Nebraska Rural Health Advisory Commission’s

Rural Health Recommendations

As provided through the Nebraska Rural Health Systems and Professional Incentive Act

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Nebraska Rural Health Advisory Commission
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Background and Purpose

In the past few years the health care system has undergone dramatic changes. Many of these changes create new opportunities for both rural providers and communities to improve the integration of health care services, to enhance the quality of care and the patient’s experience, and to provide a greater emphasis on prevention and population health. Unfortunately, the changes have also led to significant challenges: new financial incentives and reimbursement systems have produced lower revenue streams for many rural providers; innovative delivery models may lead to greater consolidation and loss of local control; and the adoption and use of electronic health records have the potential to improve health outcomes but have been costly to implement. In addition, many traditional challenges still remain such as the shortages of various types of health professionals, a larger number of hospitals with very low or negative margins, a continued lack of public transportation, and fragmented delivery systems.

The passage of the Rural Health Systems and Professional Incentive Act in 1991 authorized the Rural Health Advisory Commission (RHAC) to develop a series of recommendations regarding the direction of state rural health policy. These recommendations should address the problems related to the delivery of rural health care, the education and training of health professionals, the regulation of rural health providers and institutions, and other factors that impact rural health care. The recommendations must be prepared annually and submitted to all appropriate government agencies and bodies, including the Governor, the State Legislature, and the Department of Health and Human Services. The purpose of this report is to identify some of the major rural health issues and propose recommendations that will address these issues. These recommendations are intended to complement the work that has been done under the LR 422 Commission and the new edition of the Nebraska Rural Health Plan that is being prepared by the Office of Rural Health.

Vision Statement

In preparing the recommendations, the RHAC developed the following vision statement to serve as a guide for the direction of rural health policies:

All of the people in rural Nebraska have access to high quality, affordable, and integrated health care services that meet all of their physical and mental health needs.

This vision implies that people in rural Nebraska have access to health care services. It is recognized that not all services can or should be provided locally, but needed services should be reasonably accessible to all rural residents. This vision also implies that the rural providers and communities should not only treat illnesses and injuries but also focus on keeping people healthy. Rural communities should be responsible for identifying their needs, establishing priorities, and developing intervention strategies to address their unique needs.
The recommendations in this report are designed to improve the health outcomes of rural populations and strengthen and transform the rural health care delivery system. They are intended to improve both the efficiency and effectiveness of the system, produce better physical and mental health outcomes, lead to higher quality health care services, and create a more integrated and coordinated system of care. The recommendations are focused on the following areas:

- Population Health Issues
- Workforce Shortages and Health Professional Incentive Programs
- Behavioral Health Issues
- Rural Integrated Delivery Models
- Emergency Medical Systems (EMS)
- In-Home and Long-term Institutional Care Services
- Communication and Information Technology Systems

I. Population Health Issues

People living in rural communities face a unique combination of obstacles and challenges that are often different from those in urban areas. Some of these differences relate to the demographic and socioeconomic status of the population. For example, the percentage of the population over 65 in rural Nebraska is 19.6 percent as compared to 10.7 percent in large urban areas. As a result, rural populations tend to have a higher prevalence of chronic conditions. There is also a smaller and declining population base in most parts of rural Nebraska. In addition, a total of 33 counties have less than six people per square mile. This problem is further magnified because of the lack of public transportation.¹

Access to care in rural areas has been a critical challenge for several years. There is currently a shortage of many types of health professionals, including primary care practitioners, mental health professionals, dentists, physical therapists, pharmacists, and many others. Rural populations also have a higher uninsured rate and generally less adequate insurance coverage because of the higher proportion of small businesses. The lack of health care providers and no or inadequate insurance coverage has led to fewer annual routine checkups and less health screenings for rural residents. In comparison with their urban counterparts, rural residents are less likely to have their cholesterol checked every five years and less likely to have been screened for colon, breast, and cervical cancer.²

