


Center for Rural Health



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An Environmental Scan of  
Health and Health Care in North Dakota:  
Establishing the Baselines for Positive Health Transformation

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*Connecting resources and knowledge to strengthen  
the health of people in rural communities.*



How did it start?

- Nov. 2008: CRH members met with the DMF board and staff to discuss health issues in North Dakota
- A need for transformational change in the health arena in North Dakota
- DMF and CRH formed a partnership to conduct an environmental scan (E-Scan) of ND health and health care

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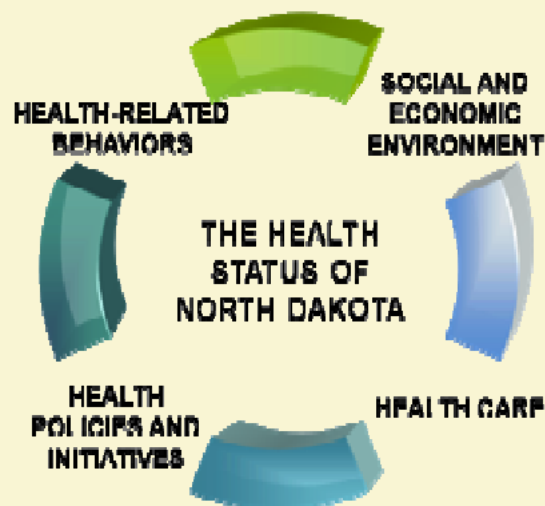
## What is the purpose of the E-Scan?

- 1) Provide an overview of the status of selected health and health care issues in North Dakota;
- 2) Identify key programs and organizations involved in these issues;
- 3) Highlight gaps in information or resources
- 4) Present measures that can help to assess the status of each of the issues; and
- 5) Inform the development of programs and policies to advance solutions to challenges.

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## Framework for the E-Scan



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## Organization of the report: Volume I

- I. Environmental context
- II. Health status of the North Dakota population
- III. Health care in North Dakota
- IV. Key stakeholder perspectives

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## Organization of the report: Volume II

- I. Health-related resources (initiatives and organizations) in North Dakota (federal, state, and non-governmental)
- II. Health-related measures, rankings, rates, and comparisons for North Dakota

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## What was done?

- Reviewed over 200 information sources
- Contacted over 70 individuals
- Compiled over 250 health initiatives and organizations
- Compiled over 250 measures
- Interviewed 8 key health care stakeholders

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## The health status of North Dakota: Environmental context

- A deepening recession/compromised national economy
- Health sector accounts for the third largest share of the state's GDP at 8.6% (\$2.4 billion)
- Urban clusters and a small, geographically rural and frontier population
- Only state to lose population from 2000 to 2005
- Over 31,000 ND children 18 and younger (21.4%) are in families that *receive food stamps*

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## Environmental context (cont.)

- Growing elderly population
- Significant decline (15%; 2000-05) in the number of youth, aged 19 and younger
- Expanding minority population (13% increase; 2000-06)
- Higher levels of unemployment on the state's reservations (averaging 63%)
- Poverty: around 12% of population

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## Environmental context: *Implications*

- Rural health care providers are particularly vulnerable to population decline/aging
- Communities need to be prepared to realign services
- Meaningful efforts by stakeholders need to consider demographic and socioeconomic factors

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## The health status of North Dakota

- 3<sup>rd</sup> longest life expectancy, 78.7 years
- Ranks 17<sup>th</sup> in *age-adjusted death rate* (2006)
- The *percentage of adults reporting fair or poor health* is 12.5% (vs. the national average of 14.8%) [CDC, BRFSS, 2008]
- However, North Dakotans report a higher use of most medical services than found nationally (DSS Research, 2008)

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## Health-related behaviors

- Improvement in many health related behaviors:
  - 19.5% decrease in youth smoking since 1999
  - Seat belt use at an all-time high (82% in 2007)
- Still, serious challenges:
  - A large overweight and obese adult population (64.9%),
  - 21% of the adult population that smokes
  - The 2<sup>nd</sup> highest rate (23.2%) in the nation in binge drinking
  - ND is below the national average for child immunization rates (77.2% vs. 77.4%)

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## Health-related behaviors: *Implications*

- Significant consequences for individual health, mortality, and health care service utilization
- Commitment of many resources and community engagement is required
- Proven strategies should be supported
- Pilot projects should be developed and evaluated
- Outcome measures need to be adopted and applied in order to track progress

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## Leading causes of death in ND

- Heart disease (26%)
- Cancer (23%)
- Alzheimer's disease (7%)
- Stroke (6%)
- Accidental (5%)
- Chronic lung disease (5%)
- Diabetes (4%)
- Influenza/pneumonia (2%)

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## Prevalence of other chronic conditions among ND adults

- Arthritis (26.9%)
- Disability (15.0%)
- Asthma (7.7%)

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## Chronic diseases: *Implications*

- Use evidence-based strategies to prevent diseases
- Invest in prevention-related activities:
  - education (e.g., proper diet and exercise)
  - wellness activities
  - incentives for healthful decisions
- Close information gaps regarding chronic diseases and other health problems in North Dakota (e.g., a statewide hospital discharge database)
- Using selected measures, track the impact of specific strategies

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## The status of health care in ND

- Lower premiums, provider costs and provider reimbursement levels than in other states
- Limited access to health services due to geographic distances, health professions shortage areas, lack of adequate insurance coverage, and an imbalance between reimbursement and cost
- The state does well on a number of quality measures
- Hospitals and nursing homes frequently exceed national averages for care quality
- Performance of small rural hospitals is frequently not reflected in quality data

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## Infrastructure: *Implications*

