TRANSFORMING HEALTH CARE THROUGH THE EFFECTIVE USE OF HEALTH INFORMATION

Health IT at RTI

Health care organizations are investing in health information technology (health IT) to improve quality of care and reduce costs. RTI International is exploring ways to realistically achieve these goals. Our researchers and informaticists understand the costs, benefits, and challenges of transforming the health care sector into a high-performance system.

RTI INTERNATIONAL

RTI is working to advance the safe, effective, and efficient use of health IT and improve patient and population health both in the United States and worldwide. In addition, RTI brings multidisciplinary research and technical expertise to bear on the real-world challenges of adopting and implementing health IT and health information exchange to achieve meaningful use of health information.

To better support all of these these efforts, the Center for the Advancement of Health IT has been established at the institute. For nearly 30 years, our staff members have helped clients implement and measure the effectiveness of health information technologies. Our growing consortium of researchers and analysts are organized around three focus areas: policy analysis and implementation, patient-centered tools, and system and outcome evaluations that promote better care while reducing unnecessary costs.

Health IT Policy Analysis and Implementation

RTI's health IT portfolio ranges from collecting data on the rate of electronic health records (EHRs) adoption to developing innovative solutions to narrow the gap between physician and patient. Interoperable health IT will ensure that health care providers have complete, accurate, and searchable health information available at the point of diagnosis and care. RTI has substantial expertise in researching and understanding the implications of health information exchange policies, particularly those governing the privacy and security of personal health information.

An example of our experience in ensuring appropriate data privacy, protecting the rights of the individual, and maintaining health data in a secure environment is our leadership of national collaborative groups in the State Health Policy Consortium. These multi-state groups are formed to develop innovative solutions to the legal and policy challenges of interstate health information exchange. Previously, RTI led the Health Information Security and Privacy Collaboration, which involved 42 participating states and territories, creating seven multi-state collaborative privacy and security projects. Each project developed common, replicable multi-state solutions to reduce variation in and harmonize privacy and security practices, policies, and laws (see http://healthit.hhs.gov/hispc).

RTI—Working to Connect the Nation

Since 2005, RTI has supported projects in nearly every U.S. state, territory, and jurisdiction to advance the use of electronic health records and the exchange of health information, both within and between states.

RTI brings together teams of researchers, informaticists, IT professionals, and policy analysts to develop creative solutions to the most challenging issues in implementing health IT. Our teams have conducted needs assessments, developed strategic and operational plans, developed stakeholder outreach and communication programs, and conducted evaluations and policy analyses. In addition, we provide technical assistance and program management support to large, complex projects and have brought together multiple stakeholders, including international experts, to form effective, collaborative teams. Currently, we are

- Researching the barriers that Medicaid providers experience as they move forward with plans to participate in the EHR incentive program
- Researching ways to leverage meaningful use to achieve patient engagement
- Providing guidance to the Regional Extension Center program related to practice transformation
- Supporting large-scale data collection services in health IT policy
- Supporting research on interstate health information exchange policies, including privacy and security
- Providing technical assistance to state-based organizations nationwide to implement health IT programs.

Health IT Evaluation

An accelerated pace of investment has spurred the widespread adoption and implementation of health IT systems nationwide. Implementing these systems represents a significant intervention, requiring research to better understand the impact on cost, quality, safety, efficiency, and patient engagement. RTI takes a multidisciplinary approach to evaluating the impact of Health IT on issues. As a recognized leader in evaluation research, at both the program level and the micro level, our cross-organizational teams have experience in technology economics, case study and business analysis, and survey design for federal clients, such as the National Institute of Standards and Technology, the Centers for Disease Control and Prevention, and the U.S. Environmental Protection Agency.

