

Quality Workgroup Vision Summary

In response to the American Health Information Community (the Community), the Quality Workgroup prepared the following document to assist the Community in its deliberations on recommendations it will make to the Secretary to address the needs and expectations of health care stakeholders by the year 2014. The concepts and statements in this document are directed to the Community and subject to further deliberation by the Community. The Workgroup's vision is predicated on the idea that performance measurement is integral to all aspects of health care in the United States and that every citizen has the right to expect consistent high-quality, safe, and efficient care. Furthermore, stakeholder education must occur to gain a common understanding of the nation's unified quality agenda and to work toward a common goal. Consumers, in particular, will require additional information on what is being measured and the rationale behind those decisions.

Desired Future Vision

In the future, stakeholders, including consumers, purchasers, providers, policymakers, researchers, accrediting and oversight bodies will rely on transparent reporting of quality performance and quality improvement to inform their decision-making about care. Information technology and the sharing of health information across a network of regional health information entities using data from electronic health records (EHR), personal health records (PHR), and strong clinical decision support (CDS) systems will assist providers in ensuring that the right care is delivered to the right patient – every time. Consumers and policymakers will use these same systems to understand how well the nation as a whole and individual providers are doing in improving care and health status in accordance with the national, regional, and local priorities.

Ideally, the national agenda will be in alignment with state and regional health care reform and policies. Performance information will be timely, comprehensive, and trusted as a true measure of how well the nation is addressing high-priority gaps in quality and safety. Performance and quality improvement are accelerated because information systems increase the ability to make optimal care decisions. Finally, results will demonstrate significant progress on the nation's quality goals reinforced by public reporting on metrics and a payment framework that aligns expectations and resources among providers, employers, public and private payers.

Realizing the Vision: Impact on Today's Health Care System

Achieving this vision will require a transformation in the information necessary to evaluate provider performance and will radically shift the way health care information is shared among various stakeholders, and in particular, how it is used by consumers.

In the future, consumers will be empowered to take a more active role in their health care. Providing more information in the form of comparative data will afford consumers the opportunity to make informed choices. To achieve this vision, however, requires transformational change among stakeholder groups and within various dimensions of today's health care system. A strong public-private partnership combined with a joint commitment to

increasing value to health care consumers is critical. The issue of quality and value in health care transcends any one stakeholder group, and true alignment of incentives across the health care value chain requires active participation and engagement from each link in that chain.

Defining Characteristics of the Health Care System in the Context of a National Quality Enterprise

Changes to the defining characteristics of the health care system within the context of a National Quality Enterprise (Quality Enterprise) must be present to achieve the high-level vision described above. The Quality Enterprise represents the nation's quality infrastructure, quality goals, and incorporates the roles, responsibilities, and expectations of key stakeholders.

In the future, national goals will be realized through comprehensive measure sets that address all of the Institute of Medicine's (IOM) Six Aims for Improvement. Meaningful and consistently refined consensus measures, such as those emerging from the AQA and the Hospital Quality Alliance (HQA) consensus process will be harmonized across settings and level of analysis and all stakeholders will have access to information on "value" (i.e., cost and outcomes associated with different medical interventions and provider settings). The data necessary to describe performance based upon these standards will be efficiently collected, aggregated, and analyzed through the widespread adoption of health information technology that facilitates electronic access to clinical information. The Workgroup recognizes that transition to clinical data will be lengthy and that a hybrid of claims and clinical data will be required to measure quality for the foreseeable future.

In the context of the Quality Enterprise, the various characteristics of today's and the future state's health care system are described below, taking into account the impact the transition from the current to future state will have on key stakeholder's experience and expectations.

Receiving Care

Today, the average *consumer* needs more information to make a more educated choice about which providers they want to use, what treatments they want to receive, and the cost, quality and efficiency of the care available. The lack of consistency in available information makes provider and care comparisons difficult and the public is becoming increasingly aware of gaps in care and safety issues for themselves and their family members.

In the future state, a national quality agenda, reflecting patient needs will be disseminated to ensure widespread consumer awareness. Consumers will be more educated, empowered and confident in their health care through the increased availability of PHRs and the rapidly growing use of EHRs by their providers. Consumers will routinely use provider performance information to make decisions about their choice of providers and with access to useful information, will expect dialogue with providers. Technology will be leveraged to coordinate health information across delivery systems, patients will be allowed to add input, and tailored self-care programs and guidelines will be available.

