

Optimizing Health Care with Information and Technology

Digital health data come from health information technology (health IT), such as electronic health records; mobile health devices, like diabetic monitors; and sensor technologies, such as wearable fitness trackers.



More Information

Linda Dimitropoulos, PhD Division Vice President, eHealth, Quality and Analytics 312.456.5246 Ild@rti.org RTI International 230 W. Monroe St, Suite 2100 Chicago, IL 60606 RTI International understands how information and technology can be used to improve health care systems, patient-provider interactions, and patient outcomes. We follow a research-based approach to make better use of digital health data. Our approach makes the delivery of health care easier, faster, and smarter for everyone from those working behind the scenes to every patient and provider.

With our vast health systems research experience, we have been providing leadership in support of the federal government's efforts to modernize health care delivery. Today, we lead the way in the use of data to solve complex problems, offering our clients wide-ranging research options and access to experts in policy, standards, informatics, public health, data analysis, knowledge management,workflow and organizational change, patient communication, and decision making—and many more.

Using Health IT to Improve Design and Delivery of Health Care

Our Digital Health and Clinical Informatics team works with clients to explore how patients and clinicians can use technology to improve individual health, selfmanagement, population health, and provider-based health care as part of health system transformation. Our experts provide evaluation for the design, usability, and impact of health IT—ranging from mobile personal devices to complex multi-user systems. We provide experience in developing and conducting complex program evaluations spanning multiple sites and stakeholders.

Improving Quality Measurement for Better Outcomes

As part of our work in quality measurement and health policy, RTI develops and implements national health care performance measures and data collection methods to improve health outcomes around the world. Our research addresses current and emerging quality analytics and payment issues, with a focus on harmonization and usability across provider settings. Harmonized measures and health information technology enable data collection across reporting programs and provide the necessary foundation for longitudinal quality comparisons; care coordination; and ultimately, improved health outcomes.



Delivering Analysis Assistance to Leverage Health Data

The RTI Center for Health Data Analytics offers expertise in analytic development and statistical analysis to benefit governments, businesses, foundations, and universities in their understanding and utilization of various sources of health care and medical data.

Our staff members analyze health data to support large-scale development and implementation of new payment models, including pay-for-reporting and pay-for-performance systems; analyze complex data for state health care payment and delivery system reform efforts needed to transform the United States health care system; and provide analytic experience with a wide range of operational and research databases created and maintained by the Centers for Medicare & Medicaid Services (CMS).

Advancing the Health of Communities

Our Public Health Informatics team works to improve people's overall health by analyzing health data at a community level and supporting health information systems across the globe. By integrating information science and informatics with public health research, we can identify and apply innovative ways to improve public health practices. Ultimately, this collaboration improves all areas of public health—including surveillance, prevention, preparedness, and health promotion.

Informing Health Policy

Our Digital Health Policy and Standards team provides research and technical assistance to inform policies regarding the implementation and safe use of health IT. Our work in standards and interoperability provides the foundation needed for new approaches to health care—in support of a learning health system—where data are collected once in a standard format during the process of care and then reused multiple times to support quality measurement and reporting, patient safety, research, and innovation. Our research supports policies designed for a more data-driven, technology-enabled health system.

Project Highlights

RTI partnered with the Office of the National Coordinator for Health Information Technology to help create a **Health IT Safety Collaborative roadmap**. This roadmap outlines objectives and specific activities to encourage the safe use of health IT, and to inform policies and practices to improve the safety of health care provided to individuals.

Funded by the Robert Wood Johnson Foundation (RWJF), the Culture of Health Sentinel Study aims to examine how 30 diverse communities are implementing transformative activities to build a culture of health. Examining these activities will inform the **Culture of Health Action Framework** that will provide insights into how RWJF and its partners can create a national movement of health for all.

Integrating Signals and Human

Response (iShare)—funded internally by RTI—explores the development, deployment, and use of sensors for health and behavior studies through multiple pilot investigations involving the extraction and analysis of self-generated data, physiological signal analysis, and the integration of heterogeneous data from other sources.

We work to develop, implement,

and **evaluate** symptom management quality measures for CMS federal reporting programs. These measures are designed to encourage care coordination, the adoption of certain clinical practices, and the effective use of resources—all to increase the value of care for nursing homes, inpatient rehabilitation facilities, and long-term care hospitals.

RTI International is an independent, nonprofit research institute dedicated to improving the human condition. Clients rely on us to answer questions that demand an objective and multidisciplinary approach—one that integrates expertise across the social and laboratory sciences, engineering, and international development. We believe in the promise of science, and we are inspired every day to deliver on that promise for the good of people, communities, and businesses around the world. For more information, visit www.rti.org.

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