



The Intersection of Health Information Technology with Health Services Research

Catalyst for Change in Our System of Healthcare

In 2001, the Institute of Medicine (IoM) estimated that between 44,000 and 98,000 Americans die each year from preventable medical errors. The lack of immediate access to patient healthcare information is the source of one-fifth of these errors.

—Committee on Quality of Health Care in America, Institute of Medicine. *Crossing the Quality Chasm: A New Health System for the 21st Century*. Washington, DC: National Academies Press; 2001.



The President's Health Information Technology initiative represents a critical shift in our system of healthcare that will improve the quality of health in our nation by reducing medical error and the cost of healthcare. RTI International is a leader in innovative health services research, and our health services research program is at the forefront of the health information technology initiative.

Recent RTI Projects

Measuring Adoption and Use of Electronic Medical Records by Healthcare Providers

RTI, under contract with Partners Healthcare at Massachusetts General Hospital (MGH), conducted focus groups with primary care physicians and hospital chief information officers to learn more

about the factors that affect the adoption and use of electronic health records (EHRs). Under a second contract with MGH, RTI is completing a statistical survey of physician practices to measure the adoption of EHR systems and how they are used in medical practice.

Protecting Privacy and Security of Health Information

RTI leads the Privacy and Security Solutions for Health Information Exchange contract funded by the Agency for Healthcare Research and Quality and the Office of the National Coordinator for Health Information Technology. RTI subcontracts with 33 states and Puerto Rico to assess variations in organization-level business practices, policies, and laws to learn about privacy and security barriers to health information exchange and to develop feasible solutions and implementation plans.

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Recommended Requirements for Enhancing Data Quality in EHRs

RTI led an effort for the Office of the National Coordinator for Health Information Technology to develop a set of recommended anti-fraud requirements for electronic health records.

Empowering Consumers Through the Use of Personal Health Records

RTI is participating in the Robert Wood Johnson Foundation Project HealthDesign, a national program designed to support the development and testing of an integrated set of next-generation personal health record (PHR) systems for consumers. RTI and The Cooper Institute are collaborating for this grant to develop a PHR designed to help sedentary adults begin and sustain regular physical activity.

Research Needs of the Changing American Healthcare System

Change in How We Measure the Cost and Quality of Healthcare

Federal agencies, which provide health insurance coverage to nearly one in every four Americans, are now required to provide easy-to-use information about the quality and price of their healthcare options so consumers can make informed choices among doctors and hospitals. This information will help support doctors and hospitals that deliver high-quality care and avoid unnecessary healthcare costs, creating opportunities to improve care and lower its costs. The move toward a patient-centric healthcare system means that new ways of measuring quality and cost will be needed.

Ready Access to Secondary Health Data

Improved access to high-quality health information collected through electronic medical records is proving to be a valuable resource for health services researchers. The aggregation of healthcare data presents many opportunities

for health services researchers to investigate issues related to access and use of health services by the population in general or specific subgroups. Research issues include those related to both users and providers of health services. On the user side, investigations include measures of need, health knowledge, perceptions of health and well-being, barriers to access, use of services, and patient satisfaction. On the provider side, issues include the organization of healthcare delivery, provider reimbursement, and other factors related to choice of diagnostic or therapeutic services made by providers. RTI researcher Dr. Linda Dimitropoulos participated as a member of the expert panel on the American Medical Informatics Association's paper on developing a national framework for secondary use of health data.

Measures of the quality of healthcare delivery need to be developed. Outcome studies may be used to assess the efficacy of health services. Studies may also focus on the health services needs of special populations defined by demographics (the elderly, children, low-income families), ethnicity (African Americans or Native Americans), or health problems (HIV/AIDS, mental health, cancer).

Measuring Impact on Patients

The concept of an empowered healthcare consumer is relatively new, and the cultural change required to engage consumers as partners in their healthcare with their providers will require an understanding of the needs of both consumers and healthcare providers.

For more information on Health IT, contact

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RTI-3309 R1 08/2007



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