Executive Summary

This report provides an overview of selected health and health care issues in North Dakota. Where available, measures specific to these issues are identified and North Dakota's performance on the measures is presented. Performance measures are important because they can be used to track trends in health and health care and to evaluate the effect of programs and initiatives. Additionally, examples of programs designed to address the selected health and health care issues are briefly summarized. This summary can serve 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, data sources, queries of agencies and organizations, and perspectives of a small set of key stakeholders. The Environmental Scan was conducted from December 2008 to mid-February 2009. The following is a synopsis of the information and perspectives presented in the report.

Health and Health Care in North Dakota: The Environmental Context

North Dakota's health and health care are affected by demographic, social, and economic factors. Population characteristics, including age composition, income levels, educational achievement, and changes in the number and distribution of people, affect health status. North Dakota, with urban clusters and a small, geographically rural and frontier population, 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. Related to these are the higher levels of unemployment on the state's reservations. 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). Dynamics external to the state, including a deepening recession and a compromised national economy, have implications for both the health of the state's population and the economic health of providers that serve the state's population. As strategies to strengthen both health and health care in North Dakota are contemplated, meaningful efforts by stakeholders need to consider these broader characteristics. Additionally, 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.

The Health Status of North Dakota

Health-related behaviors and other selected topic areas. 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. Still, 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.

Experience shows that improving the health of communities through behavioral change is possible. However, change is often slow and involves commitment of human and other resources and community engagement. In order to reduce the future burden caused by negative health behaviors, where they exist, proven strategies should be considered and supported and, where such evidence is lacking, pilot projects should be developed and evaluated related to selected priorities. As with all areas selected for action, measures need to be adopted and applied in order to track progress at individual, community, and state levels, with adjustments made as needed. A set of health-related measures, rankings, rates, and comparisons associated with the state of North Dakota can be found in Volume II of the report.

Chronic diseases. Cardiovascular disease and cancer are clearly the leading causes of death in North Dakota, comprising 49% of all mortality. Regarding morbidity, there are several chronic conditions that adversely affect the health, well-being, and quality of life among North Dakotans: arthritis (26.9% prevalence among ND adults), disability (15.0%), 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 of 46); colorectal cancer in men (15th highest of 46); stroke mortality (16th highest of 51); and prostate cancer mortality (17th highest of 46).

To address the state's health issues related to chronic disease, private and public sector investments in prevention-related activity can be instituted or strengthened or both, from education (e.g., proper diet and exercise) to wellness activities to providing incentives for healthful decisions. For example, some evidence-based strategies to improve health and prevent disease in communities can be found at http://www.thecommunityguide.org/index.html. To ensure data-driven decision-making, rather than just anecdotally driven decisions, and to maximize the efficient use of resources directed to high need health care problems, it is also important to close information gaps regarding chronic diseases and other common health problems in North Dakota.

The Status of North Dakota Health Care

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 (e.g., home health, public health, Emergency Medical Services [EMS]) or at least consider cutbacks in infrastructure, salaries, and staffing. Negative operating margins are increasing the financial fragility of health care in the state. Additionally, 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. In terms of quality, the state does very well in the aggregate on a number of quality measures. However, performance of small rural hospitals is frequently not reflected in quality data, and consequently, significantly less is known about quality in some of these facilities (i.e., whether it is better, worse, or the same as urban North Dakota hospitals). Regarding quality, while there are clear areas in need of quality improvement, performance measurement indicates that hospitals and nursing homes frequently meet and exceed national averages in both individual 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 in rural areas) tend to be highly integrated with other services (e.g., medical clinics). This integration can help position North Dakota to respond to new emerging care models such as medical homes and new payment strategies (e.g., episodic payment) 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 alike. Public health (28 single and multi-county local public health units), home health (35 entities), and EMS (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. For example, the state's trauma system needs further development of a system-wide approach to performance improvement, development of a formal critical care transportation network (with combined ground and air medical resources), and improved access to data to better inform and respond to injuries.