Additionally, *providers* will further participate in the performance evaluation process to match a patient's clinical needs and personal preferences with the appropriate care, based upon

demonstrated expertise, quality, safety, efficiency, and other relevant characteristics. Networks will link providers to enable easy communication with each other in order to provide coordinated care. Providers will be more engaged and more motivated to improve. Routine use of clinical decision support and internal quality improvement will be aligned with the national quality agenda. The *payer* community will provide benefit design and consumer strategies that promote availability and accessibility of quality and cost information and *employers* will provide choice of health plans to consumers based on enhanced availability of performance data.

Managing Clinician-Patient Interactions

Today, *providers* struggle with assembling a comprehensive view of a patient's health care needs due to the way information is collected and stored. Productivity pressures and the reimbursement structure impede the opportunity for providers to have sufficient dialogue with patients, stifling communication and information sharing. Documentation is largely manual and not geared for tracking, quality improvement, or quality reporting, resulting in additional burden on providers to collect and report measurement data.

To improve on the current state, measurement and quality improvement will largely rely on EHRs and other network technologies. In the future, national quality metrics and a unified set of operating rules and standards for collecting and using public and private sector quality data ("data stewardship") will help to simplify quality measurement; thereby reducing the burden of external reporting by providers and focusing efforts on internal quality improvement. Distribution systems will keep EHRs up-to-date with best-practice clinical decision support (CDS) based on latest knowledge, allowing for feedback to *providers* in real or near-real time. EHR support at the point of care will be common practice along with other interventions to address a wide range of condition-specific guidelines and patient safety. Data from interoperable EHRs will be available to the *research community* to better assess and prioritize national quality metrics and guidelines.

Additionally, *consumers* will have access to tools that enable a more informed dialogue between patient and provider with regular channels to report their experience with care. *Employers* will continue to support patient empowerment and linkage of payment to performance ensuring consumers have a choice of physicians and hospitals that are enhanced by the availability of performance data. *Payers* will significantly reduce administrative burden of reporting provider performance due to adoption of national consensus metrics and unified data stewardship; spending will be performance-based; and provider strategies will promote quality and cost transparency. Furthermore, the *research community* will be able to dynamically update existing measures based on changes in evidence base, and national priorities.

Managing Health of Defined Populations

Currently, the ability to track the quality of care received by groups of similar patients, commonly referred to as populations, is limited by the nation's reliance on paper medical records and a lack of standardized, relevant information. Population-based health management, population-based health interventions and communications and outreach to subsets of the population are not fully realized as a result of information gaps.

In the future, *consumers* will experience reduced gaps in care due to improved EHR support and access to tools that enable a more informed dialogue between the patient and the provider. EHR functionality will support the availability of patient lists, identifying more easily those consumers with urgent needs, and communications (via secure clinical messaging) to enable outreach to patients with gaps in care. In addition, consumers will have a channel to report their experiences of care directly to their clinicians, providing new opportunities to enhance the overall scientific knowledge about managing medical conditions for a population. *Providers* will leverage the incorporation of CDS in EHRs to allow for appropriate care to be provided directly at the time of the patient encounter, with limited requirement for alerts and reminders. Improved systems will facilitate better coordinated care of patients with multiple chronic problems. *Payers* will be able to tailor and target care and prevention programs to defined populations and design specialized incentive programs for providers treating specific sub-populations.

The future will bring the opportunity for the *research community* to more effectively study populations, and refine or advance the evidence-base by utilizing data capture and reporting enabled by population health management. Finally, the increased use and reporting through EHRs will allow *policymakers* to focus on improving quality of care for defined populations and populations at large through ready access to accurate quality and clinical data at the population level.

Coordination of Care

Today, effective coordination of care across settings and along the continuum of care is limited by site- and venue-specific medical records (both paper and electronic) and manual processes are needed today to communicate relevant health care information. Clinicians have limited access to information on how to most effectively transition patients along an episode of care and how to coordinate with other care providers when patients have multiple chronic conditions. As a result, the transition of patients between settings is characterized by a lack of continuity directly impacting the quality of care a patient receives.

In the future, *providers* will experience widespread adoption of interoperable EHRs and PHRs, enabling information sharing across sites and settings of care, allowing networks of practitioners to communicate easily with one another. *Providers* will have access to coordinated guidelines and protocols will be widely used along with the inclusion of multi-practice care process in quality metrics. Referral information systems will facilitate the transfer of critical information needed for care coordination and continuity.

