# DATA INCLUSION FOR A WEB-BASED SYSTEM FOR COMMUNITY HEALTH ASSESSMENT: THE NH EXAMPLE

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#### Presenter Disclosures

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The following personal financial relationships with commercial interests relevant to this presentation existed during the past 12 months:

No relationships to disclose

### What is HealthWRQS?

- NH Health Web Reporting and Query System
- Includes five data sets:
  - □ Birth, Death, Cancer Registry, Inpatient, Emergency Department
- Provides Standard Indicator Reports for user-defined geographic areas:
  - County(s)
  - Hospital Service Area(s)
  - Senate District(s)
  - Public Health Network(s)
  - Town(s)

## Standard Indicator Reports

- For each data set, the most commonly reported and requested analyses were included as "Standard Indicator Reports"
- Common community health indicators from each data set, including:
  - Teen birth rate (Birth data)
  - Unintentional injury by cause (ED data)
  - Invasive cancer incidence by site groups (Cancer registry)
  - Leading causes of death by age group (Death data)
  - Ambulatory Care Sensitive condition inpatient discharges (Hospital data)
- Over 100 reports are available

#### **CDC** Assessment Initiative

- Supports the development of innovative systems and methods to improve the way data are used to provide information for public health decisions and policy\*
- Serves as a "test-bed" for developing new methodologies and promising practices in
  - Web-based data dissemination systems
  - Community health practices
- NH grant
  - Focus area is web-based data dissemination systems
  - September 2007- August 2012

#### Overall Goal of the CDC Al in NH

- Augment the current NH Health WRQS by creating new modules based on additional datasets
  - Behavioral Risk Factor Surveillance System risk factors
  - Comprehensive Healthcare Information System claims
  - Performance measures data set programmatic measures
- Form a comprehensive Community Health Profile that includes key indicators from the full range of indicators available in HealthWRQS (including the new modules)
- Improve the accessibility of data in HealthWRQS

#### Goal 1: BRFSS Module

- Provides health behavior information that cannot be gleaned from administrative data
- Will have reporting to align with current Health
   WRQS geographic areas to start
  - County, Senate District, All Health Hazard Regions,
     Hospital Service Areas
- Will build ability to have user-defined geographic areas (by town)

#### Creation of BRFSS module

- Reviewed several BRFSS-based tools and publications
  - CDC BRFSS web systems
  - NH BRFSS publications
  - NH Citizens Health Initiative "A Pound of Prevention"
  - 2003-2005 NH BRFSS questionnaires
- Determined which topics were consistently included
- Reviewed which questions are available consistently for NH
- □ Derived 11 indicators for initial BRFSS module

