## Diabetes Information Portal: A Demonstration Project for the National Health Information Infrastructure

## Youssef T. AL-sheikh, Ph.D., M.S., C(ASCP),<sup>1,2,3</sup> Joseph D. Andrade, Ph.D.,<sup>4</sup> and Kang Zhang, M.D., Ph.D.<sup>1,2,3</sup>

Health information technologies can deliver complete medical information to the point of care when needed. The set of organizing principles, systems, standards, procedures, and policies that integrates health information technologies is known as the National Health Information Infrastructure (NHII).<sup>1</sup> NHII would allow care providers to concentrate their efforts on applying judgment and experience to the clinical problem at hand based on complete patient data and decision support systems. Moreover, with presently available Internet and encryption technologies, patients with chronic illnesses, such as diabetes, can be monitored at home and can seek information to educate themselves about their clinical conditions. In addition, the national objectives for Healthy People 2010 can be tracked and thus could prevent disease and promote health more effectively at national, state, and local levels. Although many existing programs and activities in the public and private sectors provide a foundation for the NHII, they lack the interconnections that could make them more useful in concert than they are as isolated pieces. Therefore, developing means and designating standards to interconnect data sources, enhancing data exchange and aggregation, and providing credible information for health care providers and consumers are cornerstones to implementing an NHII. Operational demonstration projects at the local level may provide organizational and implementation models that other communities can follow and can become the foundation for the NHII.<sup>2</sup>

We would like to announce launching the beta version of the Diabetes Information "Info" Portal (DIP) (http:// www.DiabetesInfoPortal.org) on July 1, 2008, and to briefly outline the vision for a local DIP in Salt Lake City (SLC-DIP) that can serve as a template for DIPs at state and national levels. One of the main goals of the SLC-DIP is to interconnect the various diabetes databases, diabetes care services and providers, and diabetic patients and their medical records in SLC via the World Wide Web. The portal would serve as a source for credible diabetes data and knowledge, decision support tools, patient management tools and resources, and electronic educational materials. Students in health fields concerned with diabetes would be able to find credible, up-to-date, and interactive diabetes learning modules. Researchers would be able to collaborate on clinical trials. Clinicians would be able to access recent guidelines and decision support tools in managing diabetes. Moreover, people with diabetes would have personal diabetes management pages. Electronic educational materials, such as software programs, video games, animations, simulations, graphs, information maps, and electronic management templates, would be available to consumers in one credible source.

Author Affiliations: <sup>1</sup>Department of Ophthalmology and Visual Science, University of Utah, Salt Lake City, Utah; <sup>2</sup>Program in Human Molecular Biology and Genetics, Eccles Institute of Human Genetics, University of Utah, Salt Lake City, Utah; <sup>3</sup>Moran Eye Center, Salt Lake City, Utah; and <sup>4</sup>Utah Science Center at The Leonardo, Salt Lake Main Library, Salt Lake City, Utah

Abbreviations: (DIP) diabetes information portal, (NHII) National Health Information Infrastructure, (SLC) Salt Lake City

Keywords: credible information technologies, data exchange, diabetes information portal, diabetic medical records, National Health Information Infrastructure, point of care

Corresponding Author: Youssef T. AL-sheikh, Ph.D., M.S., C(ASCP), Moran Eye Center, 65 North Medical Drive, Salt Lake City, UT 84132; email address <u>YTAL@DiabetesInfoPortal.org</u>

Extending the SLC-DIP to the state and national levels would have significant impacts on the well-being of Americans and the U.S. economy. It was estimated in the year 2006 that about 21 million Americans had diabetes with an incidence increase rate of 14% and that about 41 million Americans were prediabetic. In 2002, the cost of diabetes to the United States was \$132 billion.<sup>3</sup> By implementing a national DIP, the U.S. government may be able to improve diabetes prevention measures, reduce government expenditure on diabetes complications, and save millions—if not billions—of dollars each year.

## **References:**

- 1. The National Committee on Vital and Health Statistics. Information for Health: A Strategy for Building the National Health Information Infrastructure. Report and Recommendations from the National Committee on Vital and Health Statistics 2001.
- 2. Yasnoff WA, Humphrey BL, Overhage JM, Detmer DE, Brennan PF, Morris RW, Middleton B, Bates DW, Fanning JP. A consensus action agenda for achieving the national health information infrastructure. JAMIA. 2004;11(4):332-8.
- 3. The American Diabetes Association [homepage on the Internet]. Diabetes by Numbers Fact sheet 2006 [cited 2008 Apr 21]. Available from: <a href="http://www.diabetes.org/uedocuments/DiabetesNumbers2006.pdf">http://www.diabetes.org/uedocuments/DiabetesNumbers2006.pdf</a>.