

**CRITICAL CONCEPT 3.1****2012 Performance Measures for Medicare-Certified Home Health Agencies***Process measures*

- Percentage of home health episodes of care in which patients 65 or older had a multi-factor fall risk assessment at start/resumption of care
- Percentage of home health episodes of care in which the physician-ordered plan of care includes interventions to mitigate the risk of falls
- Percentage of home health episodes of care during which patients received influenza immunization for the current flu season

Outcome measures

- Percentage of home health episodes of care that ended with the patient being admitted to the hospital
- Percentage of home health episodes of care during which patients improved in ability to get to and from and on and off the toilet
- Percentage of patients who need urgent, unplanned medical care resulting from an injury caused by fall

Potentially avoidable events

- Percentage of home health episodes of care at the end of which the patient was discharged with a Stage II pressure ulcer that has remained unhealed for 30 days or more while a home health patient
- Percentage of home health episodes of care during which patients developed a bladder or urinary tract infection
- Percentage of home health episodes of care during which patients required emergency medical treatment from a hospital

Source: Adapted from CMS (2012c).

Beginning in 2014, hospitals must report on 16 of 29 clinical quality measures, which are yet to be defined (CMS 2012d). Current information about the measurement expectations in the meaningful use requirements of the HITECH Act can be found on the federal information technology (IT) website (www.healthit.gov/policy-researchers-implementers/meaningful-use).

State licensing regulations often require healthcare organizations to evaluate structural issues, such as compliance with building safety and sanitation codes. Licensing regulations may also include specific requirements for process and outcome measures. A list of performance data that must be collected by ambulatory surgical treatment centers in Illinois is shown in Critical Concept 3.2.

Certain state and federal regulations apply only to specific healthcare units, such as radiology and laboratory departments. These regulations contain many quality control requirements with corresponding system- and activity-level performance measurement obligations. For instance, any facility that performs laboratory testing on human specimens must adhere to the quality standards of the Clinical Laboratory Improvement Amendments, passed by Congress in 1988 to ensure the accuracy, reliability, and timeliness of patient test results regardless of where the test is performed (US Food and Drug Administration 2005).

The standards of healthcare accreditation groups often contain system- and activity-level performance measurement requirements. Accreditation standards may duplicate those mandated by government regulations and purchasers. However, some measurement requirements found in accreditation standards are unique. For example, organizations accredited by The Joint Commission (2012) are expected to collect data on the timeliness of diagnostic testing



LEARNING POINT

IT Meaningful Use Measures

To meet quality reporting objectives starting in 2012, hospitals must electronically report results of 15 measures:

1. Median time from emergency department (ED) arrival to ED departure for admitted patients
2. Admission decision time to ED departure time for admitted patients
3. Ischemic stroke—Percentage of patients discharged on antithrombotics
4. Ischemic stroke—Percentage of patients given anticoagulation for A-fibrillation/flutter
5. Ischemic stroke—Percentage of patients arriving within two hours of symptom onset who receive thrombolytic therapy
6. Ischemic or hemorrhagic stroke—Percentage of patients given antithrombotic therapy by hospital day 2
7. Ischemic stroke—Percentage of patients discharged on statins
8. Ischemic or hemorrhagic stroke—Percentage of patients who receive stroke education
9. Ischemic or hemorrhagic stroke—Percentage of patients who undergo a rehabilitation assessment
10. Venous thromboembolism (VTE)—Percentage of patients given VTE prophylaxis within 24 hours of arrival
11. VTE—Percentage of patients in intensive care unit given VTE prophylaxis
12. VTE—Percentage of patients given at least five days' overlap of parenteral anticoagulant and warfarin
13. VTE—Percentage of patients on unfractionated heparin with platelet count monitoring
14. VTE—Percentage of patients provided VTE discharge instructions
15. Incidence of potentially preventable VTE

Source: CMS (2012b).

3. The patient registers on arrival in the radiology department.
4. The X-ray exam is performed.
5. The radiologist interprets the X-rays.
6. The radiologist informs the patient's doctor of the X-ray results.

To select performance measures for X-ray procedures, consider IOM's (2001) six dimensions of healthcare quality and the corresponding performance questions listed in Exhibit 3.9. Answers to these questions can help the radiology department gauge its performance in each quality dimension. The department will determine which quality characteristics it will need to measure regularly and which questions will provide the most

EXHIBIT 3.9.

Quality
Dimensions and
Performance
Questions for
Radiology Services

<i>Quality Dimension</i>	<i>Performance Questions</i>
Safe	<ul style="list-style-type: none"> • How many patients react adversely to the X-ray dye? • Are pregnant patients adequately protected from radiation exposure?
Effective	<ul style="list-style-type: none"> • Are significant (e.g., life threatening) X-ray findings quickly communicated to the patient's doctor? • How often are presurgery X-ray findings confirmed at the time of surgery?
Patient centered	<ul style="list-style-type: none"> • Do patients often complain about a lack of privacy in the X-ray changing rooms? • How many patients are greeted by the receptionist upon arrival in the department?
Timely	<ul style="list-style-type: none"> • How long do patients wait in the reception area before an exam? • Are outpatient X-ray results reported to the patient's doctor in a timely manner?
Efficient	<ul style="list-style-type: none"> • How often must X-ray exams be repeated because the first exam was not performed properly? • Is staff sometimes unable to locate X-ray films when needed because they have been misplaced?
Equitable	<ul style="list-style-type: none"> • Do uninsured patients receive the same level of service as insured patients do? • How often is the mobile mammography unit available to people living in rural areas?

lists examples of evidence-based measures that CMS (2011) encourages physicians to use for quality management purposes.

