

Health Information Technology

Health information technology (HIT) holds the potential to fundamentally improve the quality, efficiency, and safety of care Americans receive. Today, much of the healthcare sector lacks the infrastructure, standards, and incentives to effectively use HIT to achieve these goals. A common language among HIT systems is limited, and performance measures are not always structured for use within electronic health records (EHRs), personal health records (PHRs), health registries, and other settings. Return on investment is not fully understood, and much remains unknown about how providers actually use HIT to deliver higherquality care to their patients.

The National Quality Forum (NQF) is working to build an infrastructure for HIT and quality and is playing a leading role in ensuring patients receive high-quality and evidenced-based care. NQF is working closely with the Department of Health and Human Services' Office of National Coordination (ONC) on key policy recommendations, such as HIT adoption requirements. From their work on the Quality Data Set (QDS) through measure retooling and Clinical Decision Support (CDS) activities, NQF's work is having an immediate impact and helping to ensure electronic platforms can rapidly advance quality improvement.

NQF 2010/2011 HIT Goals and Projects

QDS Maintenance

The QDS describes clinical quality information so that it may be shared for quality measurement, clinical research, and public health, all of which repurpose information recorded during clinical care. As the QDS is applied to new measures, to measure retooling efforts, and to supporting EHR use, the model will evolve, requiring oversight and expert advice.

eMeasure Development

Building on the QDS and using the Healthcare Quality Measure Format (HQMF), an HL7 standard, the eMeasure is the electronic format for quality measures. NQF is now working to specify testing requirements for eMeasures. In the future, eMeasures will be part of NQF's measure submission, endorsement, and maintenance requirements.

Initial Measure Retooling

The Department of Health and Human Services has requested that NQF manage the conversion, or "retooling," of a set of 112 measures from their paper-based format to the eMeasure format, working in coordination with their original stewards. These currently endorsed quality measures need to be converted so that the data elements are defined using the eMeasure format and in the context of EHR usage.

Measure Authoring Tool

NQF will sponsor the development of a software tool that measure developers will use to create the eMeasure. The tool will be web-based, easy to use, and maintained over time for use in NQF's measure submission process.

Clinical Decision Support (CDS)

To truly improve quality, clinicians must receive feedback in real time at the point of care. Using the QDS as a foundation, NQF is developing a classification system



for the information necessary to ensure "critical events" (e.g., requisite screenings, contraindications) are tracked and acted upon by the provider. The CDS taxonomy also will serve as a framework of requirements for CDS to function effectively within an EHR or other electronic system.

Care Coordination

Appropriate, consistent, and efficient coordination of patient care is a critical component of ensuring high-quality healthcare. NQF has developed a framework for assessing the adequacy of care coordination, and efforts are now underway to endorse additional care coordination performance measures. This project will identify the HIT capabilities necessary to measure and improve care coordination, including the types of data that must be captured in the plan of care (building off established EHR models from HL7 and other international standards organizations) and shared with other members of the care team.

Healthcare IT Utilization

Proper use of HIT (e.g., PHRs, EHRs, HIEs) and its core features and functions is essential to improving quality of care. HIT also can have unintended consequences and introduce safety hazards (e.g., wrong drug chosen due to proximity on the screen to another drug, problem list fails to show all problems). This project will establish a taxonomy of different types of performance measures that might be developed to assess whether HIT is being used properly by clinicians and others, including assessing whether decision support tools are being used effectively and methods of detecting hazards. The project also will identify methods of testing utilization measures and type and level of evidence necessary to support endorsement, and will provide guidance pertaining to system certification requirements.

For more information on NQF's Health IT portfolio and opportunities to participate in these and other activities, please contact Sheera Rosenfeld, Senior Health IT Director, at srosenfeld@qualityforum.org or visit www.qualityforum.org.