To support improved coordination of care, the *National Quality Enterprise* will encourage the alignment of measures across settings as well as the use of interoperable EHRs and PHRs that allow for measurement of episode-based care. The *research community* will develop guidelines and measures that promote efficient, quality, coordinated care and will continue to identify gaps and refine and update existing measures as more information is gathered on coordination of care. As a result of these efforts, *payers* will implement payment programs that reward effectiveness and coordination of care and *consumers* will remain engaged and empowered, and utilize quality information to strengthen their experience and undertake a vested interest in care across settings.

Quality Improvement

Today, public reporting requirements are helping to advance quality improvement, yet remains constrained by the intensity and burden of data collection. Performance measurement is reliant on labor-intensive chart reviews, and manual data extraction activities remain a limiting factor in making the necessary information available to impact improvement in care delivery. EHRs, where implemented, support care delivery but have not been designed to facilitate improvement and assessment of quality of care delivered across patient groups. Providers receive feedback reports on quality retrospectively, with at least a four-month lag from the date of care delivery and the use of clinical decision support at the point of care is low.

The future will require automated data collection through EHRs for, at a minimum, the NQF-endorsed measures selected by the HQA and AQA thereby reducing *provider* burden of collection and public reporting. To support quality improvement, EHRs will need to be able to produce information on many performance measures that are not publicly reported. Event detectors within EHRs will identify significant variances in practice and potential hazards, highlighting for providers important health details. EHRs will also integrate patient-specific care and safety recommendations into workflow. Improved CDS will be selectively concentrated toward the highest-frequency/highest-severity quality issues in addition to allowing for automated collection of adherence, non-adherence, and exclusion criteria.

Furthermore, *consumers* will remain engaged and empowered, and will realize the benefit of true quality improvement; becoming more comfortable with initiating dialogue with providers about their health care. *Payers* will implement payment programs that reward quality improvement and transparency of quality information. The *research community* will leverage outcomes data and continually refine practice guidelines and quality measures to further quality improvement efforts, and to build or extend the evidence base.

Measuring and Reporting Quality

There is no unified national agenda for measuring quality today. Current measurement efforts are limited by what is measurable, rather than focused on what is important to measure. Measure development activities focus on provider encounters and thus, occur in silos. Many measure developers use differing standards for evidence grading, differing approaches to measure specifications, and have varying capabilities for measure development and maintenance, resulting in inconsistencies in the way measures are developed, implemented and maintained.

In the future, *All Stakeholders* will have a robust set of standardized quality measures to use, including specialty care settings. *Providers'* reporting efforts will largely be supported by health information technology and real or near-real time feedback. EHRs will support data capture and reporting for consensus measures leading to quality reporting as a natural byproduct of care. Common services will allow small practices to participate more effectively in reporting.

In addition, by increasing reporting participation, professional certification entities and *accreditors* will increase reliance on robust, easily accessible data, including performance measurement, in the evaluation for accreditation. Using the same information, *consumers* will

be able to discern quality of care through consistent information with which they can make informed choices and *payers* will be able to reward efficiency and quality of care, based on reporting of reliable and consistent quality measures. *Policymakers* will become unified around a national quality agenda and incorporate into this agenda the performance gaps identified in the AHRQ *National Healthcare Quality and Disparities Report*.

Payment

Today's payment system is largely driven by financial compensation for utilization of encounter-based services, regardless of patient outcome. There has been an increase in pay-for-performance pilots and programs are increasing in number but studies on the effectiveness of such programs remain mixed. Measurement of quality performance is done largely through claims data because electronic clinical information is generally lacking and performance information is insufficient for payers to determine true under- and over-utilization of services. Currently, the market perceives the cost of quality reporting to be higher than the benefit or incentives, but generally supports movement toward payment based on value.

In the future, payment reform will exist when incentives are aligned. To improve the current system, *payers* will use financial incentives to promote higher levels of quality across diverse health care settings. Easier, more consistent reporting will lead to more reliable performance measures combined with wider availability of tools to improve overall quality. This system will also allow for increased reimbursement drivers based on quality. Adoption of national consensus metrics and a unified data stewardship will significantly reduce the payers' administrative burden of provider performance measurement and lead to a comprehensive basis for quality performance incentives.

