

CONNECTIONS™

Where public health meets,
exchanges new ideas and
solves public health problems.

Integrated Child Health Information Systems Community of Practice

NYC WELCOMES CONNECTIONS

The February 2002 Connections meeting gave members of the All Kids Count community of practice an intensive, three-day look at what it took to integrate its immunization and lead poisoning databases through a Master Child Index (MCI). Staff of the New York City Department of Health gave in-depth presentations about MCI requirements, architecture, data quality, and technical and organizational challenges.

Representatives of 10 child health information system integration projects, All Kids Count staff and visitors from CMS and HRSA also heard updates from Connections projects, identified integration issues for on-line discussions, and learned about the collaborative approach to improving pediatric practice employed by the National Initiative for Children's Healthcare Quality (NICHQ).

Thank you New York City DOH staff for hosting this visit.



The Oregon Department of Health will host the next site visit, June 25-27, 2002 in historic downtown Portland. The three-day visit will focus on Oregon's FamilyNet Data System, including the development of its marketing plan. Other sessions include interactive discussions on the life cycle of an integration project and the vision for integration.

NEW YORK CITY: OVER 821,000 REASONS TO LINK DATA

Three years ago when the NYC Commissioner of Health asked the Citywide Immunization Registry (CIR) and Lead Poisoning Prevention Program (LPPP) to integrate their systems, the programs' management wanted to be certain that they selected the best approach to integrating the systems before moving forward. After all, the programs were very different. They not only operated on different platforms, but their primary objectives were different – CIR's principal business process was clinical decision support for immunization providers, and LPPP focused on case management.

“The MCI integration means programs will be able to pursue public health goals instead of wrestling with data.”

But the CIR and LPPP had many things in common: They both served the over 821,000 NYC kids who are under age 7, they both managed huge volumes of data, they stored the same core demographics, and neither would accept a disruption of service.

By asking the right questions before launching the project and then moving through a deliberate implementation process, the NYC DOH and staff of these two programs have developed an approach that links the two information systems while preserving the mission and core functionality of each system, without disruption to either system. The result

continued on page 2



WHAT'S YOUR INTEGRATION STRATEGY?

These questions can help to determine the best approach to integrating your systems.

1. How much "life" is left in the existing applications?
2. Will current technology meet future needs?
 - Do we need a new technology platform?
 - Do we need a common user interface?
3. Will the integrated system bring new benefits?
 - Can an "integrated person/child index" linked to independent systems produce integrated information?

821,000 Reasons – continued from page 1

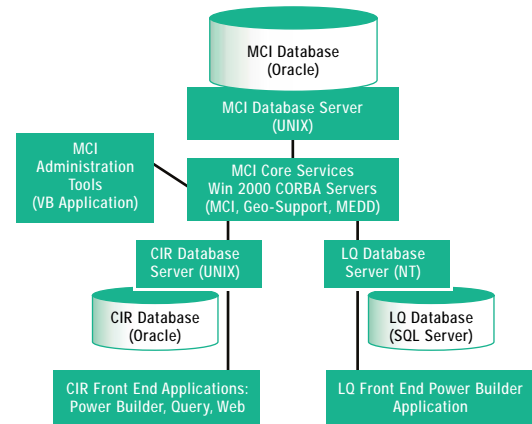
is that NYC is about to launch an integrated system that leverages the resources of both CIR and LPPP to improve case management, provider outreach, evaluation, reporting, and surveillance. Notes Amy Metroka, Director of CIR, “The MCI integration means programs will be able to pursue public health goals instead of wrestling with data.”

Master Child Index Links Databases

The MCI system is positioned as part of New York City’s Child Health Initiative, whose stated goal is to improve the health status of children by reducing morbidity due to lead poisoning, vaccine preventable illness, asthma, injury and other health concerns. Strategies for achieving the goal are to raise awareness of children’s health issues, conduct community-based activities to reach high-risk children, and – pertinent to this integration project – enhance data capacity so that it can be used to increase outreach activities, immunization rates and lead screenings.

The approach taken by NYC links the CIR and the LPPP database, LeadQuest (LQ), through a Master Child Index (MCI). All children found in the two systems, and subsequent systems to be integrated, are “registered in the MCI to facilitate matching children across these systems. The MCI will use sophisticated business rules to match new information to children in the MCI, de-duplicate children with multiple records or duplicate information within a record, and merge children across the databases. The MCI will contain identifying and demographic information for every child contained in at least one of the participating systems.

MASTER CHILD INDEX: Phase I



MCI development began in summer 2000 with a kickoff meeting attended by a team representing the CIR and LPPP programs and vendors, with leaders from outside of the two programs. They faced formidable technical, organizational, operational and budgetary challenges, ranging from the selection of “middleware” to allow intercommunication between separate databases to coordinating activities among two program staffs and three software vendors into an efficient team and developing a system within budgetary limitations. But the team persevered.

The MCI project is now approaching the end of its first phase, with the MCI synchronizing and de-duplicating an initial load of 2 million CIR patient records and 1.9 million LQ patient records. Then, each month, it will load and synchronize approximately 60,000 CIR patient records, 170,000 immunizations, 10,000 vital records and 39,000 LQ records. It’s an enormous undertaking, but by spring of 2003, the team hopes to have the data warehouse that will help the NYC DOH achieve its Child Health Initiative goal – improving the health of NYC children – in place.

NEW YORK SITE VISIT RESOURCES

Visit www.allkidscount.org/connections-akc.html to view presentations from all of the **Connections meetings**, including the New York City meeting in February 2002.

