An Evolving Statewide Indiana Information Infrastructure
State and Regional Demonstration Project—Indiana Network for Patient Care

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Organization: Regenstrief Institute
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Project Period: September 2004 – July 2010
AHRQ Funding Amount: $5,000,000
Summary Status as of: July 2010, Completion of Contract

Target Population: General

Summary: Indiana is using established local and regional health information initiatives, including the Indiana Network for Patient Care (INPC), to develop the electronic health information infrastructure across the entire State. The INPC, an operational health information exchange (HIE) in central Indiana, is one of six Agency for Healthcare Research and Quality (AHRQ)-sponsored State and Regional demonstration (SRD) projects begun in late 2004 and early 2005 to create State or regional HIE. The SRDs use a variety of approaches (e.g., technical, business, and governance models) to support data sharing and interoperability. Each is funded to analyze the role of the Medicaid program, evaluate their project, and develop a sustainability plan. The INPC HIE includes an array of participants and members: physicians, hospitals, ambulatory practices, laboratories, radiology centers, health plans, State and county health departments, and immunization registries. The Regenstrief Institute, acting on behalf of the participants, created and operates the exchange and helped create the Indiana Health Information Exchange (IHIE) to establish a sustainable business model to support the INPC.

The INPC has operated since 1995, providing population-based, longitudinal, structurally coded, and text patient data on citizens of Indiana. The INPC coverage is most complete for the Indianapolis Metropolitan Statistical Area (MSA), a 3,200 square-mile region in central Indiana with 1.7 million residents, but continues to expand to cover all 6.4 million residents of Indiana. As of the end of 2010, the INPC stored data for 23 million unique patient registrations, representing more than 11 million unique individuals. The system contains clinical data for nearly the entire population of the Indianapolis MSA, patients throughout Indiana, and patients outside the State.

The INPC captures data from many sources, including hospitals, physician practices, public health departments, laboratories, radiology centers, pharmacies, pharmacy benefit managers via SureScripts, and payers. Sources such as hospitals and physician practices provide many types of data, including laboratory, radiology, and pulmonary function test results; cardiology diagnostic results; gastroenterology study results; procedures performed; diagnoses assigned; transcribed reports (admission, operative, discharge); and inpatient, outpatient, and emergency department encounters. As of August 2010, more than 19,000 clinicians across Indiana exchange data through the system.

Project Objectives:
• Assess the effects of HIE on productivity, service utilization, patient quality, safety, satisfaction, and
ongoing marginal costs. (Ongoing)*

• Create a sustainable business and funding model to assure the HIE’s long-term survival by providing services built on top of the HIE, such as clinical messaging, quality improvement, and public health services. (Achieved)

2010 Activities: The INPC continues to grow and support clinical care, public health surveillance, quality measurement, coordination of care, and clinical research. In 2010, 14 hospitals joined the network, and work began to incorporate Golden Living extended care facilities. By the end of the year, the INPC contained more than 11 million unique patients, 600 million encounters, and 3.5 billion rows of structured results. Providers continue to access the INPC for care in a variety of settings including pre-hospital care in ambulances, emergency departments, inpatient settings, mass sporting events, and physician offices. The project team began to track and share the level of participating providers’ utilization of the data with the participating facilities. The level and intensity of usage continue to increase. Quality measures for 5.3 million individuals are now generated monthly. Participating providers and payers receive data on these measures, which physicians use to receive millions of dollars in incentives from payers. The Quality Health First® program, which relies on INPC data, had nearly 1,500 participating primary care physicians at the end of 2010.

The team is working to expand the use of the flows of information in the INPC to enhance coordination of care. Based on a successful pilot project with one payer, they are working to deliver notifications about relevant care events to care coordinators hosted by payers. Dozens of projects utilize INPC data, with appropriate patient consents and institutional review board reviews for health services research, clinical effectiveness research, clinical trials recruitment, and translational research. A notable example is the Observational Medical Outcomes Partnership in which the team is examining the methodological underpinnings of utilizing observational data for research. Finally, in 2010, the team undertook a major contractual and administrative re-organization of the INPC. A new contractual model to accommodate the growth and evolution of the INPC was developed and is being implemented. In addition, the team is re-organizing the management committee to accommodate the larger number of participants and to incorporate a representative model for the committee.

Impact and Findings: Preliminary findings from the study examining barriers to expanding HIE indicate that many stakeholders are still not well-informed about HIE. Small hospitals report that two major reasons for non-participation are financial concerns and lack of IT infrastructure. Several HIE participants were concerned about data confidentiality. INPC is still seeking other data sources, such as home health workers and nurse case managers, as well as seeking to extend services.

Strategic Goal: To develop and disseminate health IT evidence and evidence-based tools to support patient-centered care, the coordination of care across transitions in care settings, and the use of electronic exchange of health information to improve quality of care.

Business Goal: Implementation and Use

* This objective was not completed prior to conclusion of the funding period but is still targeted for completion.