Executive Summary

The Health Information Technology Portfolio in 2012

The Agency for Healthcare Research and Quality (AHRQ), through the work of its Health Information Technology (IT) Portfolio, is one of the lead agencies of the Department of Health and Human Services tasked with researching how health IT can improve health care. Since 2004, AHRQ's Health IT Portfolio has invested in groundbreaking research to increase understanding of how health IT can be used to improve health care quality, safety, efficiency, and effectiveness.

The Health IT Portfolio's body of research helps identify successful approaches to effective use of health IT to improve health care quality, barriers and facilitators to implementation, and how the use of health IT may impact different types of outcomes. To accomplish its objectives, the Portfolio—

- Anticipates the future needs of the health care system and supports development of innovative health IT solutions.

- Identifies and fills current gaps in knowledge about health IT.

- Leverages the capability of health IT to improve the quality, safety, efficiency, and effectiveness of health care.

The *2012 AHRQ Health IT Annual Report* highlights the Portfolio's initiatives in 2012 and demonstrates how the projects have contributed to the evidence base on the impact of technology in health care. Through a variety of funding mechanisms, a total of 138 grants, contracts, and interagency agreements funded by the Health IT Portfolio were active in 2012. These projects were led by organizations across the United States and span various technologies, care settings, and populations of research, such as using health IT in practice redesign, developing an electronic health record (EHR) format that is specific to pediatric patients, and using health IT to improve quality in primary care practices. Profiles of each project funded in 2012 are available at: http://www.healthit.ahrq.gov/portfolio/.

Highlights From the 2012 Health IT Annual Report

AHRQ-funded research in 2012 resulted in several notable successes in the areas of clinical decision support, quality measurement, improving preventive care, and medication management. These projects are briefly described here:

- *Advancing the Use of Clinical Decision Support:* AHRQ has played a key role in recent initiatives to define and execute approaches for more effective clinical decision support (CDS). Findings from two CDS AHRQ demonstration projects have shown the ability to share CDS components across organizations using different EHR systems.

- *Developing the Evidence Base on Quality Measurement Enabled by Health IT:* AHRQ continues to drive work on quality measurement enabled by health IT, which can make the process more reliable, timely, and cost effective, including the funding of the Pathways to Quality Measurement Through Health IT initiative. As part of this work, in July AHRQ published Quality Measurement

Enabled by Health IT: Overview, Possibilities, and Challenges, that provides an overview of the historical and current state of quality measurement through health IT. In addition, AHRQ launched the Health IT-Enabled Quality Management Web page, which describes its initiative intended to advance health IT-enabled quality measurement and reporting by identifying strategies, a health services infrastructure, and related research issues.

- *Using Health IT to Improve Preventive Care:* AHRQ continues to focus on how to improve preventive care by funding various projects where health IT applications have supported the delivery of appropriate, individualized preventive health services that engage patients and integrate into clinical care practices. Projects highlighted in this report include that of Lynne Nemeth, Ph.D., and her team, which involved implementing electronic standing orders into the daily workflow of primary care practices. This project demonstrated meaningful improvement in care across study measures, including immunizations, mammogram rates, and screening for diabetes and osteoporosis. In addition, James Mold, M.D., and his team led the development of *My Wellness Portal*—a comprehensive, patient-centered, prevention-oriented, Web-based personal health record and found that its use increased the delivery of recommended preventive services, and increased clinician knowledge of patients' medical histories. Videos for these projects and others can be found at the AHRQ Health IT YouTube channel, available at: http://www.youtube.com/user/AHRQHealthIT.

- *Improving Medication Management Safety in the United States:* Medication management is a complex and expensive process with high potential for both benefit and harm. AHRQ has funded numerous projects where health IT applications have supported the workflow around the provision of prescription medications, control, and recording of use. One example is the work of Grant Carrow, Ph.D., and his team. They conducted a pilot project to develop, implement, and evaluate a system for electronic prescribing of controlled substances, which directly informed the Drug Enforcement Agency's Interim Final Rule published in 2010 allowing controlled substances to be prescribed electronically nationwide for the first time.

Moving Forward Into 2013 and Beyond

The work funded by the AHRQ Health IT Portfolio in 2012 has helped to identify challenges to health IT adoption and use, solutions and best practices for making IT work in real world health care delivery settings, and tools that will help providers incorporate new IT successfully. AHRQ continues to produce field-leading research and evidence syntheses to inform future decisions about health IT by health care stakeholders and policymakers. New focuses in 2013 and beyond include funding projects that examine the design of consumer health IT (PA-11-199), which is becoming more and more important as patients are increasingly using technology to manage their health care. In addition, AHRQ continues to collaborate with its Federal partners and has recently funded 12 projects that will help inform the Stage 3 Meaningful Use measures for the Centers for Medicare & Medicaid Services' Electronic Health Record Incentive Program. To learn more about the Health IT Portfolio, please go to the AHRQ Health IT Web site, available at: http://www.healthit.ahrq.gov.