Supplementary Online Content


eAppendix. Coding Criteria for Categorizing National Quality Forum (NQF)-Endorsed Measures

This supplementary material has been provided by the authors to give readers additional information about their work.
**eAppendix.** Coding Criteria for Categorizing National Quality Forum (NQF)-Endorsed Measures

The Institute of Medicine (IOM) framework for categorizing process of care measures focuses on *prevention, screening, evaluation/diagnosis, management, and follow-up.* This framework is useful for considering the range of quality measures needed to assess the spectrum of care provided to patients.

We categorized each NQF-endorsed process measure into one of the five IOM groups. There is some subjectivity to classifying measures, in that a given measure may pertain to more than one IOM category. Therefore, we developed coding criteria to categorize measures, based on our own clinical experience and our interpretation of the original manuscripts describing the IOM framework.\(^1,2\) Three of the authors subsequently reviewed each quality measure, applying the criteria to code each measure. The coding guidelines used, with associated examples, may be found below.

- **Code as Diagnosis/Evaluation** if the measure starts with an established diagnosis, but is evaluating for a sub-diagnosis (*e.g., human epidermal growth factor receptor 2 testing in breast cancer*) or uses a specific physical exam evaluation to assess the severity of a known disease (*e.g., fundoscopic exam for patients with diabetic retinopathy)*
- **Code as Management** if the measure starts with an established diagnosis (*e.g., HIV* or patient population (*e.g., psychiatric inpatients*), but is evaluating for a separate high-risk condition (*e.g., HIV patients who got a TB test; psychiatric inpatients being evaluated for violence, alcohol or drug use; Diabetes patients who got a LDL; hospice patients evaluated for pain*), since they were assumed to be under the active care of a provider for their primary condition.
- **Code as Management** if the measure starts with an established diagnosis and focuses on managing a potential complication of this diagnosis (*e.g., known diabetic patients receiving foot care plan or being evaluated for foot/eye pathology as part of diabetes management*).
- **Code as Management** if the measure relates to reviewing or following-up a test result.
- **Code as Management** if the measure relates to expected number of appointments in patients with pregnancy (as this is seen as management of pregnancy).
- **Code as Management** if the measure assesses prophylaxis or secondary prevention for surgical patients (*e.g., peri-operative antibiotics; hair clipping prior to surgery; venous thromboembolism prophylaxis*) as this is seen as management of their surgical condition.
- **Code as Management** if a measure starts with an established diagnosis and assesses treatment with a preventative measure (*e.g., Hepatitis A vaccine in patients with chronic liver disease*), as this was seen as management of the established condition.
- **Code as Management** if the measure assesses documentation of care coordination.
between healthcare facilities (e.g., patients transferred to another hospital whose medical record documented appropriate communication to receiving hospital)

- Code as **Follow up** if the measure relates to patient follow-up appointment after hospitalization
- Code as **Follow Up** if a measure relates to expected number of follow-up appointments in asymptomatic patients (e.g., for children less than 15 months) or documented time interval of follow up plan (e.g., follow up appointment for patients with elevated BMI, or repeat colonoscopy in 10 years)
- Code as **Follow Up** if a measure relates to access to care, including regarding issues of insurance
- **Double code** if a measure has multiple components that clearly relate to more than one IOM categories (e.g., a measure assessing care for a patient with a history of falls that are evaluated for their falls AND a plan is put into place to prevent future falls should be double coded as Diagnosis/Evaluation AND Management).
- **Double code** if a measure assesses testing before and after a diagnosis is made (e.g., CRP and ESR in the 3 months before and after a diagnosis of rheumatoid arthritis is made), given the possibility that testing is done for both Diagnosis and Management.

**References:**