Enabling a Digital Quality System

Vision: A scalable, sustainable digital quality infrastructure "utility" that enables reduced waste and burden in quality reporting; allows measurement across levels of the healthcare system; more accurately identifies high-value care; and enables a "learning health system" that leverages existing guidelines and clinical inputs to improve care in real time.

Background. For the last 30 years quality measurement has driven remarkable improvements in healthcare. The Healthcare Effectiveness Data and Information Set (HEDIS®), the backbone of the measurement system, has revolutionized our ability to identify areas for improvement, drive that improvement and standardize expectations for high quality care. Adoption of HEDIS measures aimed at the prevention and treatment of colorectal cancer, high blood pressure and diabetes, to name a few, have resulted in millions of saved lives and avoided complications.

Problem. Today's sprawling quality enterprise can be labor-intensive, fragmented, and inconsistent. It is also largely retrospective. Eliminating unnecessary or duplicative work and expenditures related to quality measurement could result in massive cost savings and free up invaluable time for patient care. America needs a more automated, unified, accurate, prospective, and timely quality measurement and reporting system. Moreover, the federal government bases many of its performance incentives on insufficiently validated data processed through systems that are prone to error. This undermines CMS's goal of rewarding high quality care and ensuring that this is what patients receive.

While programs that utilize and audit HEDIS data, such as Medicare Advantage Stars, can be confident in the validity of the data used to evaluate quality, others have inconsistent – or nonexistent – validation regimens. The explosion in electronic clinical data with the adoption of EHRs makes it even more essential that CMS evolve technology-enabled approaches to validate and leverage clinical data sources for use in quality and incentive programs.

Challenges. The current approach to quality improvement and value-based incentives is fragmented and uncoordinated across health plans and delivery systems. This creates excessive burden on clinicians and hinders patient safety, efficacy, and affordability. This "non-system" produces care that is riddled with gaps, redundancies, and inefficiencies. Even physicians who attempt to coordinate and rationalize care are obstructed by the balkanization of data, the lack of a full picture of what is happening to their patients, and the inability to act effectively if care is not what it should be.

The quality measurement enterprise no doubt contributes to this dysfunction. The way that healthcare data are currently organized and shared impedes the delivery of seamless and coherent care. Improving the data and measurement infrastructure will result in more efficient, transparent, comparable, and consistent quality reporting, removing a key barrier to improving healthcare.

We need an evolution that embraces the essential features of successful quality programs – impartiality, accountability, data validation, evidence-based standards and measures – while breaking down barriers to data-sharing, cooperation, and adoption of a common set of tools and protocols that will improve healthcare for all Americans.

A key challenge to modernization is overcoming inertia and facilitating coordination among diverse stakeholders to build, test and implement a new digital quality infrastructure. Much of the necessary technology exists in disparate forms (e.g., standards) and places (e.g., demonstration projects, vendor proprietary implementations). Recent legislation, regulations

and industry consensus promise to address interoperability – including the need for standardization. But because there is variability in implementation, we are not yet achieving standardization in practice and will remain locked into an inefficient, costly model. The best chance to accelerate adoption across parties is to demonstrate to regulators, developers, and users of quality measures how a uniform set of tools in a common, secure environment can facilitate better data flow and utilization for an array of quality efforts and entities.

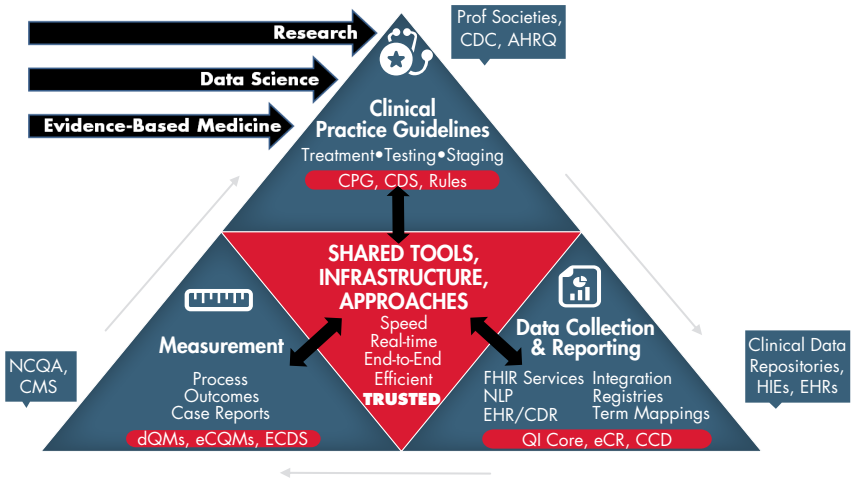
The Path Forward. The digital quality utility we envision aligns closely with the "secure, data-driven ecosystem to accelerate research and innovation" contemplated in the 2020–2025 Federal Health IT Strategic Plan and would support the Centers for Medicare & Medicaid Services (CMS) goal of requiring all quality measures to be reported digitally by 2030. And it builds on growing interest among states and many private payers to move in this direction.

Digital quality measures (dQMs) are key to unlocking the potential of a reimagined quality enterprise. They reduce the time and cost to distribute, implement, and maintain measures. Electronic Clinical Data System measures (ECDS), a subset of dQMs that use the HEDIS reporting standard, ease reporting burden by using data generated in the normal course of care delivery and captured in electronic health records, registries, health information exchanges (HIEs) and other digital sources. This rich clinical data allows for measuring more of what matters, including outcomes and care for individual patients rather than the general population.

A more digital quality system will enable rapid feedback and integrated content development across clinical guidelines and decision support, quality measures, and data specifications – each informing the other. This is the essence of a true learning health system. Collaborative vehicles NCQA's Digital Measurement Community can incubate new ideas and solutions as the digital ecosystem evolves. These efforts align with digital measurement initiatives underway at the Agency for Healthcare Research and Quality, Centers for Disease Control and Prevention, Office of the National Coordinator for Health IT and others.

Next Steps. NCQA is scoping an end-to-end pilot of the essential components necessary to advance digital quality measurement. From there we envision working with a diverse group of stakeholders to develop a platform that can continuously evolve and expand to incorporate new users, use cases and functionalities. Users would be able to tailor the digital tools that emerge to their own goals and minimize the burden of maintaining organization-specific systems. In light of its broad potential to improve the system, and the ongoing cost of operation and maintenance, we believe a public-private partnership with seed funding from each sector and ongoing membership fees may be the appropriate governance model – with members empowered to influence development and priority use cases.

A Digital Ecosystem for Better Clinical Practice and Quality Measurement



As an independent, trusted, non-profit organization with a strong record of building consensus, we feel well-suited to convening a collaborative effort on this front with participants from the public and private sectors. We would welcome the chance to discuss the concept further.