Our teams have conducted both retrospective and prospective analyses of the economic impacts of new technologies and innovation as well as evaluating the roles of advanced technologies and health information exchange in the US health care system, particularly as concerns interoperability among health information systems. Recently we have

- Conducted research on the Indiana Health Information Exchange related to the quality-of-care reports (produced for hospitals and physician groups at that site) that explicitly break down quality measure performance by different payers
- Supported the Centers for Medicare & Medicaid Services' 5-year EHR demonstration, which is implementing a new incentive payment system for expanding use of EHRs and improving quality of care in 400 physician practices serving Medicare fee-for-service beneficiaries in rural and urban areas of South Dakota, Louisiana, Pennsylvania, and Maryland
- Executed a cross-site evaluation of the Robert Wood Johnson Foundation's Diabetes Initiative, which included 14 community and clinic-based diabetes self-management programs
- Performed an evaluation of the project BreathEasy: A PHR for Adults Living with Asthma & Depression or Anxiety, which will examine the impact of the personal health record (PHR) on health outcomes, quality of life, and quality of care.

Patient-Centered Research and Technologies

Patients and caregivers using a broad range of technologies can transform the way they manage health information, coordinate health activities, and engage with care providers. RTI researchers use cutting-edge approaches and innovative technologies to improve the way health data are accessed and managed, offer actionable reminders to patients, and address complex challenges such as data interoperability and the combined use of clinical and administrative data for analysis and decision support. We continue to advance the use of real-time and retrospective patient data to provide high-value applications and interventions for users.

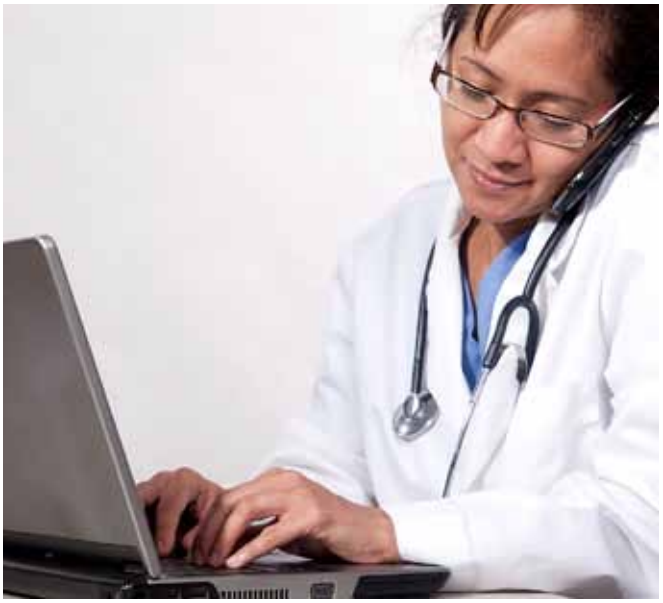
We offer research expertise that leverages the concepts of Health 2.0 tools such as blogs, podcasts, tagging, search, and wikis. These approaches, along with user-generated content and open-source principles, have shown promise in areas such as personalizing health care, collaboration, and health education promotion. RTI scientists are skilled in research collaboration and dissemination of tools, results, and lessons learned. We offer a broad set of activities, including formative research, message development and testing, experimental design, data collection, analysis, and reporting. Our staff have the skills and experience to transfer knowledge—using emerging technologies as well as traditional forms of information-sharing—to key stakeholders, including health care providers, consumers, researchers, and academicians.

Using mobileHealth to Advance Patient Health

Researchers at RTI developed the ARTEMIS (RTI-SMS) platform to support sending and receiving text messages for research purposes. The ARTEMIS platform is a web service designed for researchers interested in investigating the use of text messaging to support health behavior change, including risk reduction, disease prevention, and chronic disease management.

Recent projects include the following:

- Developing a PHR application that will help sedentary adults become more physically active as part of Project HealthDesign: This is a national program designed to support the development and testing of an integrated set of next-generation PHR systems that can assist consumers with managing their health and health care.
- Evaluating the use of text messaging to facilitate health behavior change among persons living with HIV: In this effort, study participants received tailored text messages based on their individual need for adherence reminders, risk reduction messages, social support, general health and wellness recommendations, and patient activation prompts.
- Implementing *HealthBox* in India and Bangladesh, a comprehensive technology to guide the community health worker in providing an accurate general health assessment, interactive education, point-of-care testing, and algorithmic treatment and referrals. *HealthBox* features audiovisual content for low-literacy populations and intuitive, easy-to-use tablet computers.



More Information

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