(All presentations can be viewed online or downloaded as PowerPoint files.) Click on “Site Visits and Meetings” to find:

- A project brief for New York City’s MCI integration project and other **Connections** projects.
- Presentations about the MCI project. (These are also available on CD-ROM from All Kids Count.)
- The MCI Test Plan, describing the scope, approach, resources and schedule of the testing activities in the MCI. It identifies the items and features to test, testing tasks, personnel responsible and risks. (Download as PDF file.)
- Presentations about **Connections** members’ special projects.
- A report on Strengthening New York City’s Public Health Infrastructure by the Public Health Association of New York City is online at www.phanyc.org/NYCphiW2.pdf

SOLVING PROBLEMS, SHARING SOLUTIONS

All Kids Count has awarded Connections members funding to solve special problems related to the integration of child health information systems and to share their solutions with other Connections members. Awards of up to \$50,000 per project were made last fall, and at the February Connections meeting, members reported on their progress.

The goal of the special projects is to enable integration projects to undertake a discrete project that will generate information that can also be useful to, or applied by, Connections members and other public health agencies that are integrating health information systems. The eight projects now underway are highly diverse. In Michigan, for example, the Department of Community Health is developing an inventory of health databases and a planning document. In Missouri, the Department of Health and Senior Services is determining the feasibility of abstracting immunization and other public health reportable conditions data from billing data. In Rhode Island, the Department of Health is updating policies on confidentiality and security of information in KIDSNET.

At the conclusion of the special projects, the products – white papers, policy manuals, data models, business processes, data sharing agreements – will be shared among Connections members and be available to the wider public health community through the All Kids Count web site.

Descriptions of the special projects can be found at www.allkidscount.org/connections-akc.html.

“HOT TOPICS” IDENTIFIED FOR CONTINUING DISCUSSIONS

While the optimum way to learn from one another is face-to-face, alternative communication channels can keep community of practice members in touch and help them move their work forward. At the NYC Connections meeting, members of the group identified “hot topics” that they will discuss using www.Connectionszone.org, an on-line threaded discussion tool, and conference calls.

All Kids Count staff will be facilitating discussions on the life cycle of an integration project, making the case for integration, planning for bioterrorism money, privacy and confidentiality, stakeholder issues/strategies, and technology/data quality.

Up to five persons from each Connections project can participate in the on-line discussions, and the conference calls are open to all interested parties. Knowledge generated from conference calls and on-line discussions will be summarized and made available to the public via the All Kids Count web site.



FEBRUARY 2001 SITE VISIT ATTENDEES

Representatives of the 10 organizations that comprise the Integrated Child Health Information systems community of practice attended the February site visit in New York City.

CalOptima (Medicaid managed care for Orange County, CA)

Kansas Integrated Public Health System

Maine Department of Human Services

Michigan Department of Community Health

Missouri Department of Health and Senior Services

New York City Department of Health

Oregon Department of Human Services

Rhode Island Department of Health

Santa Clara County (CA) Department of Health

Utah Department of Health

Also attending were representatives from the following:

National Initiative for Children's Health Care Quality (NICHQ)

Center for Medicare and Medicaid Services (CMS)

Genetic Services Branch, Maternal Child Health Bureau, Health Resources and Services Administration (HRSA)

The Integrated Child Health Information System community of practice is a program of All Kids Count, which is supported by the Robert Wood Johnson Foundation to foster development of integrated child health information systems.

Connections communities of practice bring public health practitioners together to meet, exchange new ideas and solve public health problems. They are a program of the Center for Innovation in Health Information Systems, which is committed to improving the health and well-being of individuals and communities, especially children, through strategic application and management of information technology.

The Center for Innovation is a component of The Task Force for Child Survival and Development.

Alan R. Hinman, *Principal Investigator*
David A. Ross, *Director*
Kristin N. Saaras, *Deputy Director*

For information, call 404.687.5611

www.connectionszone.org
www.centerforinnovation.org
www.allkidscount.org



CLICK

The Sound Of CONNECTIONS

Connections Puts Oregon in Touch with New Approaches

Connections site visits help public health practitioners learn from one another by providing them with opportunities to share their successful ideas and implementations, and, just as important, their mistakes, says Sherry Spence, MCH Data Systems Coordinator, Oregon Department of Human Services, Office of Family Health.

Ideas from Utah's newborn data linking project and Maine's probabilistic matching system have already influenced Oregon's FamilyNet integration project, which integrates and coordinates health assessment and service information about children and families. In addition, Missouri's identification of the factors necessary for a successful integration project have reinforced Sherry's messages with Oregon's health policy decision-makers.

Sherry says that the Connections meetings also have enabled her and colleague Barbara

Canavan, Director, Oregon Immunization ALERT, "to identify principal themes that help us to explain our data integration strategies to stakeholders in Oregon." She explains, "Connections meetings bring value by putting you in touch with so many different perspectives on the same issues you're dealing with on your own project."

The ideas that Sherry and Barbara bring back to Oregon from Connections meetings "help us show staff that new approaches to integrating systems can work, when sometimes they see that part of the project as daunting. We can say, 'See these other states did it.'"

But there's an added benefit for people attending Connections meetings. "Renewing friendships and seeing peers from other states in a relaxed, mutually supportive setting does wonders in renewing our energy and strengthening our resolve," she points out. "This is probably what Connections does best and is likely to yield the greatest long-term benefit."