Rural residents are also at greater risk of chronic disease because of specific risk factors. For example, about 32 percent of rural residents were obese as compared to 28 percent in large urban areas. Rural residents have slightly higher hypertension rates, are more likely to binge drink, less likely to wear seat belts, and less likely to consume fruits and vegetables. Finally, they are less likely to engage in physical activity and visit a dentist during the year.³

¹ Department of Health and Human Services, Division of Public Health, “Nebraska Health Status Assessment 2015,” August, 2015, p. 2.
² Department of Health and Human Services, op. cit., p. 58.
³ Ibid
In response to these access and health status issues, many rural communities are beginning to develop plans for addressing these issues. For example, most local health departments either have or are in the process of developing five-year community health improvement plans (CHIPs). In addition, the Patient Protection and Affordable Care Act authorized all nonprofit hospitals to develop a community health needs assessment (CHNA) and an implementation plan. The vast majority of local health departments and hospitals are working together on these plans to include similar goals, priorities, and intervention strategies. During both the planning and implementation stages, it is also important to include other organizations.

**Recommendations**

1. Local health departments and hospitals should work together to develop their respective plans and involve other appropriate community and regional organizations (e.g., community action agencies, Nebraska cooperative extension, schools, and employers).
2. Intervention strategies should be evidence-based whenever possible; promising strategies should only be implemented if there are resources to provide a rigorous evaluation.
3. To address broad health issues (e.g., obesity, access to care, and mental health issues), resources at the local level should be aligned to create a greater collective impact.
4. The Division of Public Health, other divisions within the Department of Health and Human Services, the College of Public Health at the University of Nebraska Medical Center, and others should provide technical assistance in the development of local plans and fund pilot projects to assess the value of promising innovative intervention strategies.
5. A core set of measures should be developed to track the improvements in personal and community health.
6. A statewide health information database that includes all-payer claims data and uniform patient outcomes data from all health care providers should be established.
7. To improve the health literacy of both children and adults, more effective workplace and school health education programs need to be established.
8. To promote greater personal responsibility for wellness, it is essential to provide proactive, culturally-competent patient education on disease management and prevention as well as financial incentives for personal health-related improvement.
9. A Center of Health Care Data and Planning should be established to perform the following functions: (1) prepare reports to inform decision-makers regarding the high priority health care needs, (2) create a profile of health in the state, (3) suggest changes to state laws and regulations, (4) develop metrics to monitor the effectiveness of population health outcomes, and (5) recommend policies to reduce health care disparities.

**II. Workforce Shortages and Health Professional Incentive Programs**

According to the Health Resources and Services Administration, the total number of primary care physicians, physician assistants, and nurse practitioners in the U.S. is expected to increase nationwide by 2020, but the increasing supply will not be adequate to meet the growing demand for primary care services. The demand for services is expected to increase because of the expanding aging population, the growth of the total population, particularly in urban areas, and
to a lesser extent the expanded insurance coverage under the Affordable Care Act.\textsuperscript{4} The imbalance between supply and demand has a significant impact on both rural and urban areas where many older physicians are nearing retirement age and will need to be replaced. For example, 37 percent of family practice physicians in rural Nebraska are 55 years of age or over and 44 percent of family practice physicians in the urban areas of Nebraska are aged 55 or older.\textsuperscript{5} In addition, the rising level of student debt and lower reimbursement rates make rural areas less attractive to new physicians. The demand for primary care practitioners in urban areas is expected to increase sharply because of a growing population base, expanded insurance coverage, and new models of care (e.g., Accountable Care Organizations) which emphasize a greater use of primary care and preventive services. The expanded use and recruitment of primary care practitioners in urban areas may greatly magnify the shortages in rural areas.

While many rural areas face challenges in the recruitment and retention of physicians, physician assistants and nurse practitioners, the supply of other health professionals such as dentists, pharmacists, mental health practitioners, physical therapists, and occupational therapists is also inadequate to meet the need. Most rural hospitals, physician clinics, and nursing homes are forced to pay a nationally competitive wage rate in order to attract these health professionals to their communities. However, the reimbursement rates allowed by Medicare and other third-party payers are often based on local costs, which may not be sufficient to pay these competitive rates.

