

Digital Health and Clinical Informatics

RTI International's Digital Health and Clinical Informatics (DHCI) program provides research and services in the design, implementation, use, and evaluation of health information technology (health IT) and data to improve health outcomes and health care delivery.



More Information

Stephanie Rizk, MS
Senior Manager, Health Information
Technology Policy
312.456.5276
srizk@rti.org

RTI International
3040 E. Cornwallis Road, PO Box 12194
Research Triangle Park, NC 27709-2194
USA

Our DHCI experts help our clients explore how patients, clinicians, policymakers, and other stakeholders can use technology to improve individual health, self-management, population health, and provider-based health care as part of health system transformation. We conduct research and provide technical assistance that focuses on the following areas:

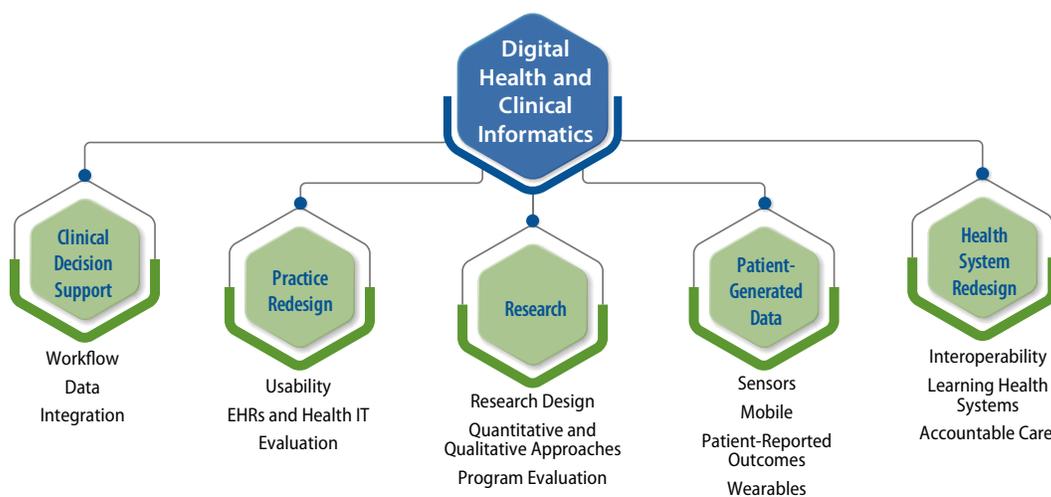
- Clinical decision support (CDS)
- Consumer health informatics
- Data analytics
- Data re-use
- Health IT design and implementation
- Mobile health (mHealth)
- Optimal use of data and technology.

Our services improve patient outcomes, care delivery, and care coordination across care settings and the home.

We cater solutions to better serve our clients. As part of this approach, we assemble teams with the expertise to advance the safe and effective use of health technology and data. Our staff members evaluate the design, usability, and impact of health IT—ranging from mobile personal devices to complex multiuser systems. We provide experience in developing and conducting complex program evaluations spanning multiple sites and stakeholders. Our research identifies strengths and weaknesses in the implementation and use of health IT for visit-based care, virtual care, and self-care.

Our program has partnered with many types of organizations, including the following:

- **Federal/State Agencies:** Agency for Healthcare Research and Quality, Office of the National Coordinator for Health Information Technology, Office of the Assistant Secretary for Planning and Evaluation, New York City Department of Health and Mental Hygiene



- **Commercial Organizations:** Validic, Biogen, AbbVie Inc.
- **Foundations/Associations:** Robert Wood Johnson Foundation, Genetic Alliance, The John Merck Fund, National Association for Trusted Exchange, American Medical Informatics Association
- **Academic Medical Centers:** Duke University, University of North Carolina—Chapel Hill, Northwestern University, Vanderbilt University, Joslin Diabetes Center in Boston

Areas of Expertise

Our multidisciplinary staff members bring technical expertise and contextual understanding of health care settings to support research in CDS, practice redesign, patient-generated data, health system redesign, and foundational research and evaluation.

Our experts employ a variety of methods to support actionable research in these areas, including the following:

- Convene stakeholders for multidisciplinary collaboration to assist clients in developing best practices, establishing standards, and coordinating technical and policy strategies.
- Develop tailored, rigorous evaluation plans to address client-specific topics in digital health and clinical informatics.
- Design and conduct mixed-methods evaluations for program improvement, including key opinion leader reviews, technical evaluations, statistical analyses, literature reviews, and environmental scans.
- Offer user-centered design and usability testing with a focus on workflow, human factors, and system functionality.
- Leverage clinical data sources through expertise in interoperable transmission of data, collection and analysis of patient-generated data, and mHealth data.
- Disseminate and communicate results, including reports, peer-reviewed publications, presentations, testimonies, and lectures in diverse areas related to clinical informatics, digital health, and connected care.

Project Highlights

Technological Advances in Glucose Management in Older Adults (The Tango Study): DHCI is leading a qualitative study of technology-use enablers and barriers, and cost-effectiveness as part of a randomized controlled trial in older adults (age 65 or older) with longstanding type 1 diabetes. This study at Joslin Diabetes Center in Boston involves an innovative enhanced continuous glucose monitoring platform to improve the safety of self-administered insulin treatment given the elevated risk of damaging or fatal hypoglycemia among older adults. This work is funded by the National Institute of Diabetes and Digestive and Kidney Diseases.

Patient-Centered Outcomes Research (PCOR) CDS Learning Network: Our DHCI leaders are working with the Agency for Healthcare Research and Quality to build a nationwide community of stakeholders to expand the use of CDS in all settings of care, enabling PCOR findings to be incorporated into the care setting.

Integrating Signals and Human Response (iShare): iShare 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, the analysis of physiological signals, and the integration of heterogeneous data from other sources.

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.

RTI International is a registered trademark and a trade name of Research Triangle Institute. The RTI logo is a registered trademark of Research Triangle Institute.