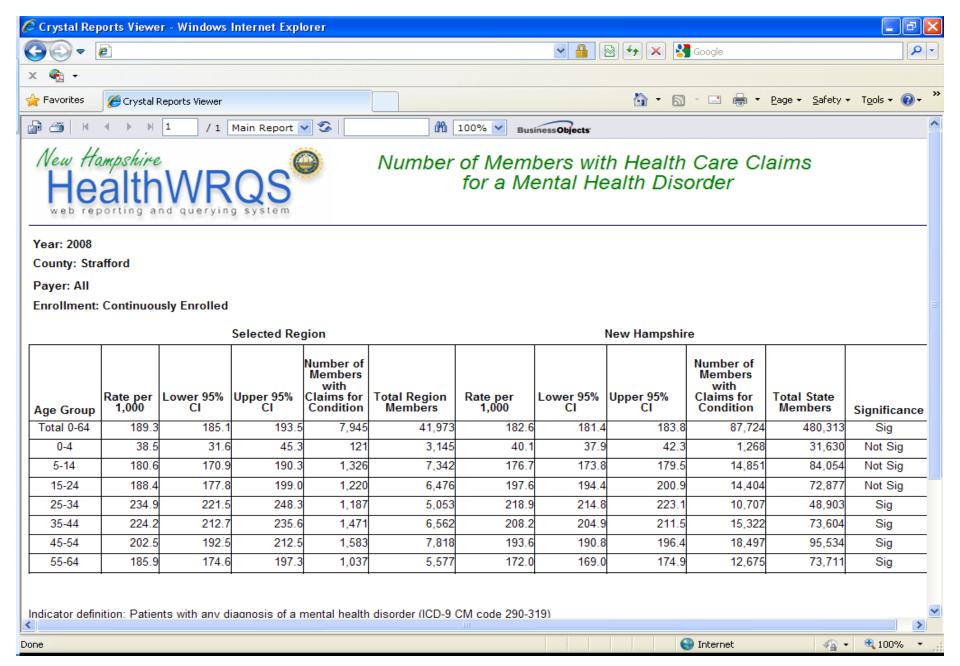
#### **BRFSS** Module Indicators

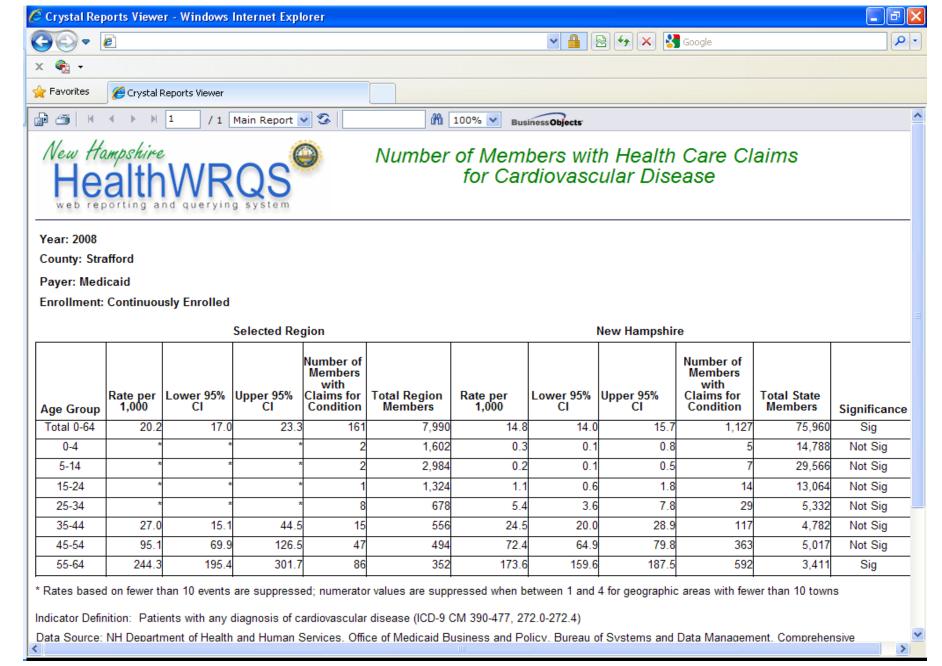
- Any kind of health care coverage
- General health status
- Poor mental health days
- Heavy drinker
- Current smoker
- Current asthma
- Diabetes

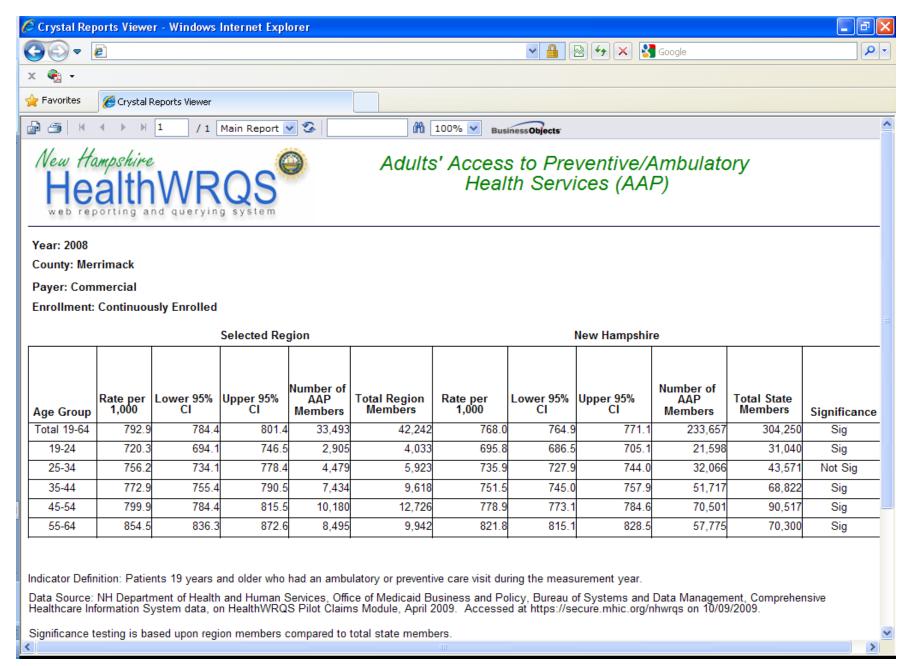
- Overweight and obese
- Any physical activity
- Moderate or vigorous physical activity
- 5 or more fruits and vegetables

#### Goal 2: Claims-based module

- Based on NH's all-payer healthcare claims database, Medicaid and commercial
- Module focuses on access and chronic diseases
  - Overall number of members with claims
  - Care indicators for members with conditions
  - Any preventive service or visit, adults and children
- Reports and methodology to allow for geographic flexibility (currently by zip code)
- Developed with On Point Health Data in Maine







#### Goal 3: Performance measure module

- Building topic-specific modules including indicators from all data sets
  - Tobacco first; obesity second
- NH DHHS, through the Multi-state Learning Collaborative (MLC), has developed a collection system for performance measures from contracted agencies.
  - DHHS is also establishing key performance measures for internal programs.
- The AI project will work with the MLC team to determine what measures are useful for a public view.
  - □ Those programmatic measures will be integrated into the performance measure module.

