



Austin/Travis County: Strengthening the Safety Net Through Health Information Technology

The Austin/Travis County Health and Human Services Department used its *InformationLinks* grant to strengthen its ties to the [Indigent Care Collaboration \(ICC\)](#), an alliance of safety net providers serving a three-county region of central Texas.

The ICC was established in 1997, with support from the *Communities in Charge* program of the Robert Wood Johnson Foundation (RWJF) to help broad-based community coalitions design and establish sustainable health care delivery systems that manage health care services for uninsured residents, promote prevention and early intervention and integrate health care services. See [Program Results](#) for more information on the project. ICC's mission is to increase access to health care, improve quality and lower the costs of providing care to low-income and uninsured residents.

From 2000 to 2003, the Indigent Care Collaboration developed the I-Care system, with a \$2-million Community Access Program grant from the federal Health Resources and Services Administration. I-Care is a repository for clinical data that allows safety net providers to build systems for sharing electronic medical records.

In 2004, I-Care included more than 300,000 patients in its data repository and was adding 10,000 encounters per week from more than 30 hospital, clinic, and physician network locations.

Although Austin/Travis County and other health departments in the region were founding members of the collaborative, they had not yet explored the potential for exchanging data with other members. According to ICC Executive Director Ann Kitchen, *InformationLinks* offered an opportunity to address this issue.

Analyzing Health Department Systems: Finding Silos

With an RWJF *InformationLinks* grant, the Austin/Travis County Health and Human Services Department and other ICC members formed a Steering Committee to begin creating a long-term strategic plan for a health information exchange that would be a model for the region.

As a first step, ICC thoroughly analyzed all systems in the health department and found virtually no automated data exchange among them. According to Kitchen, "We realized [all systems] had their own tool box and stored their information in their own area or 'silo.'" Like health departments across the country, the silos "didn't talk to one another."

The analysis, which had never been done before, revealed that the health department had vast quantities of data that could be used to improve public health planning, response and initiatives. It inspired the project partners to "look across the horizon and ask the next question—what can be shared?" said Kitchen.

The dream, she said, was to link up the silos, creating one hub of information in which data could be aggregated so that a picture of the community's overall health could emerge.

The Big Picture: Asking Physicians What They Need From Public Health

Before seeking technological solutions to the challenge of data sharing, Steering Committee members examined the information needs of physicians in greater detail. From a series of focus groups, they found:

- **Physicians want public health information that is directly relevant to their practice and to patient care.**
 - They regarded information that is not patient specific (whether from the public health department or another source) as "nice but not necessary."
 - Most physicians are very interested in having access to immunization data for both children and adults.
 - Physicians consider laboratory information as pivotal and would like to be alerted to outbreaks of communicable diseases, such as mumps, pertussis and flu.
 - Physicians want to be able to access needed information immediately and easily.
- **Physicians are largely unaware of the data available to them from the local public health department and would like more information about the available data sets they can access.** They generally do not use the resources available to them.
- **Although physicians are aware of the most common conditions they are required by law to report, they are unsure of many other reportable conditions.**

Physicians:

 - Often see reporting as time consuming and sometimes frivolous.
 - View reporting methods as outdated, inefficient and prone to inaccuracies.

- Are generally not clear about reporting procedures because they are not usually the individuals doing it. Reporting is most frequently done by the laboratories (or is presumed to have been done by the lab).
- Have concerns about patient privacy issues relating to some reportable conditions. This is especially true among physicians in private practice.
- **Physicians generally do not believe that they can easily and effectively communicate with the health department.**

Sharing Immunization Data: A Logical Starting Point

Based on the focus group findings, the Steering Committee decided to focus first on improving the exchange of immunization information between providers and the health department.

"Kids show up at WIC [the Women, Infants and Children program, which provides nutritional support to low-income families] with no records. They are immunized and then we find out later that they had all their shots," said Kurt Becker, who manages the public health department's immunization program.

Adding a vaccine interface to the I-Care system would allow data exchange among the county and state health departments, safety net providers and other community stakeholders, such as school district nurses and clinicians in private practices. [ImmTrac](#), the statewide Texas immunization registry, was a logical partner in that data exchange, but confidentiality issues and technical limitations restricted the amount of data providers could access through ImmTrac.

Steering Committee members decided that a statewide immunization conference was a good way to educate stakeholders from around the state on the broad issues relating to immunization in Texas. Prior to the conference, some 92 participants and child health providers throughout the state completed a Web-based survey in May 2006, providing feedback on:

- Current use of ImmTrac by health care providers.
- Enhancements they would like to see in the system's functionality.
- Improvements that would increase ImmTrac's utilization and effectiveness.

The two-day Immtech Strategies Summit in July 2006 began with presentations about model information systems. It concluded with a brainstorming session that identified three areas for improvement:

- Decreasing the turnaround time for adding new children, new vaccine data for children and consent information to the registry.

- Making the system more user-friendly by simplifying the process for adding new patients and correcting inaccuracies.
- Adding more technical help desk support.

Participants agreed on the following recommendations:

- Empower parents as advocates for child health to improve community awareness.
- Create real-time interface between ImmTrac and local electronic health record systems and disease registries.
- Standardize security functions to allay public concerns.
- Address data timeliness, tracking and completeness issues to improve emergency preparedness.
- Increase provider participation with a combination of training, incentives and mandates.
- Raise money for a robust and unified local system, connected to the state system.

Legislative staffers at the conference identified three issues related to ImmTrac for action in the January 2007 legislative session:

- Improving the state's emergency-preparedness system by including adult vaccinations in the immunization registry.
- Addressing consent issues, a major source of delays in adding data to the registry.
- Including additional data elements, such as lead screening and genetic screening in pregnancy.

InformationLinks: A Work in Progress With Real Markers of Success

InformationLinks was the health department's first step toward recognizing the emergence of public health informatics and positioned it to be a significant player in the local, regional and state development of health information exchanges, according to project staff. At the close of the grant:

- A stronger relationship between the health department and the Indigent Care Collaboration had begun to develop. "We now know each other's capacities and capabilities and are more effectively able to collaborate on future projects. We are better able to pose research questions and develop projects that have real-life impacts," said Kitchen.
- The health department was still working on the details of a pilot immunization project, which included purchasing and installing the software to allow the health department and safety net providers to exchange immunization data.

- Project staff members were exploring ways to aggregate immunization data, measure community-wide immunization rates and recommend interventions for safety net providers that would improve immunization rates.
- Staff members were considering other opportunities to exchange data. For example, the analysis of I-Care data had found that many hospitalized asthma patients are uninsured and do not buy medications in a timely fashion. The project team discussed using I-Care data to identify these patients and make sure they are discharged with medication, reducing their risk of costly emergency room use and rehospitalization.