- Systemic issues facing health care facilities: supply of health workforce, aging physical plants, reimbursement levels, demographic changes, increasing numbers of uninsured
- Hospitals (6 urban and 39 rural) are highly integrated with other services (e.g., medical clinics)
- Public health (28 units), home health (35 entities), and EMS are challenged to continue their current activities
- Telepharmacies are a successful example of addressing workforce shortages
- Regionalization of more health care infrastructure, network building, and use of telemedicine can help to strengthen and extend health care services

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## Quality

- North Dakota tends to rank high in care quality and low in costs
- North Dakota does quite well on *hospital care* and is in the average range on *chronic care* and *ambulatory care*
- The state's *overall health system performance*: the 13<sup>th</sup> highest performance average in the country
- The 3<sup>rd</sup> highest performance average in the country for *nursing homes*

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## Quality: *Implications*

- Enhancing networking and communication, and sustaining and strengthening primary care
- Encouraging consumers to access publicly available information about care quality
- A subset of measures most relevant for North Dakota to track quality improvement
- A multi-stakeholder approach

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## Access: *Health insurance*

- The lack of health insurance has a profound impact on individuals and the health care system
- Uninsured: 8.2% (approx. 51,900 people)
- More likely to be uninsured: Rural residents, young adults, American Indians, and workers of small employers

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## Access: *Workforce*

- Emerging challenges: from primary care shortages to shortages of dentists
- Health Professions Shortage Areas in ND:
  - Primary care (81%)
  - Mental health (90%)
  - Oral health (28%)
- More severe shortages in rural areas
- Supply of next generation of providers jeopardized due to decline in number of youth

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### *Access: Utilization of services*

- Higher admission rates (9<sup>th</sup> highest in the nation; 137 admissions per 1,000 population in 2005)
- Outpatient visits: also, 9<sup>th</sup> highest in the nation
- Longer lengths of stay than the national average (8.8 days in ND vs. 5.7 days in the U.S.)

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### *Access: Implications*

- Ongoing assessment of insurance coverage across vulnerable groups is important
- Research needed that explores the reasons behind utilization patterns
- A comprehensive approach to greater production, recruitment, and retention of health care providers
- Strategies should target all components of the workforce pipeline and be replicated where possible
- Involve a range of stakeholders, from high school teachers to health care employers to policymakers

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## Financing

- Health expenditures in ND increased annually by 6% from 1991 to 2004
- Per capita health spending in 2004 was \$5,808 (vs. \$5,283 for the U.S.)
- Tribal budgets break down on a per capita basis to \$1,800
- North Dakotans spend:
  - more on hospital care, drugs, other medical nondurables, and nursing home care (compared to the U.S. population)
  - less on physician and other professional services, home health care, and other personal health care
- In 2008, per capita public health funding in ND decreased by 14% (\$79 to \$68 per person), dropping national ranking from 20<sup>th</sup> to 28<sup>th</sup>

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## The status of North Dakota health care: *Implications*

- With Medicare as a dominant payer, the state's health care providers are particularly sensitive to reimbursement adequacy
- Important to monitor:
  - access measures at local and regional levels
  - factors influencing the viability of local health care
- Needs assessments are important to align community needs and providers' services
- Solutions are needed in the context of redesigned care models (e.g., different mix of workforce, use of health information technology, medical home)

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## Improving the health status of ND: Key stakeholder perspectives

- Health and health care in ND require profound and pervasive change
- Urgency in addressing health issues such as obesity
- Broad-based collaboration to address priority health and health care issues is strongly advocated
- Health promotion and disease prevention strategies are important
- More wellness programs, benefits, and incentives are encouraged
- Research and ongoing monitoring of the state's health status are essential

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## Who are the users of the E-Scan?

- Policymakers
- Researchers
- Community groups
- Media
- Grant writers
- Foundations
- Health care providers
- State associations

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## E-Scan dissemination strategies

- Hard copies of the report
- PowerPoint presentation
- E-Scan brief (to be distributed at the April Dakota Conference on Rural and Public Health among other options, 300 recipients)
- News release (all ND media and selected national outlets)
- Center for Rural Health Update (e-newsletter, 4,000 recipients)
- *North Dakota Medicine* magazine story
- Web video
- E-Scan webpage on the CRH website (with PDF download)

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The screenshot shows a web browser window displaying the Center for Rural Health website. The page title is "Health and Health Care in North Dakota: An Environmental Scan Report". The URL is <http://ruralhealth.und.edu/projects/escan/publications.php>. The website header includes the CRH logo, the name "Center for Rural Health", and the affiliation "University of North Dakota School of Medicine & Health Sciences". A navigation menu contains links for "Community Development", "Programs & Initiatives", "Rural Health Topics", "Publications & Maps", "News & Updates", and "Events & Presentations". The main content area features a "Project Description" section with a breadcrumb trail: "Home > Project > Environmental Scan of Health and Health Care in North Dakota". Below this is a "Partners" section, followed by a "Staff" section, and a "Funder" section. The main heading is "Environmental Scan of Health and Health Care in North Dakota". The text describes the scan conducted from December 2008 to mid-February 2009, providing an overview of health and health care issues in North Dakota. A "Presentations" section highlights a presentation titled "Health and Health Care in North Dakota: An Environmental Scan" presented to the Dakota Medical Foundation's board of directors. A "Full Report" section offers a PDF download for "Volume I (full document)", which includes an "Executive Summary", "Introduction to the Report", "Part I. Health Care in North Dakota: The Environmental Context" (covering Population Characteristics, Age, Race and Ethnicity, and Economic and Social Characteristics), and "Part II. Health Status of North Dakotans" (covering Health-Related Behaviors and Selected Topic Areas).



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