## Goal 4: Community Health Profile

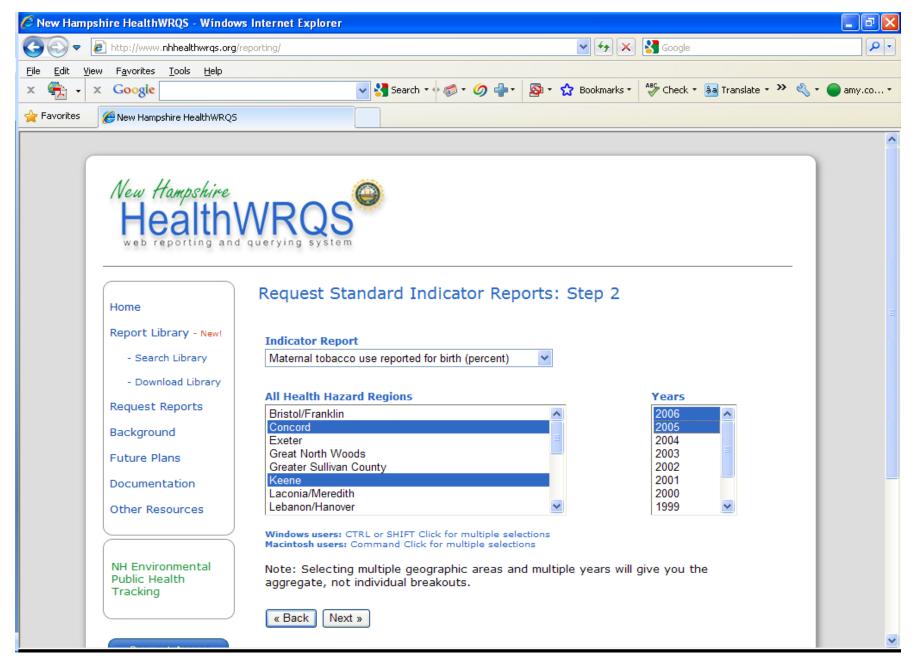
- With the new modules developed, the AI team will work with stakeholders to determine what the "key" indicators for a comprehensive community health profile are.
- Will develop a community health profile prototype to include on HealthWRQS that includes the key indicators.

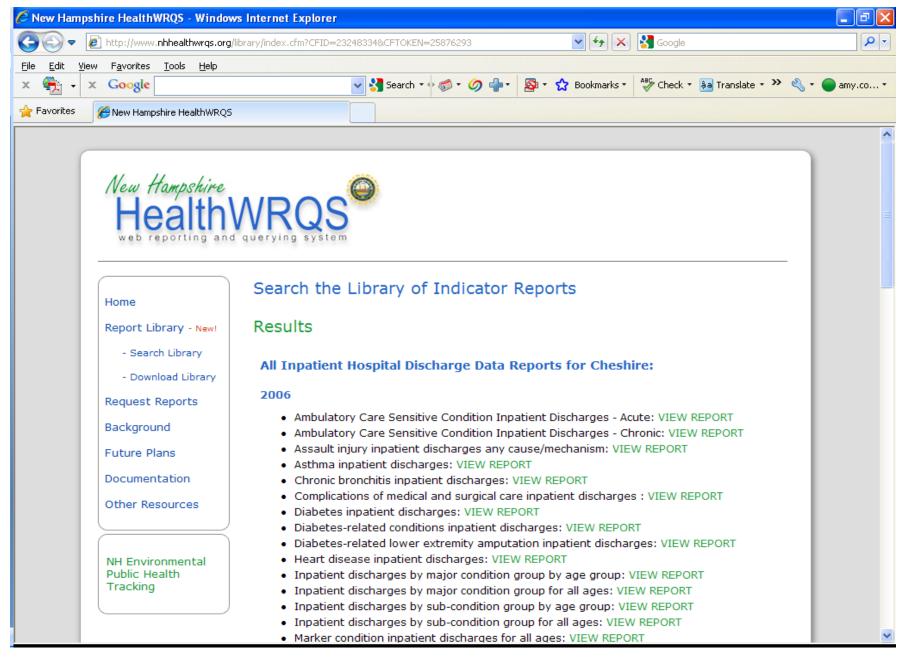
## "Community" in NH

- Barrier: NH public health infrastructure has not historically been organized by standard geographic areas.
  - There are no standard geographic areas for public health practice (e.g., no county health departments), although we are moving towards regionalization.
  - Organizations and practitioners define their areas and populations served in many different ways.
    - Reports of NH data organized into standard geographic regions are of limited value.
- Solution: Build a web-based data dissemination system that allows for geographic flexibility

## Current HealthWRQS Accessibility

- Barrier: Geographic flexibility needs to be balanced with privacy concerns.
  - Access to the full system is limited to approved users via Virtual Private Network (VPN) access.
  - Need for VPN access has been problematic for some users.
  - Solution: Build a version with multiple user types
    - Most needs can be met with a public portal
- Barrier: This takes a long time to develop.
  - Solution: Make reports available another way (in the meantime)
    - www.nhhealthwrqs.org library





## Questions?

