

MEASURES MANAGEMENT SYSTEM

Structural Measures

As defined in the Measures Management System Blueprint [structural quality measure, also known as a structure measure](#), “assesses features of a healthcare organization or clinician relevant to its capacity to provide healthcare.” This approach to measurement focuses on the environment of care and its related administrative processes and policies. The underlying assumption is that system characteristics have a significant impact on quality of care.¹

Using Structural Measures

An initial step in delivering high quality healthcare is the infrastructure of the facility or organization. Structural measures are used to assess infrastructure of capacity, systems, and processes. Each category of quality measurement (structural, process, and outcome) is a piece of the complete picture, not the sole measure of quality. Structural measures can only be used as indirect measures of quality as they indicate general tendencies of quality of care.² Structure influences processes and there needs to be a relationship between a structural measure and a process and that process must have a relationship with an outcome.³

Infrastructure includes the physical equipment and facilities, technology, and human resources of a healthcare setting. Structural measures include technological capabilities such as electronic health records (EHRs) or electronic prescribing software, medical equipment and devices, policies and procedures in place to direct staff, govern practice, and staff capabilities.⁴ An example of a structural measure is NQF 0650: Melanoma: Continuity of Care - Recall System which looks at the percentage of patients, regardless of age, with a current diagnosis of melanoma or a history of melanoma whose information was entered, at least once within a 12-month period, into a recall system that includes:

- *A target date for the next complete physical skin exam
AND
- A process to follow up with patients who either did not make an appointment within the specified timeframe or who missed a scheduled appointment.

Two important reasons for using structural measures are

- Characteristics of the healthcare environment can significantly affect the quality of care

¹ Donabedian, A. (2003). An Introduction to Quality Assurance in Health Care. New York: Oxford University Press.

² Donabedian, A. (1980). The Definition of Quality and Approached to its Assessment. Volume 1. Ann Arbor, MI: Health Administration Press.

³ Donabedian, A. (2003). An Introduction to Quality Assurance in Health Care. New York: Oxford University Press.

⁴ Agency for Healthcare Research and Quality. (n.d.). Types of Quality Measures. Retrieved from <https://www.ahrq.gov/professionals/quality-patient-safety/talkingquality/create/types.html>

MEASURES MANAGEMENT SYSTEM

- Care settings that meet certain standards have an advantage when it comes to providing high-quality care.⁵

Accreditation and certification programs commonly use structural measures to reflect compliance or non-compliance with accreditation standards or certification requirements. As an example, if a facility is accredited or certified by one of the healthcare certification or accreditation bodies, there is reasonable expectation that a patient will receive treatment that meets a certain standard of quality and the outcomes have a better chance of being favorable than if the patient was treated at a facility without the distinction.

The Pros and Cons of Structural Measures

The benefit of structural measures is that they provide an indication of a healthcare organization's or clinician's capacity to provide for high quality care. Without the resources, policies, and procedures to provide services patients need, quality likely suffers. Since infrastructure is relatively stable, structural measures are relatively easy to develop and report.^{6,7}

The limitation of structural measures is that they do not measure the quality of care received or indicate whether a patient's health was improved as a result of that care. The implementation of structural measures is key. The ability to deliver services or access to e-prescribing software doesn't necessarily mean those functions occur as they were intended. If a facility purchases an EHR system to meet a requirement for accreditation, but then continues to use paper charting methods, the potential benefits of EHR use, that is better quality of care, would not be realized.

Having an adequate infrastructure is the first step toward providing quality of care. Structural measures are the method for assessing that infrastructure.

For more information on this topic, please visit our [Overview of the Specification Phase of Measure Development](#) page on the CMS website.

⁵ Families USA. (2014). Measuring Health Care Quality: An Overview of Quality Measures. Retrieved from http://familiesusa.org/sites/default/files/product_documents/HSI%20Quality%20Measurement_Brief_final_web.pdf.

⁶ Donabedian, A. (1980). The Definition of Quality and Approached to its Assessment. Volume 1. Ann Arbor, MI: Health Administration Press.

⁷ National Institutes of Health, Office of Behavioral & Social Science Research. (n.d). Evaluating the Quality of Health Care, Structure Measures. Retrieved from <http://www.esourceresearch.org/eSourceBook/EvaluatingtheQualityofHealthCare/7StructureMeasures/tabid/812/Default.aspx>