Center for Rural Health

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Environmental Scan of Health and Healthcare in North Dakota

Presented to the ND Legislative Council

Industry, Business and Labor Committee

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

APPENDIX C

What was the purpose of the E-Scan?

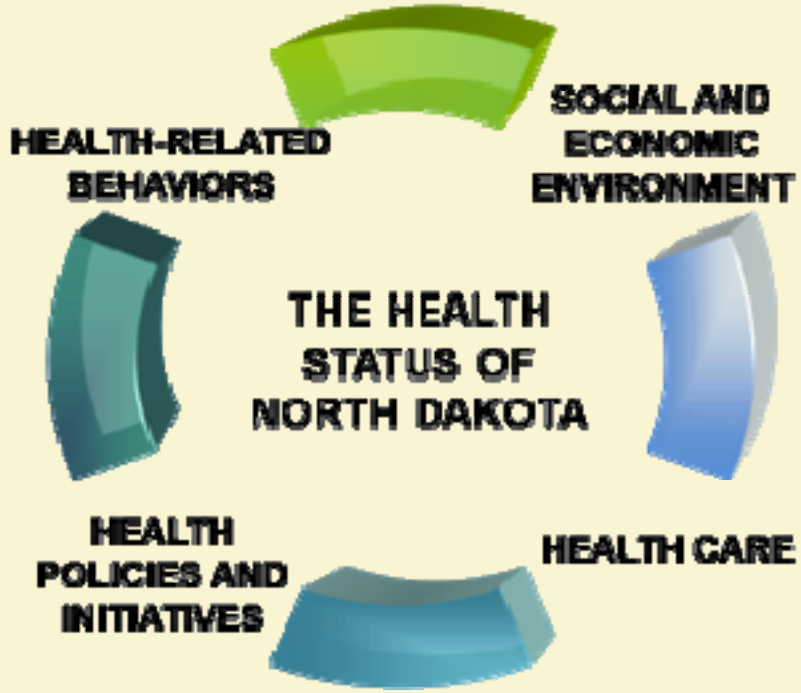
1) Provide an overview of the status of selected health and health care issues in North Dakota;
2) Identify key programs and organizations involved in these issues;
3) Highlight gaps in information or resources;
4) Present measures that can help to assess the status of each of the issues; and
5) Inform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

Funded by Dakota Medical Foundation, Dec. 2008

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

E-Scan Framework



The E-Scan framework adapts elements of the Institute of Medicine's *State of the USA Health Indicators* and is also aligned with the framework from the *Healthy People 2010*.

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

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

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

The health status of North Dakota

- 3rd longest life expectancy, 78.7 years
- Ranks 17th 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)

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 2nd 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%)

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

Causes of death and chronic conditions in ND

Leading causes of death:

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

Other chronic conditions:

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

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

The status of health care in ND

- Lower than in other states premiums, provider costs, and provider reimbursement levels
- 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

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 38 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

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 13th highest performance average in the country
- The 3rd highest performance average in the country for *nursing homes*

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

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

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

Access: *Utilization of services*

- Higher admission rates (9th highest in the nation; 137 admissions per 1,000 population in 2005)
- Outpatient visits: also, 9th 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.)

Access: *Implications*

- Ongoing assessment of insurance coverage across vulnerable groups is important
- Research is 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

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 20th to 28th

The status of ND 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)