Although Nebraska has benefited from the federal National Health Service Corps programs, the number of qualified shortage areas has declined in the past several years. As a result, Nebraska has relied on the state-funded student loan and loan repayment programs to encourage health professionals to practice in state-designated shortage areas. Since the inception of the loan repayment program in 1994, a total of 590 eligible health professionals have practiced or are practicing in shortage areas with a default rate of only 8 percent. In 2015, the State Legislature enacted a law (LB 196) which increased the maximum award amounts for the student loan and loan programs and created a medical resident loan repayment program. The medical resident loan repayment program provides loan repayment to primary care medical residents attending residency training in Nebraska for a commitment to practice in a state-designated shortage area once residency training is completed. The medical resident loan repayment recipient must practice the equivalent of full-time for one year for each year loan repayment was received.

\textbf{Recommendations}

1. The funding for the Nebraska rural health incentive programs (the student loan and loan repayment programs) should be expanded.

2. A comprehensive plan that projects the future demand and supply of health professionals in Nebraska should be developed. This plan should also establish priorities for future funding

\textsuperscript{4} The U.S. Department of Health and Human Services, Health Resources and Services Administration, “Projecting the Supply and Demand for Primary Care Practitioners through 2010,” http://bhpr.hrsa.gov/healthworkforce/index.html

\textsuperscript{5} Unpublished data obtained from the Health Professions Tracking Service, College of Public Health, University of Nebraska Medical Center, September 2015.
levels for the Health Professional Incentive Programs and should include recommendations that would make these programs more attractive to health professionals in Nebraska.

3. Scope of practice barriers for health care workers and new categories of health care workers (e.g., community health workers and community paramedics) should be carefully evaluated.

4. New technology such as telehealth, home monitoring, and internet-capable care should be expanded. This new technology can be more effectively and efficiently used by assuring adequate broad-band access and assuring standardization/integration of health care platform interoperability.

III. Behavioral Health Issues

There has been a chronic shortage of behavioral health professionals in rural Nebraska for many years. The shortages of personnel include psychiatrists, psychologists, licensed mental health practitioners, advanced practice registered nurses practicing psychiatry, alcohol and drug abuse counselors, and others. Currently, out of the 90 rural counties, the RHAC has fully designated 81 counties and nine counties have been partially designated as mental health shortage areas.

The shortage of behavioral health professionals has a serious impact on rural Nebraskans. The lack of providers affects availability and accessibility of behavioral health care services and leads to less than adequate care for many residents. There are many issues in providing rural mental health care including dealing with communication problems, social network issues, social exclusion factors, stigma labels, and lack of anonymity. Presently, many rural residents consult their primary care provider for mental health issues, which often leads to burdens for the local physicians such as causing backlogs in their daily schedules. Also, the primary care doctor may not be able to effectively or efficiently treat the patient in need of behavioral health services.

The RHAC is supportive of an integrative approach to providing behavioral health services in rural Nebraska. This approach would integrate mental health professionals into existing primary care settings. Research shows that most patients prefer to receive their behavioral health care from their family physician. The plan proposed here would allow patients to be seen in the comfortable, familiar environment of their primary clinic; an approach that would help considerably in fighting factors such as stigma and social network issues. Having mental health professionals available in primary care settings would also help deal with other rural problems such as provider isolation and would allow for an integrated approach for care that would treat the whole individual.

There are other promising strategies to address the workforce shortage. Telebehavioral health has been used effectively in Nebraska and in other states. This model has a great deal of potential for the delivery of high quality behavioral services, although presently this modality is underutilized. Another present strategy underway is to increase the number of mid-level providers. Recently, the University of Nebraska Medical Center began training advanced practice registered nurses and physician assistants with a specialty in psychiatry. In 2014, there

6 Mims, S. (April 6, 2006). Integrated Health Care: Involving Primary Care Physicians in the Continuum of Care. Presentation at the WNC Symposium on Mental Health and Substance Abuse. Asheville, NC.
were 29 advanced practice registered nurses practicing psychiatry in rural communities and all but five of them worked in communities with a regional hospital (e.g., Kearney and Scottsbluff). There are only four physician assistants practicing psychiatry in rural communities. These programs are a good start although many more professionals are still needed in rural Nebraska.

