

## Background

Medical records are spread across multiple offices, hospitals, and medical venues. Exchanging records by phone, fax, or mail contributes to medical care errors and inefficiencies. Leaders at Lovelace Clinic Foundation (LCF), a non-profit health services research institute, convened a consortium of private and public health care organizations in New Mexico and acquired federal and local financial support to build an electronic health information exchange. The exchange is called the New Mexico Health Information Collaborative (NMHIC), and it will move electronic medical information between different organizations. Because these organizations have few existing sharing alliances, have different electronic information systems, and can be competitors, convening them to build a neutral intermediary organization requires considerable effort.

## Objective and Methods

The objective of this substudy is to assess the financial and labor resources required to plan and build the health information exchange.

We tracked and summarized resources committed to building our local health information exchange (NMHIC) during the first two years of this three year project.

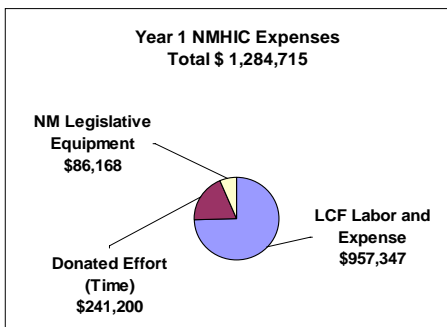
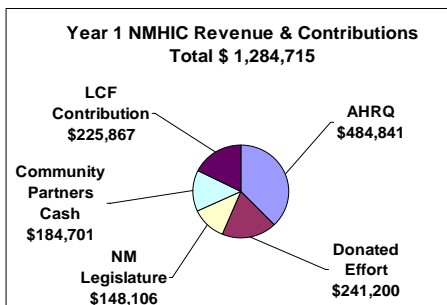
## Results

Our collaborative started in October 2004 and has completed two fiscal years. The most prominent product of this collaborative was convening representatives from 35 different hospitals, laboratories, schools, public health agencies, employers, insurers, and associations. These NMHIC steering committee members met regularly and provided support and guidance to the core team of NMHIC staff residing at LCF. NMHIC products were:

1. developing the NMHIC organization and governance,
2. planning for a future state-wide neutral body to become the Regional Health Information Organization for NM,
3. drafting and executing legal agreements for exchanging electronic information across NMHIC,
4. building technical infrastructure for exchanging electronic information (built locally rather than through purchase of software and technology),
5. building a master patient index with public domain algorithms to match records for the same patient across different electronic systems,
6. designing a web-based mechanism to securely refer patients between organizations, and
7. conducting a pilot project in one community to send/receive electronic referrals starting November 1, 2006.

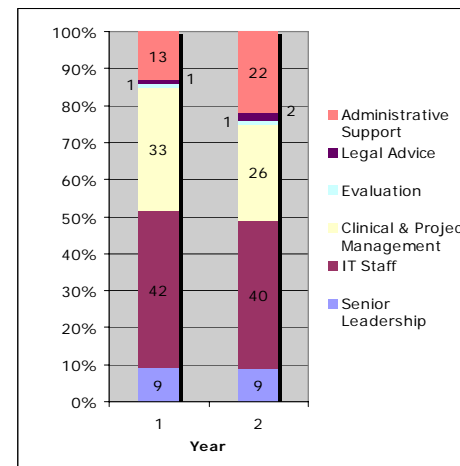
## Revenue/Expenses (Figure 1 and 2)

About \$1.3 million was expended each year, and \$1.1 million of that was for human effort. The remaining \$200,000 each year was used to purchase computer equipment or software. Software expenditures were low because exchange software was built rather than bought and because organizational development lagged behind technical progress. Grant collaborators were required to contribute financial or in-kind resources, so 38% in year one and 39% in year two of the \$1.1 million human time was donated. The remaining \$700,000 supported core project staff, who accounted for about five full-time equivalent employees.



## Human Effort Distribution (Figure 3)

The percent effort by employee labor categories changed slightly over two years: senior leadership 9%, 9%; information technology 42%, 40%; clinical and project management 33%, 26%; evaluation 1%, 1%; legal advice 1%, 2%; administrative support 13%, 22% for years 1 and 2, respectively.



## Conclusions

Advancing health information exchange is predominantly a human rather than technological endeavor, particularly when it involves community collaboration.