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

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

Center for Rural Health

DMF
DAKOTA MEDICAL FOUNDATION

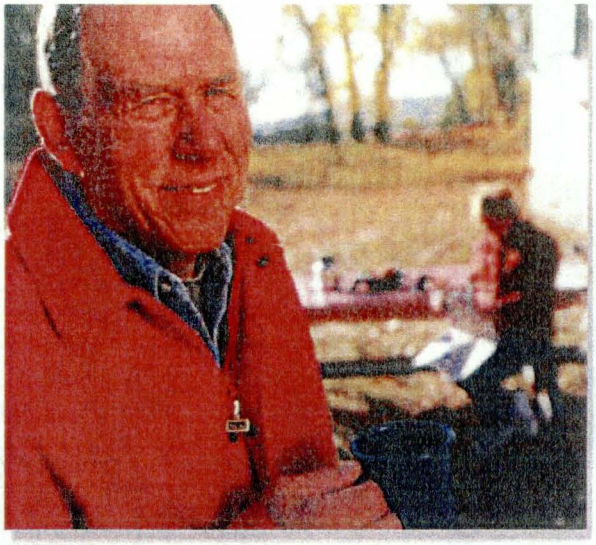
An Environmental Scan of Health and Health Care in North Dakota: Establishing the Baselines for Positive Health Transformation provides an overview of selected health and health care issues in North Dakota. Measures specific to these issues are identified and North Dakota's performance on the measures is presented. Additionally, examples of programs designed to address the selected health and health care issues are briefly summarized, serving as a resource for individuals and organizations interested in capitalizing on current health care activities in the state.

Information presented in this report is drawn from a range of sources including reports, websites, datebases, queries of agencies and organizations, and perspectives of key leaders in the health field.

The message that emerges from the environmental scan is that the best of North Dakota—a cooperative and collaborative spirit, a can-do attitude, concern for our neighbors, and clear recognition of the link between North Dakotans' health and the economic health of their communities—can be brought to bear directly on transforming the state of our health and health care. Capitalizing on these strengths, our efforts will need to be targeted, collaborative, strategic, and measurable. It is just the sort of thing that North Dakotans, pulling together and putting their minds to it, can do. It is time.

The Dakota Medical Foundation and the Center for Rural Health want the standards set and met for North Dakotans' health and health care to be the best in the nation—to make what is less than acceptable, good, and to make what is good, great. The ultimate aim can and should be that when other states seek solutions, their health and health care compasses will point to North Dakota.

Environmental Context



North Dakota's health and health care are affected by demographic, social, and economic factors. With urban clusters and a small, geographically rural and frontier population, the state faces a unique set of challenges and opportunities that confront the population's health, the types of health care services needed, and the financial viability of health care systems.

The state's growing elderly population (46 of the state's 53 counties will have 22% or more of their population age 65 or older by 2020), expanding minority population (13.8% increase from 2000 to 2006; primarily occurring on Indian reservations), and the significant decline in the number of youth, aged 19 and younger (a 15% decline from 2000 to 2005), have direct implications for health care services.

Around 12% of the state's population lives in poverty. Rural poverty is greater than urban, and rural income is, on average, lower than urban income levels. Poverty and income levels have direct implications for public programs, such as Medicaid, and the financial status of providers.

The health system is also affected when patient volumes change, causing financial concerns for many types of providers (e.g., decreases in elective procedures due to economic concerns, depopulation of some rural communities).

Efforts directed toward improving health and health care should be accompanied by close attention to performance on key measures in order to ascertain effectiveness of strategies and programs.

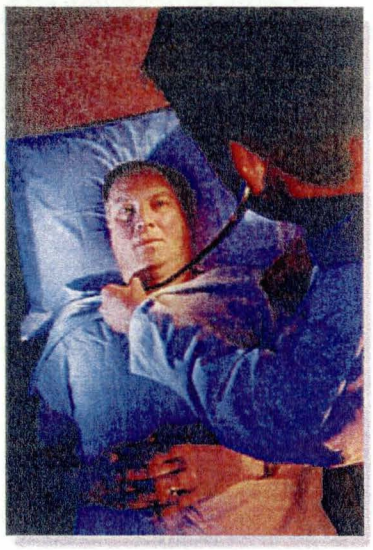
Health-related behaviors

North Dakota has achieved improvement in many health related behaviors, particularly the 19.5% decrease in youth smoking since 1999 and seat belt use at an all time high at 82% in 2007.

