

The New Hampshire Assessment Initiative: Augmenting the NH Health Web Reporting and Query System (NH HealthWRQS)

New Hampshire HealthWRQS is a community health web reporting and querying system that allows public health professionals to access a wealth of commonly used public health statistics for standard and customized geographic areas. The HealthWRQS project is an initiative of the New Hampshire Department of Health and Human Services and the New Hampshire Institute of Health Policy and Practice at the University of New Hampshire.

The system is currently in production with a suite of reports for commonly-used health indicators, called "Standard Indicator Reports". The reports include age-specific rates, age-adjusted rates, and statistical benchmarking against the state rates for user selectable sub-state areas. The reports include statistics on cancer incidence, births and birth outcomes, causes of death, reasons for hospitalizations and emergency room visits, as well as health behaviors and risk factors. In total, there are over 100 reports that can be run for one of five different user selectable geographic types relevant to New Hampshire. The user can selectively define aggregated regions made up of those areas (e.g., a report can be run that combines the 16 specific towns served by a hospital). HealthWRQS reports are generated via a Cognos 7 Upfront Intranet website that queries data stored in an Oracle data warehouse.

New Hampshire's Assessment Initiative (AI) project is augmenting the existing NH web-based reporting and query system, known as NH HealthWRQS, by developing new modules based on the data from the Behavioral Risk Factor Surveillance System (BRFSS), healthcare claims data from the Comprehensive Health Information System (CHIS), and public health program performance measures data. In addition, in the later years of the NH AI project, the HealthWRQS modules will be integrated to create a comprehensive Community Health Profile.

In Years 1 and 2 of the project (2007-2009), NH has focused on: (1) establishing the NH Assessment Initiative project team, (2) developing the indicators and methodology for the development of the BRFSS module, completing the analysis and making two years of reports available for county level BRFSS indicator reports (3) developing the methodology and pilot version for the claims data module, (4) understanding how performance measures are used and collected in NH and in other states, (5) developing a web site to promote the understanding and use of HealthWRQS and the data from it, and (6) promoting HealthWRQS and providing both web-based and in-person training opportunities for using health data.

In 2009-10, NH plans to focus on: (1) analyzing and making available the BRFSS indicator report for additional geographic areas and refining the design preparing for launch of the health behavior risk factor module for WRQS, (2) launching the claims data module and designing the health care delivery module for WRQS, (3) building a prototype of the performance measures module, (4) including a demographics module, (5) continuing to evolve and expand the HealthWRQS website to include reports

of the most recent year of county-level data for all indicators in the library, and (6) promoting HealthWRQS and exploring options for sustainability.

Next steps in the technical development of the HealthWRQS system include upgrading from Cognos Series 7 to Cognos Series 8, which will allow significant advancement in the development of the HealthWRQS project. These enhancements include: a security model that will support installation on an external web server, eliminating the need for VPN connections; ability to produce community health profiles that allow a user to define a custom geographic area and with one click receive batch of multiple indicator reports; improved ad hoc query functionality that will allow release of an ad hoc query system to all appropriate users; improved report development tools that will speed development process of reports for the system; a guest users account that will allow reports for county and state geographic areas to be accessed without restriction.

NH AI Project Team

- Jose Montero, MD, State Epidemiologist, DHHS (Co-Principal Investigator of AI project)
- Ned Helms, MS, Executive Director, NHIHPP (Co-Principal Investigator of AI project)
- Josephine Porter, MPH, NHIHPP (Project Director of AI project)
- Amy Costello, MPH, Project Director, NHIHPP
- Andrew Chalsma, Chief, Bureau of Data Systems and Management, DHHS
- Joan Aschiam, MSN, Chief, Bureau of Policy and Performance Management, DHHS
- Susan Knight, MSPH, BRFSS Coordinator; or Karla Armenti, ScD, Chief, Bureau of Health Statistics and Data Management, DHHS

This team was assembled to include representation for each of the major focus areas of the new module development, as well as overall leadership of the program. Ms. Porter was hired in December 2007 to serve as the project director. In addition, as a former BRFSS coordinator and epidemiologist for NH, she leads the development of the BRFSS module. Ms. Porter is NH's representative on the monthly CDC AI teleconference convened by the Project Officer. Mr. Chalsma and Ms. Costello guide the development of the claims module. Ms. Costello also provides oversight of the website development and maintenance (www.nhhealthwrqs.org). Ms. Aschiam provides guidance for the performance measures module development, and serves as liaison to the Public Health Improvement Action Plan workgroups and Council (established by the legislature in 2007). Dr. Montero and Mr. Helms provide overall oversight, and serve as key links to other projects within DHHS and across the state that have linkages to the NH AI project, including the New Hampshire Citizens Health Initiative (www.steppingupnh.org).

To support the work of the project, we have contracts and/or agreements with:

- The Maine Health Information Center (for the claims module)
- Abt Associates (for the BRFSS module)
- WebSolutions at UNH (for the project website)