In addition, *providers* will continually improve, and will receive incentives to do so through payment, while *consumers* will recognize value and quality. Consumers will have access to cost information and will be educated on how to interpret both quality and cost data. At this time pay-for-performance strategies will evolve from rewarding high-quality clinical care to rewarding care that is not only high quality but patient-focused and efficient. *Policymakers* will support legislation and programming that link "performance" to payment and *employers* will recognize benefits from alignment of incentives and payment across the health care value chain. These changes will afford employers the opportunity to manage shared cost programs with employees due to the availability of valuable, understandable and applicable health care quality performance reporting.

Building Blocks for Change: National Quality Infrastructure Requirements

To support the envisioned changes to the health care system, there are various components of the national quality infrastructure that must be bolstered, and in some cases, developed de novo. These components represent interdependent building blocks, working together to create the defined future vision. For example, a robust health information exchange (HIE) is dependent on solid policies for appropriate data use, stemming from a unified data stewardship and clearly defined and accepted privacy and security policies with data supplied by interoperable electronic health records. Each one of these building blocks is critically dependent on the development and maintenance of a strong public-private partnership.

Without shared responsibility, commitment and investment, we will not be successful in achieving the milestones discussed below.

Metrics

Today, national priorities for quality measurement are not defined and metrics are currently limited to what is measurable rather than what is important to measure. Developed by multiple organizations with differing perspectives, experience, and objectives; metrics have limited standardization of targets and limited commonality in how similar terms are defined for numerators and denominators. Operational and IT challenges of metrics create tension with the need to drive measurement forward.

To realize the future vision, a unified national agenda for quality measurement must be developed and must be aligned with the common framework for measurement and use standard definitions of terms to the extent possible. Measure developers will have to collaborate to facilitate measure harmonization and vendors will have to collaborate with the National Quality Forum (NQF) and quality measurement organizations to encourage development and implementation of common conventions and guidelines for measure development.

Electronic Health Record Adoption

Recent surveys suggest that adoption rates in ambulatory settings range between 15 and 18 percent¹. In 2005, 10 percent of hospitals had implemented all functions of an EHR; 36 percent were just getting started; 27 percent had low usability; and 27 percent had moderate usability (usability defined as the number of functions and the percentage of which the hospital had fully implemented)².

In the future, EHR adoption will increase because of the financial incentives related to improved quality and external reporting and a reduction in purchaser uncertainty due to product certification, which will require high-quality, highly-functional EHR products.

Electronic Health Record Products

Today, capabilities of EHR products lag behind the needs of external performance reporting and quality improvement. CDS capabilities in existing inpatient EHRs consist mostly of alerts and order sets as part of computerized physician order entry systems. In ambulatory EHRs, CDS is limited to some medication checking and age- and sex-based wellness prompting but limited support for disease management. CDS is difficult to implement without disrupting clinician workflow, and is not explicitly synchronized with quality measurement. Utilization and benefits are inconsistent at different sites because the knowledge and tools are not interoperable (each vendor / provider recreates the wheel) and adoption is limited and difficult.

¹ Gans D, Kralewski J, Hammons T, Dowd B. Medical groups' adoption of electronic health records and information systems. *Health Affairs* 2005; 24(5):1323-33.

¹ Burt CW, Sisk JE. Which physicians and practices are using electronic medical records? *Health Affairs* 2005; 24(5):1334-43.

² <http://www.ahapolicyforum.org/ahapolicyforum/resources/content/FINALNonEmbITSurvey105.pdf>

In order for change to occur there needs to be increased availability of EHR capabilities to include data capture, measurement, and reporting due to product certification and market pressures. A common performance measurement infrastructure must include standardized data sets, and the wide-spread use of HIT including EHR platforms and interoperability throughout the systems. This unified platform will be able to monitor and improve quality performance. Standardization of CDS methodologies will be completed, through harmonization of US and international Standard Development Organizations. EHRs containing effective CDS tools will address a full range of quality improvement goals: health maintenance, chronic disease management, patient safety, and effectiveness and cost of care. Effective EHRs combined with change management will build local and national capacity to work toward the nation's quality improvement priorities. CDS and related process improvements will be supported by reimbursement structure and certification.

Health Information Exchange (HIE)

Currently, there are at least nine state-level HIEs, with 55 percent of these planning to be suppliers of performance data. However, vehicles for support and knowledge sharing among state-level HIE initiatives are lacking along with financial models for a sustainable HIE structure. Mechanisms are needed to promote strategic synergy among states and between state and federal efforts, with additional clarity on how state policymakers and governmental agencies should be involved in HIE. Public and private payers will need to be engaged and leveraged.