Serious behavioral health challenges exist in the state, including a large overweight and obese adult population (64.9%), 21% of the adult population that smokes, and the second-highest rate (23.2%) in the nation in binge drinking. Decreases in these and other health-compromising behaviors are important as they have significant consequences for individual health, morbidity, mortality, and health care service utilization and related costs.

In order to reduce the future burden caused by negative health behaviors, proven strategies should be considered and supported, and pilot projects should be developed and evaluated related to selected priorities. Measures need to be adopted and applied in order to track progress at individual, community, and state levels.

Chronic diseases

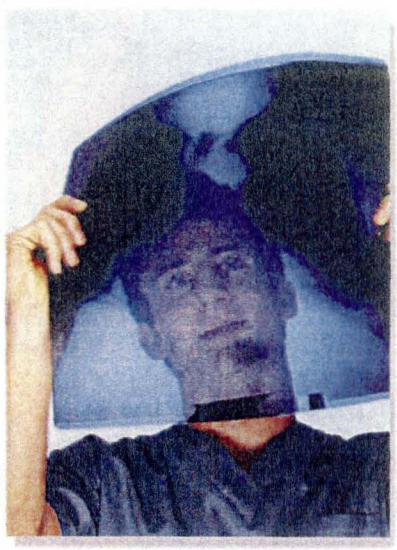


Cardiovascular disease and cancer are the leading causes of death in North Dakota, comprising 49% of all mortality. North Dakotans also suffer from: arthritis (26.9%), asthma (7.7%), and diabetes (6.3%).

North Dakota's performance on measures of chronic disease-related conditions tends to be better than national averages and most states, with the following exceptions: prostate cancer (9th highest); colorectal cancer in men (15th highest); stroke mortality (16th highest); and prostate cancer mortality (17th highest).

To address the state's health issues related to chronic disease, investments in prevention-related activity can be instituted or strengthened. To ensure data-driven decision-making and to maximize the efficient use of resources, it is important to close information gaps regarding chronic diseases and other common health problems.

Health care status



Both strengths and challenges are associated with health care infrastructure in North Dakota. Public and private insurers tend to obtain health care services at low cost compared to other states. However, an imbalance between reimbursement levels and cost of providing care is driving some health care facilities to decrease services or at least consider cutbacks in infrastructure, salaries, and staffing.

Limited access to health services is a challenge due to geographic distances, health professions shortage areas, and, for uninsured and underinsured, lack of adequate insurance coverage.

Performance measurement indicates that hospitals and nursing homes frequently meet and exceed national averages in both rural and urban facilities.

A challenge is to eliminate the variation in quality and aim for performance that is consistently high on quality measures, regardless of where in North Dakota health care consumers seek care.

Infrastructure

North Dakota hospitals (6 urban and 39 rural) tend to be highly integrated with other services. This can help position North Dakota to respond to new emerging care models such as medical homes and new payment strategies currently being contemplated by both national-level public and private payers.

Supply of health workforce, aging physical plants, reimbursement levels, demographic changes, and the prospect of increasing numbers of uninsured associated with deteriorating economic conditions are systemic issues facing health care facilities, both urban and rural.

Public health (28 single and multi-county local public health units), home health (35 entities), and Emergency Medical Services (at least one ambulance service in each county) are, in many cases, challenged to continue their current activities across their current service areas. Decreasing or delaying access to these services can have direct implications for patient outcomes.

Regionalization of more health care infrastructure, network building, and use of telemedicine can help to strengthen health care services and extend these services to hard-to-reach populations.