**Recommendations:**

1. The interdisciplinary training opportunities between primary care physicians, physician assistants, nurse practitioners, and mental health professionals should be expanded.

2. Pilot projects that integrate primary care practitioners, critical access hospitals, and behavioral health services should be funded and evaluated.

3. More flexible Medicaid and private insurance reimbursement policies that would address transportation and travel costs need to be developed and implemented. Consideration should also be given to increasing reimbursement for telehealth/telemedicine services.

4. State incentive programs for mental health providers and alcohol and substance abuse counselors practicing in rural areas should receive increased funding. This funding should be used to provide support services and additional training for the current workforce, maintain competitive reimbursement rates, and support new incentives for rural practice.

**IV. Rural Integrated Health Care Systems**

The health care system in the United States is undergoing a major transformation and these changes are likely to have both a positive and negative impact on the rural health care system. Many of these changes such as a new focus on population health, the use of new technologies, and new types of health care workers have been discussed in other sections. The main driver of these changes is a shift in payment strategies from fee-for-service and cost-based reimbursement to value. Value has been defined “as better health care (improved clinical quality, patient safety, and patient experience) and lower per capita cost.” This new emphasis on value has led to the development of new delivery models, including the patient-centered medical home (PCMH) and accountable care organizations (ACOs). These new models have financial incentives to improve health outcomes and control costs (e.g., reducing avoidable hospitalizations, improving cancer screening rates, and increasing immunization levels).

In a patient-centered medical home model (PCMH), health care services are more accessible, continuous, timely, patient-centered, and coordinated. There is an emphasis on preventive services (e.g., providing mammograms, cholesterol and blood pressure screenings, and up-to-date immunizations). With this model, there is also an incentive to work closely with behavioral health providers, public health professionals, and long-term care support services. Numerous PCMH clinics have developed in Nebraska, but new revenue streams are needed to build the

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capacity and keep these models successful. Funding for pilot projects has also been provided by the DHHS Division of Public Health to encourage local public health departments to collaborate with PCMH clinics on implementing diabetes prevention programs and using community health workers to encourage patients with chronic diseases to make lifestyle changes (e.g., increase physical activity and eat more nutritious foods).

**Recommendations**

1. Develop additional pilot projects to encourage collaboration between state and local health departments and PCMH clinics to implement population health programs and activities. These pilot projects should be based on the following principles:

   • An integrated system should be developed from the “bottom up” and guided by a comprehensive planning process that involves health care providers, local health departments, community action agencies, Nebraska extension, community officials, and consumers.

   • Although all integrated rural health systems will have many common characteristics, diverse approaches are necessary because of the differences in the needs of the population, the economic characteristics of the area, and the local culture.

   • All integrated systems should foster cooperation, collaboration, and integration of services and activities, including innovative technology such as telecommunications.

   • All integrated systems should be evaluated based on the Triple Aim (better health outcomes, better quality of health care services, and lower per capita costs).

2. The educational medical centers in Nebraska should emphasize interdisciplinary training and a team-oriented approach to delivering health care services.

3. The Office of Rural Health should work with both public and private agencies to build integrated health networks.

4. Both public and private payers should change their reimbursement policies to help PCMHs build the infrastructure (e.g., care coordinators and data analysis) that is necessary to improve patient outcomes.

5. Innovative insurance models that decrease the number of uninsured, reduce the cost and improve the coverage for small groups and individuals, and use private sector programs to provide low-risk self-funded pools should be developed.

6. Policies and programs should be developed that will assure transparent pricing by all health care public and private providers.
7. Reimbursement policies should be designed to reward health care providers for improving health outcomes.