Slightly different problems affect special services, including oral health care and pharmacy services. Access to dental services is hampered by both workforce shortages and payment systems such as Medicaid. Financial vulnerability is illustrated by the fact that less than one-fourth of North Dakota dentists in 2005 accepted all Medicaid patients and one-third limited the number of Medicaid patients. Access to dental health services for patients on Medicaid and those unable to pay out-of-pocket for services is essential. The availability of oral health education and preventive services delivered using new approaches merits consideration. The transformation of a number of rural pharmacies to "telepharmacies" utilizing pharmacists and pharmacy technicians as well as technology is a successful example of addressing some workforce shortage dimensions. 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. Based on available data, 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, according to the Commonwealth Fund, 2007). Nevertheless, within the state, there are clear opportunities for quality improvement. Enhanced networking and communication, and sustaining and strengthening primary care are pivotal to quality health care. Additionally, encouraging consumers to access publicly available information about care quality can assist them in making informed decisions when choosing health care facilities.

From the vast number of measures that currently exist to monitor quality, a subset could be selected that is most relevant for North Dakota. As with most topics discussed in this report, there are improvement opportunities and relevant measures. A multi-stakeholder approach (private and public entities) can be important to selecting priorities and related measures that can track progress in specific areas. In terms of quality, 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. Some collaborative efforts are currently underway in the state, but they are fragmented.

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. In rural states, the availability and location of services are important considerations, and potential and actual decreases in service areas or closures of health facilities (e.g., dental clinics and home health agencies) should be carefully evaluated to determine their effect on local communities. While community leaders engage in discussions about facility closures, no mechanism is used to engage a larger group of experts to consider, along with the community, potential strategies to continue obtaining services using new approaches.

Health Insurance: With an uninsured prevalence of 8.2% (approximately 51,900 people), North Dakota has variability across geography, race, income, and other factors in rates of insurance. Particularly with current economic conditions, ongoing assessment of insurance coverage across vulnerable groups is important, in addition to ensuring comprehensive dissemination of information regarding the availability of public programs. 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. Public policy can be used as a means to strategically address specific problem areas, targeting resources to better meet standards of efficiency and equity. In North Dakota, specific groups that are more likely to be uninsured include the following: rural residents, young adults, American Indians, and workers of small employers.

Workforce: Given the demographic trajectory of North Dakota as well as anecdotal and quantifiable information about the health care workforce, the state clearly 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 indicate a need for 271 physicians, nurses, clinical laboratory science practioners, 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. This effort could involve a range of stakeholders from high school teachers to health care employers to policymakers.

Utilization of Services: Health care costs are directly tied to utilization of health services. Data indicate that 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 (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. In 2004, the most recent year for state–national comparisons, the per capita health spending level in North Dakota was $5,808, whereas the U.S. per capita rate was $5,283. 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 (e.g., local and regional population characteristics) 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.

Improving the Health Status of North Dakota: Key Stakeholder Perspectives

In their interviews, 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.

Summary

Health and health care in North Dakota present an array of challenges and opportunities. To achieve improvement in both areas, collaborative efforts are important and there is significant potential to extend their reach and expand their focus. Collaboration and broad-based approaches to addressing health care cost, access, and quality issues are supported by key stakeholders. Networking can offer opportunities to build new linkages and capitalize on sharing resources and expertise.

Improving the health status of the population includes engaging communities in the process of enacting new policies (e.g., school-based) and programs that are, when possible, evidence based and transportable to other communities. Involvement of representatives from a wide range of public and private (health and non-health), local to statewide entities that are open to new ideas is essential. When instituting new initiatives, the most effective initiatives (from either within or external to the state) should be selected, promoted, and replicated, and related progress tracked. Current and future health and health care plans should be assessed against clearly defined and North Dakota relevant performance measures.