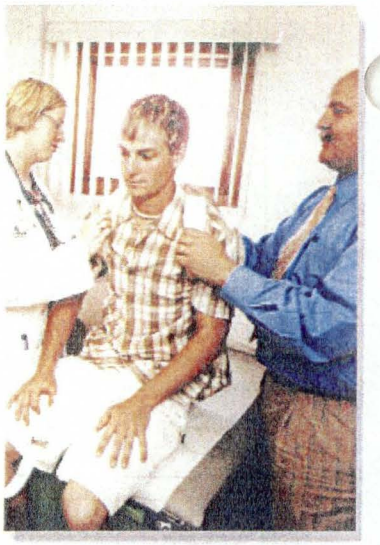
Harnessing technology, developing networks, and deploying different levels of health care providers can ensure access to high quality services ranging from home health to mental health.

Quality

The state's health care systems perform better than many others in providing consumers with relatively high-quality and efficient health care services (the 13th highest performance average in the country). Nevertheless, there are clear opportunities for quality improvement. Enhanced networking and communication, and sustaining and strengthening primary care are pivotal to quality health care.

A multi-stakeholder approach can be important to selecting priorities and related measures that can track progress in specific areas. Annual reviews could be conducted to track how well the state's facilities do compared to each other and to other states in order to identify areas and approaches to improve care.

Access



Access to health services in North Dakota is influenced by geographic, economic, and other factors. Payment methods, workforce supply, and even area population fluctuations influence the availability of services.

Potential and actual decreases in service areas or closures of health facilities should be carefully evaluated to determine their effect on local communities. Groups of experts, along with the community, should work together to develop potential strategies and new approaches.

Health insurance

With an uninsured prevalence of 8.2% (approximately 51,900 people), North Dakota varies in rates of insurance across geography, race, income, and other factors.

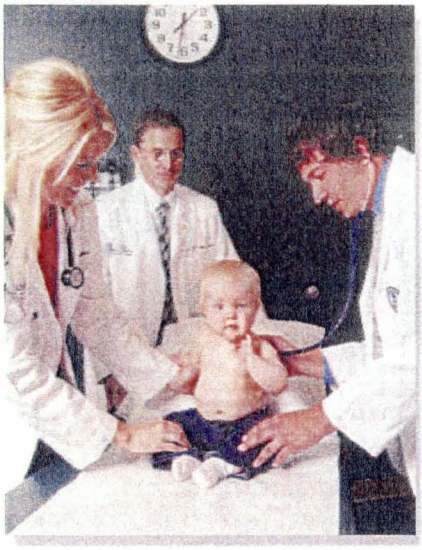
Specific groups that are more likely to be uninsured include rural residents, young adults, American Indians, and workers of small employers.

The lack of health insurance has a profound impact on individuals and families as it seriously limits access to health care, contributes to poorer health outcomes, increases inefficiencies within the health care system (e.g., seeking care in more expensive service centers such as the emergency room), and reallocates financial responsibility for the payment of care in inequitable ways.

Ongoing assessment of insurance coverage across vulnerable groups is important, in addition to ensuring comprehensive dissemination of information regarding the availability of public programs.

Public policy can be used as a means to strategically address specific problem areas, targeting resources to better meet standards of efficiency and equity.

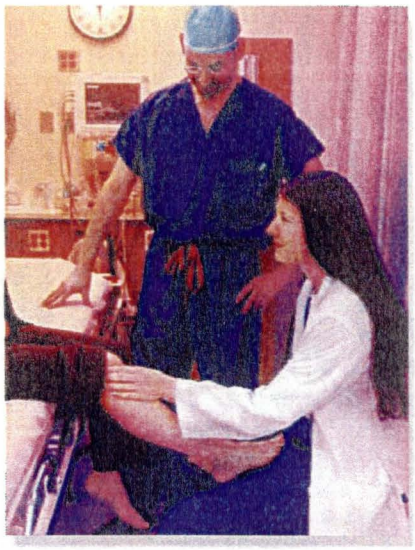
Workforce



The state faces emerging challenges to ensure access to an adequate workforce, ranging from primary care shortages to shortages of dentists. Total reported health care provider vacancies in North Dakota indicates a need for 271 physicians, nurses, clinical laboratory scientists, mental health professionals, and X-ray technicians.