8. Palliative and end-of-life care should be promoted across the continuum of care.

V. Emergency Medical Services (EMS)

Emergency medical services are an essential and often unrecognized component of the rural health care system. The goal of the EMS system is to provide a coordinated, timely, and effective response to medical emergencies. These services are essential in rural areas because of the distances between population centers and the need to transport patients from hospitals and nursing homes in small communities to larger facilities. Although emergency services/skills are essential, many challenges exist in small communities. These challenges will only intensify as the demand for health care services expand because of a growing elderly population, more chronic illnesses, and new technological innovations.

One of the major challenges is to recruit and retain volunteers who are interested in becoming EMTs and paramedics. Some of the major factors contributing to this problem are: (1) the work is often emotionally stressful and burnout may occur, (2) the compensation and benefits are low or non-existent for volunteers, (3) it is difficult to maintain coverage during the day because many volunteers work out of town and/or employers may not allow EMTs to miss work, and (4) the training and educational requirements are considered excessive by some volunteers.

Another challenge is the lack of research and data about the effectiveness of the EMS system and patient outcomes. Although some states, including Nebraska, are collecting EMS performance data (e.g., length of time to reach a destination), major gaps still exist and the analysis of the data is very limited. Without the widespread adoption of improved communication systems and health information technology that will allow the exchange of patient information across the continuum of care, it will be very difficult to evaluate the quality and performance of the EMS system related to patient outcomes.

According to a 2006 report by the Institute of Medicine, the lack of knowledge about the quality of EMS services results from the lack of nationally agreed-upon measurements of EMS quality, the absence of nationwide standards for the training and certification of EMS personnel, no accreditation of institutions that educate EMS personnel, and virtually no accountability for the performance of EMS systems. Since this report was published national standards for the training and certification of EMS personnel have been adopted.

Finally, the EMS system is difficult to change because of the fragmentation and lack of coordination between pre-hospital providers. In Nebraska, it is not uncommon for multiple EMS agencies to serve the same population center. For example, Thayer County has eight ambulance units to serve 5,317 residents. Many of these EMS units are not able to communicate effectively.

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with one another, although new communication technology can alleviate most of the problems. Adopting new communication systems would allow hospital emergency room personnel to better treat the patient or transport the patient to a tertiary facility.

To improve coordination and communication among EMS providers and between EMS providers and other health care services (e.g., hospitals), a new vision is needed. This vision needs to take into account the overlapping EMS roles and responsibilities that include health care, public health, and public safety. This new vision and the strategic initiatives to achieve the vision need to consider which entity or entities should lead this effort and ultimately assume responsibility and accountability for the performance of EMS care. Consideration should also be given to identifying the strengths and weaknesses of regionalization and what standards need to be established to evaluate the quality and performance of the EMS system. In Nebraska, no public or private entity is responsible for the scope, authority, and operation of local EMS systems. Finally, it will be critical to identify potential local, state, and federal funding sources, existing and new incentives, and reimbursement policies to make the EMS system more effective and efficient.

Recommendations

1. A multi-sector coalition should be formed to develop a state EMS Plan. This coalition should include representatives from state and regional EMS organizations, local ambulance services, hospital administrators, hospital personnel, physicians, state and local public officials, state patrol and other law enforcement agencies. The plan should address roles and responsibilities of various public and private entities, assess the strengths and weaknesses of regional models and the coordination of large and small EMS units, and identify measures that can be used to evaluate the quality and performance of local ambulance units and state policies that impact the EMS system. The coalition should recommend an entity at the county or regional level that would be responsible for EMS services in the area.

2. The Nebraska Office of Emergency Health Systems should continue to assess local EMS services in rural communities and encourage innovative models that make the system more effective and efficient.

3. The Nebraska Hospital Association should work with the Nebraska Congressional delegation to allow all hospitals that own or manage EMS ambulance units to receive cost-based reimbursement. (Currently, only hospitals that own or manage EMS units that are 35 miles from another unit can receive cost-based reimbursement.)

