

## Using Health Information Technology in Practice Redesign: Impact of Health Information Technology on Workflow

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<b>Principal Investigator:</b>	Carayon, Pascale, Ph.D.
<b>Organization:</b>	Abt Associates, Inc.
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<b>Project Period:</b>	August 2012 – August 2015
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**Summary:** Ambulatory care settings are increasingly using health information technology (IT) to capture patient reporting of medical histories, symptoms, results of self-testing (e.g., blood glucose levels, blood pressure), weight questions and concerns, over-the-counter medication use, and other information that patients need to share with their care providers. Although health IT can help facilitate making information more readily available to providers as they formulate a patient’s treatment plan, smaller physician practices may find it difficult to implement health IT to maximize benefit while minimizing disruption.

This project is one of three contracts awarded under the Agency for Healthcare Research and Quality Accelerating Change and Transformation in Organizations and Networks II (ACTION II) request for task order (RFTO) titled ‘Using Health IT in Practice Redesign: Impact of Health IT on Workflow.’ The goal of this RFTO is to fund methodologically rigorous research studies on health IT implementation to support practice redesign in ambulatory care settings and to enhance understanding of the causal relationship between health IT and workflow processes.

The project, led by Dr. Pascale Carayon (principal investigator) from the University of Wisconsin-Madison and Andrea Hassol (project director) from Abt Associates, will use a case study research design to explore the influence of sociotechnical factors—such as practice characteristics, physical environment, or communication flows—on clinicians, office staff, and patients in capturing and using patient-reported health information, both within an ambulatory practice and across multiple practices. The work will be guided by the Systems Engineering Initiative for Patient Safety (SEIPS) model. The team is using a combination of quantitative and qualitative methods to study six small- and medium-sized ambulatory care practices, conducting an in-depth case study of each, to describe the workflow related to patient-reported health information from the viewpoint of multiple stakeholders. Study sites will be located in Alabama (assisted by researchers with the University of Alabama at Birmingham) and Wisconsin.

The study team will spend 3-4 days at each study site to conduct direct observations, interviews with clinical and office staff, clinician surveys, and patient interviews to create process maps and document work system barriers and facilitators to the integration of health IT in each site’s workflow. This information will be used for within-case and across-case analyses to understand how using health IT to capture and use patient-reported health information impacts clinical workflow.

### Project Objective:

- Explore the influence of sociotechnical factors on clinicians, office staff, and patients in capturing and using patient-reported health information, both within an ambulatory practice and across multiple practices. **(Ongoing)**

**2012 Activities:** The project began in August 2012. The focus of activity for the first few months was on establishing the necessary subcontracts, developing the research and analysis plans, and developing the Information Control Request (ICR) to obtain Paperwork Reduction Act (PRA) clearance. The ICR was drafted and underwent revisions after AHRQ review.

**Preliminary Impact and Findings:** The project has no findings to date.

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**Target Population:** General

**Strategic Goal:** Develop and disseminate health IT evidence and evidence-based tools to improve health care decisionmaking through the use of integrated data and knowledge management.

**Business Goal:** Knowledge Creation

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