A comprehensive approach to generate interest and support for greater production, recruitment, and retention of health care providers require assessing successful strategies targeting all components of the workforce pipeline and replicating them where possible.

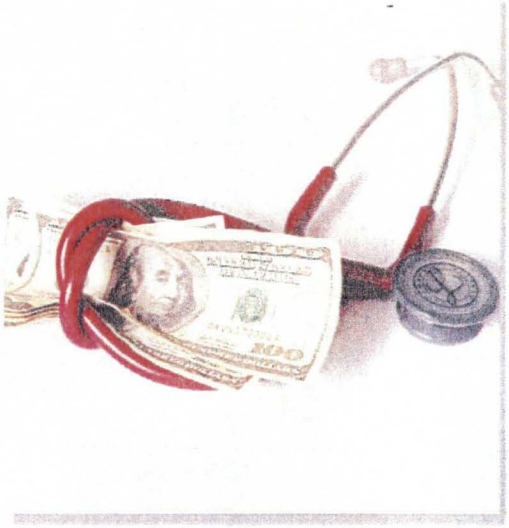
Utilization of services



Health care costs are directly tied to utilization of health services. The state has higher admission rates (9th highest in the nation; 137 admissions per 1,000 population in 2005) and longer lengths of stay than the national average (ND average was 8.8 days compared to the U.S. average of 5.7 days in 2005).

Research that explores the reasons behind utilization patterns can inform strategies to further decrease health care spending in the state.

Financing health services



Health expenditures in North Dakota increased annually by 6% from 1991 to 2004. North Dakotans spend more on hospital care, drugs, other medical nondurables, and nursing home care than found for the overall United States. However, North Dakotans spend less on physician and other professional services, home health care, and other personal health care compared to the U.S. population.

The current economic recession is likely to affect public and private payers of health services as well as health care systems, businesses, and families. Projections for a growing population of older citizens in North Dakota indicate that Medicare will remain a dominant payer, and consequently, the state's health care providers will be particularly sensitive to the adequacy of the program's reimbursement rates.

With very low or negative margins across many North Dakota hospitals and other signs of health system vulnerability, such as contraction of home health services, measures of viability and access are important to monitor.

Data that tracks access measures at local and regional levels as well as factors influencing the viability of the local health care sector can facilitate planning for strengthening or redeploying health care services to minimize access-to-care problems. Local communities and health facility leaders can embark on community assessments to ensure an alignment between what community members want in terms of health care and what providers offer.

Key stakeholder perspectives

Key stakeholders recommend investment in prevention-related activity. Similarly, a majority of recently surveyed North Dakotans indicate strong interest in wellness programs. The sensitivity of chronic illness to healthful behaviors and the interest on the part of the public and opinion leaders in addressing health promotion and disease prevention strategies speak to the importance of and opportunity for offering related programs, education, and services, including fitness activity, encouraging more work and community-based wellness programs and incentives, and encouraging businesses and insurers to leverage health coverage and activities that include wellness benefits.

Center for Rural Health

The Center for Rural Health is one of the nation's most experienced organizations committed to providing leadership in rural health. Located in Grand Forks, ND, the Center serves as a resource to researchers, educators, policymakers, reporters and health care providers across the state of North Dakota and the nation. Activities are targeted toward identifying and researching rural health issues, analyzing health policy, strengthening local capabilities, developing community-based alternatives, and advocating for rural concerns.
ruralhealth.und.edu

Dakota Medical Foundation

Dakota Medical Foundation, Fargo, ND, focuses its efforts on improving health and access to medical and dental care in the region, with a special emphasis on children. Since 1996, the Foundation has invested over $36 million to over 300 nonprofit organizations in the region.
dakmed.org

To view the full report, visit
ruralhealth.und.edu/projects/escan/publications.php