VI. In-Home Care and Long-Term Institutional Care Services

In rural Nebraska, the population over 65 years of age is considerably higher than the percent in urban areas. With an older population, rural areas have a higher proportion of chronic illnesses and a need for many types of health care services. Despite a greater need for services, access to these services is limited by the lack of public transportation, an inadequate supply of health care providers, limited in-home support services, and inadequate resources to pay for these services.
Access to home health and in-home services vary considerably across the state. Although long-term institutional care services (i.e., skilled nursing care and assisted living care) are generally available, these services are more expensive and many of these facilities receive a significant proportion of their revenues from Medicaid. In addition, all critical access hospitals have swing beds which provide long-term care support.

While it is critical to have an adequate supply of long-term care beds, it appears that there is an imbalance between institutional care and in-home care. New technology and greater support services would allow a greater share of the aging population to remain in their own homes for a longer period of time and would reduce costs.

**Recommendations**

1. Pilot projects that assess new models of in-home care, telemedicine, and home monitoring technology should be developed and evaluated.

2. The feasibility of providing public transportation at least in some regions of the state should be evaluated.

3. A “team approach” training program that is focused on the at-risk elderly population should be established for current health care providers and staff who work in facilities.

4. Electronic medical records should be used to assess patient needs and identify appropriate treatments at multiple points of care.

5. Provider training initiatives related to the aging patient (e.g., pharmacy modifications and appropriate treatment of the elderly trauma patient) should be developed.

6. The number of health professionals (e.g., geriatric nurses, certified nursing assistants, and mental health professionals) who are better able to provide care for older patients should be expanded.

**VII. Communication and Information Technology Systems**

Electronic technologies are transforming the rural health delivery system and they have the potential to expand access to services, improve the quality of care, and provide clinical and managerial data that will support informed decision-making. For example, electronic health records have already been implemented by most hospitals and the majority of physician clinics. While these data are now generally used for internal decisions, in the future they will be shared among all providers. New technology has improved the quality of care through e-ICUs, remote EKG readings, teletrauma, e-pharmacy, telebehavioral health, telemedicine access to specialty care (e.g., cardiologists), and home monitoring systems. Unfortunately, most of these new technologies are greatly underutilized because of payment policies, lack of training, and practice cultures.  

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Recommendations

1. Staff from the Department of Health and Human Services should identify the best practices in advanced rural telehealth network models that could be duplicated in other areas of the state.

2. The use of telecommunications for consultations, education, and electronic health information delivery to and from homes, hospitals, and other health care providers should be promoted and encouraged.

3. Strong telecommunications linkages between public health departments, area hospitals, and other health professionals to address district-wide, regional, and statewide health needs should be developed.

4. Electronic health records (EHR) technology should be used by all health care providers to share patient information through the Nebraska Health Information Initiative (NeHII). NeHII is the prominent Health Information Exchange (HIE) in the state and, with greater participation from hospitals and physician clinics, it can be a valuable partner in the sharing of patient data and the development of a complete electronic patient record. It can also become the ideal conduit to share data with public health and other state and federal agencies.

5. Standardized protocols for all reporting, transmitting, and the exchange of all health care data should be developed and implemented.

6. The capacity of state agencies should be expanded so they can send and receive the patient information that providers with certified electronic health records (EHRs) are required to transmit and receive to and from these agencies.

Conclusion

The health care environment is changing rapidly and these changes are having a dramatic impact on the rural health system. These recommendations attempt to bridge some of the major gaps during this transition period. While there are many new opportunities to help achieve the RHAC’s vision (e.g., new incentives to build integrated models of care, new data that can be used to improve the quality of care and health outcomes, and new technologies to expand access to care), many major challenges remain. Some of these challenges, including a shortage of health professionals, more consolidated networks which threaten local control of health services, and lower reimbursement rates, make it more difficult to build integrated care models. However, by working together and moving quickly, communities have an opportunity to reshape their health system to produce better health outcomes, enhance the quality of health care services, and develop a more efficient, cost-effective system.