Work flow processes improved dramatically by importing electronic data

By Micah Williams, D-REX Project Manager

The Disease Reporting EXchange (D-REX) improves the Public Health Preparedness and Emergency Response (PHPER) surveillance environment by serving as the vehicle for gathering Electronic Laboratory Reports (ELRs) into the Indiana State Department of Health (ISDH) and distributing those ELRs to various program areas for expert analysis. The primary focus concerning the functionality of the data repository is to obtain and maintain a standardized level of bidirectional information transmission between both external and internal sources associated with Public Health. Moreover, the D-REX team is working together in a concerted effort to provide a superior level of quality that truly streamlines the ISDH program area's operational processes and promotes "meaningful use" criteria as defined by the National Communities of Practice (CoP) governing Electronic Medical Records.

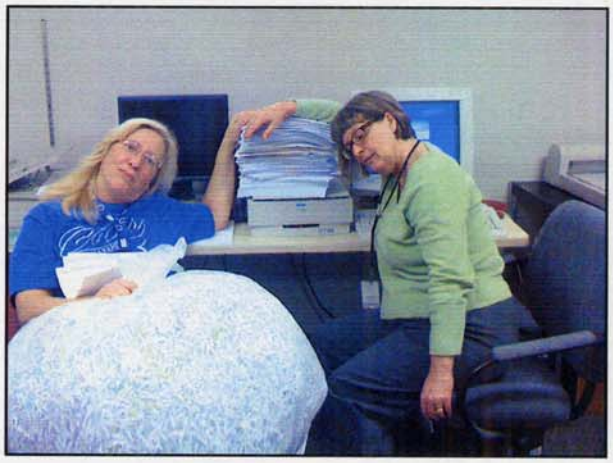
While the original mandate of ELR data was intended to support surveillance operations within the Epidemiology Resource Center, D-REX also serves other program areas within ISDH in a model of single-point of contact for ELR data. In doing so, the D-REX project team has inspired a new level of interoperability for the ISDH program areas, allowing for improvement of data-gathering process and quality, and freeing program area resources to pursue missions that focus on accomplishment of public health goals.

In this latest installment we highlight the DREX impact on the HIV program's work flow processes and the operational improvements associated with ELR. August 2009 will forever change the operational aspects of the HIV program. During that month, the HIV program area began receiving ELR data directly from D-REX into its eHARs system. The D-REX team formed a partnership with the HIV program area representatives to formulate the specifications involved in their data handling process and drive the end product toward the highest level of customer satisfaction. HIV had several complicating factors, including staff to work load ratios, as we mapped out a strategy to transition from paper reporting to the electronic process. There were challenges to overcome, but the HIV team was eager and the D-REX team was diligent in their pursuit of HIV directives towards data acquisition and quality. Within a six month timeframe, there is a measurable change in the quality and quantity of labs coming to the HIV program electronically.

In December 2008: 360 (11%) labs were imported electronically vs. 2,963 (89%) manually entered. However, In December 2009: 2,690 (76%) labs were imported electronically vs. 863 (24%) manually entered. Linda Slinkard & Colleen O'Brien of HIV's Clinical Data & Research Office handle importing all this information. This is an amazing shift!

In the calendar year 2008 only 41% of HIV's labs were imported electronically. In calendar year 2009, that number has jumped to 59%. And this is after only six months of focus with the D-REX resources. The HIV program area continues to fund a D-REX technical resource who is dedicated to pursuing labs which conduct HIV surveillance, and loading those labs electronically to the HIV program area.

This is a team effort that provides a measurable change in quality of information delivered, and the time it takes HIV to process it. Together in partnership, these teams are accomplishing results that will positively impact HIV Surveillance in Indiana and ultimately, the quality of public health all Hoosiers experience. ★



Linda Slinkard and Colleen O'Brien demonstrate the speed and efficiency of manually entering lab data vs importing it electronically.