In order to leverage HIE capabilities, broader stakeholder dialogue must:

- conduct an environmental scan of states that have successfully integrated state-level HIE with quality and transparency initiatives;
- develop business models that support state-level HIE involvement in quality and transparency initiatives; and
- discuss and clarify the governance structures that are required to support the relationship between state-level HIE organizations and quality initiatives.

In the future, these activities will position state-level HIEs to facilitate cost-effective access to state-wide data for quality initiatives and assist with data standardization to reduce duplicate data acquisition efforts. HIE representatives will be involved in national committees and coordinating efforts (NQF, AQA, HQA, etc.) while strengthening relationships with quality organizations at the state and local levels.

Data Stewardship

Currently, there is no consensus regarding utility of centralized vs. decentralized strategies for aggregating data for quality assessment, resulting in multiple stakeholders holding relevant data with limited access to others' data. In addition, there are no uniform rules regarding data access and use, contributing to privacy concerns.

To create consensus, a collaborative of measure developers, clinical system vendors, providers and practitioners must begin to apply research and hold discussions to generate principles for guidance on implementation of operating rules and standards. A data steward body will

reconcile and enhances operating rules and standards based on learning's from AQA pilots and emerging data exchanges. Stewardship will be consistent across aggregators, with some variation where necessary to be sensitive to regional priorities, and some variation over time as the national agenda for improving quality evolves. Technical assistance will be available for data aggregators and international standards will be harmonized where appropriate to encourage adoption and implementation.

Data Aggregation

In the present environment, clinical data is aggregated by providers and payers in proprietary databases that are not interoperable, or into stand-alone registries and related databases. These individual initiatives do not comprehensively assess provider performance since the data collected are often insufficient to reliably measure quality and efficiency performance.

In order to improve data aggregation practices, it must be enhanced by the structuring of documented data either through direct entry of structured information, or through focused and standardized free text searching and parsing techniques, seamlessly to clinical users. This will allow for patient-centered data, aggregated across providers and payers to support longitudinal quality measurement at the patient, physician, physician group, plan and hospital level. Longitudinal measurement systems will capture the performance of multiple providers caring for a patient, will examine how well care is provided across transitions to different settings (e.g., hospital to nursing home), and most important, will evaluate patient outcomes over time. The same data will also be used to report to population health reporting and surveillance (e.g., real time biosurveillance; cancer registries; vital statistics).

Population Reporting and Feedback

Today providers utilize proprietary information systems for performance improvement and physician feedback.

In the future, quality reporting modules or systems will provide closer to real-time performance data to local organization managers or individual practitioners to allow timely implementation of performance improvements through benchmarking and peer comparison. EHRs will support transfer of quality data to these quality reporting modules or systems that can support automated and standardized quality reporting. An established nation-wide interoperability will enable population reporting and feedback and will coordinate public and private health.

Public Reporting

Today public reporting is fractured and inconsistent with multiple measures and data display approaches. As a result, the public infrequently uses reported data to support choice of providers. NQF in partnership with measure developers need to define consensus set of measurement priorities to support public reporting and ensure that public reporting is focused on national priorities.

In the future, research must be done to understand consumer preferences around data display. The quality data that is displayed needs to be pertinent, valid, reliable and understandable to

enable informed choices across the care continuum (hospitals, physicians, SNF, etc). Information on performance data, payment policies, and performance improvement processes will require timely, public disclosure to providers (both clinicians and institutions), purchasers, and beneficiaries, to promote accountability among providers.

Privacy and Security Policies

The Health Insurance Portability Accountability Act of 1996 (HIPAA) applies to health information created or maintained by health plans, health care clearinghouses, and health care providers who engage in certain electronic transactions, but there is a potential lack of protection of personal health information (PHI) when used by entities not explicitly covered by HIPAA legislation or regulations. In fact, there may be mistaken perceptions that HIPAA assures protection of all secondary use of PHI by users, beyond those covered entities specifically noted in HIPAA.

In the future, a national framework for the secondary use of health data must include a robust infrastructure of policies, standards, and best practices to facilitate the broad and multiple purpose collection, storage, aggregation, linkage, and transmission of health data with appropriate protections for legitimate secondary use. Rules and guidelines will be put in place early on in the process in order to enable quality programs to continue uninterrupted by secondary data issues. Appropriate confidentiality protections will be in place for the submission of patient data that are in strict compliance with HIPAA regulations. Potential problems of patients opting out of having their data included in a data repository will be addressed and impacts on accurately assessing the quality of care on both the national and community levels will be understood.