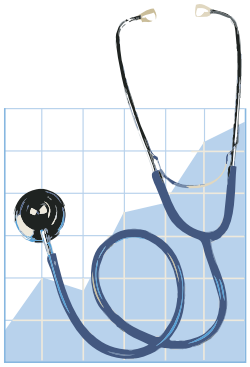
UNC GILLINGS SCHOOL OF GLOBAL PUBLIC HEALTH

Gillings Innovation Labs

Managing Disease through Linking Data

Hospital and ambulance services may help provide the missing link



Data May Be the Key to Controlling Disease

The data are there—if only we could assimilate information currently stored in scattered systems, then we might develop a better understanding of the distribution of diseases and their causes. Drawing upon records of thousands of actual cases, we have a better chance of understanding disease and reducing human suffering. Collecting, understanding and interpreting those data is crucial.

Breaking It Down

- ***The Idea***
  To get a clearer idea of the environmental, individual, economic and geographic causes of diseases and how they are being treated.

- ***The Hope***
  That more complete information will result in a better understanding of the causes of disease, and more effective efforts at prevention and treatment.

- ***The Model***
  Asthma will be used as the model for the initial efforts. Who is most affected by the disease, possible environmental triggers, and what kinds of treatments patients currently receive will be identified and described. Of particular interest are asthma attacks that result in hospital or emergency room visits.

- ***The Plan***
  To develop innovative computer systems that can link and analyze data collected by hospitals and ambulance services.

IMPACT!
Helping Control Suffering

If knowledge is power, information and the tools to understand disease could be our most potent tool for controlling or ending suffering from our most common diseases. Local and state medical service providers will supply information that can lead to better decisions about health care education and services.

GOAL
To gain useful insight through collecting and interpreting pertinent data so that the spread of diseases can be controlled or stopped.

PARTNERS
UNC Department of Emergency Medicine, Orange County (NC) EMS, UNC School of Information and Library Science.

Leadership

David Richardson, PhD, assistant professor of epidemiology, UNC Gillings School of Global Public Health, leads the team. The team will develop innovative computer systems designed to evaluate the data that are already being collected in many disparate locations.