To promote widespread use of quality measures by the healthcare community, the Agency for Healthcare Research and Quality sponsors the National Quality Measures Clearinghouse (NQMC), a database of evidence-based performance measures developed by governmental, accreditation, and medical professional groups around the world (AHRQ 2008). To be added to the NQMC, the measures must meet inclusion criteria, including reliability and validity assessments.

<i>Topic of Interest</i>	<i>Evidence-Based Measure</i>
Asthma management	Percentage of patients aged 5 through 40 years with a diagnosis of mild, moderate, or severe persistent asthma who were prescribed the preferred long-term control medication (inhaled corticosteroid) or an acceptable alternative treatment
Nontraumatic chest pain evaluation	Percentage of patients aged 40 years or older with an emergency department discharge diagnosis of nontraumatic chest pain who had a 12-lead electrocardiogram performed
Osteoporosis management	Percentage of patients aged 50 years or older with a diagnosis of osteoporosis who were prescribed pharmacologic therapy within 12 months
Pharyngitis management in children	Percentage of children aged 2 through 18 years with a diagnosis of pharyngitis who were prescribed an antibiotic and received a group A streptococcus test for the episode
Diabetes mellitus management	Percentage of patients aged 18 through 75 years with diabetes mellitus who had most recent blood pressure in control (less than 140/90 mmHg)
Childhood immunization	Percentage of children two years of age who had four DTaP/DT, three IPV, one MMR, three influenza type B, three hepatitis B, one chicken pox vaccine (VZV), and four pneumococcal conjugate vaccines by their second birthday

EXHIBIT 3.16.

Examples of
Evidence-Based
Performance
Measures

useful answers for measurement purposes. Factors the radiology manager will take into consideration when selecting performance measures for the department are summarized in Exhibit 3.10.

Aspects of service that will be measured to answer performance questions must be stated explicitly. Without this knowledge, measures cannot be developed.

DEVELOP THE MEASURE

Once performance questions have been identified, the next step is to define the measures that will be used to answer the questions. Suppose the radiology manager chooses to address the question of timely reporting of X-ray exam results to patients' doctors. The department policy states that results are to be telephoned or faxed to patients' doctors within 48 hours of patients' exams. To turn the question into a performance measure, the manager uses the percentage of results communicated to doctors within 48 hours of completion of an outpatient X-ray exam.

To ensure she knows what information this measure will provide, the manager rewrites the measure in terms of the data that will be used to calculate it, as follows:

$$\frac{\text{Number of outpatient exam results reported to doctor within 48 hours}}{\text{Total number of exams performed}} \times 100$$

By writing the performance measure in fundamental measurement units, the manager is able to identify the data she needs to generate the measure. The top number in the fraction

	Yes	No	EXHIBIT 3.10. Factors to Consider When Selecting Performance Measures
Is the measure mandated by government regulations or accreditation standards?	_____	_____	
Is reimbursement linked to good performance in this measure?	_____	_____	
Is the organization's performance in this measure available to the public?	_____	_____	
Does the measure evaluate an aspect of service that is linked to one of the organization's improvement goals?	_____	_____	
Does the measure evaluate an aspect of service that is linked to one of the department's improvement goals?	_____	_____	
Are affected physicians and staff members likely to be supportive of initiatives aimed at improving performance in this measure?	_____	_____	
Are resources available to collect, report, and analyze the measurement results?	_____	_____	

Numerator

The number written above the line in a common fraction, which signifies the number to be divided by the denominator.

Denominator

The number written below the line in a common fraction, which functions as the divisor of the numerator.

is the **numerator**, and the bottom number is the **denominator**. To calculate the percentage of results communicated to the doctor within 48 hours of exam completion, the top number is divided by the bottom number and then multiplied by 100.

Examples of performance measures, along with the numerators and denominators that would help answer some of the questions in Exhibit 3.9, are provided in Exhibit 3.11.

Some performance measures, typically structure measures, do not have denominators. For instance, health plans usually want to know whether a hospital is accredited. Evidence of accreditation is a structure measure. Only two measurement results are possible—the hospital is accredited or not accredited. As another example, a common measure of a healthcare organization's compliance with environmental safety is the number of fire drills it conducts each year. This measure is an absolute number; a denominator is not necessary.

EXHIBIT 3.11.

Performance
Questions and
Measures for
the Radiology
Department

<i>Performance Question</i>	<i>Measure</i>	<i>Numerator</i>	<i>Denominator</i>
How many patients react adversely to the X-ray dye?	Percentage of patients who react adversely to the X-ray dye	Number of patients who react adversely to the X-ray dye	Total number of patients receiving an X-ray dye injection
Are pregnant patients adequately protected from radiation exposure?	Percentage of women of childbearing age who are asked about pregnancy status prior to X-ray exam	Number of women of childbearing age asked about their pregnancy status prior to X-ray exam	Total number of women of childbearing age who undergo an X-ray exam
How often must X-ray exams be repeated because the first exam was not performed properly?	Percentage of X-ray exams repeated because of wrong patient positioning on first exam	Number of X-ray exams repeated because of wrong patient positioning on first exam	Total number of X-ray exams performed
Is staff sometimes unable to locate X-ray films when needed because they have been misplaced?	Percentage of X-ray films that cannot be located within 15 minutes	Number of X-ray films that cannot be located within 15 minutes	Total number of X-ray films requested
Do uninsured patients receive the same level of service as insured patients do?	Percentage of service complaints received from uninsured patients	Number of service complaints received from uninsured patients	Total number of service complaints received from all patients
How often is the mobile mammography unit available to people living in rural areas?	Percentage of time mobile mammography unit is available in rural areas	Number of hours the mobile mammography unit is open for business in locations more than 30 miles from the hospital	Total number of hours the mobile mammography unit is open for business