systems, such as ICD-9-CM and ICD-10-CM/PCS, group together similar diseases and procedures and organize related entities for easy retrieval. They are part of a set of standards for administrative data and have historically been integral to quality measures. However, they have limitations in their ability to capture clinical details found in the measures.

Encoding primary documentation of clinical care requires a different type of system, or a controlled reference terminology. These granular, comprehensive terminologies are able to codify the clinical content of a health record and provide a more accurate representation of a measure's data elements. Capturing clinical content at the point of care using controlled reference terminologies via an EHR has the potential to change the dynamics of how quality measure criteria are collected and reported. To have a streamlined process, the quality measures will need to be made IT-ready. To this end the National Quality Forum is developing an electronic format for quality measures, or eMeasure, by leveraging the Quality Data Set and the Health Level Seven International standard Healthcare Quality Measure Format.

To prepare for the future, HIM professionals should monitor the development of the eMeasure initiative and expand their knowledge of terminologies, including:

- SNOMED CT
- LOINC
- RxNorm

Then, as the next few years unfold and clinical data for quality measurement evolve to become more electronically captured and automatically abstracted, HIM professionals cognizant of and knowledgeable about the terminologies adopted and implemented in EHR systems will secure their role in the management of quality data.

Note

1. Society of Actuaries. "Measurement of Healthcare Quality and Efficiency Resources for Healthcare Professionals." Available online at www.soa.org/research/health/research-quality-report.aspx.

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