Chairman Keiser and members of the Health Care Reform Review Committee, I am Dr. Terry Dwelle the State Health Officer for the North Dakota Department of Health. I’m here to present on the state’s current model for health-care delivery and talk about alternative health care delivery models that in my assessment need to be discussed and addressed in the state of North Dakota to improve the general health of the population and help mitigate rapidly rising costs of health care. This will require a balance and coordination of three sets of tools: adequate policies at the state, local and organizational levels; population-based programs of public health; and a reorientation of current clinical services to emphasize primary care.

Promoting a Wellness-Oriented System
We are blessed in North Dakota to have an incredibly talented and committed health-care system and clinicians that work hard to keep people well and in good health. In several studies, North Dakota clinical systems and clinicians provide the best quality of care for the lowest costs in the nation. But there may be a few things we can consider in our state to improve the care we provide.

The current health-care system emphasizes care for illnesses. At the same time we provide necessary care for the ill, we must more aggressively incentivize and encourage the health-care systems to keep people as well as possible to improve quality of life and decrease health-care costs. Experts call this “squaring off the curve” of chronic disease, seeking to prevent the early onset of chronic illnesses and their complications until near the end of life. We can only do that by removing as many risk factors for illness as possible; things like tobacco use, inadequate diet and exercise, inappropriate use of alcohol and other substances, etc.

The current fee for service reimbursement system also works against promoting wellness. A majority of a provider’s revenue comes from taking care of sick people in hospitals and clinics. The more tests and procedures provided, the greater the revenue. The current fee for service reimbursement system has increasingly provided payment for some wellness services, such as preventive screenings, but somehow we must consider how to incentivize the system to improve a wellness outcome for patients. We need to find significant ways to reward clinicians who provide services that keep people well. Until we do that, health-care costs will continue to escalate at the current rate.
Encouraging Primary Care and a Medical Home
Numerous articles in medical literature show that in areas of the country that have increased primary care, which provides a personal clinician that coordinates and integrates comprehensive wellness and health care for the whole patient (called a medical home), there is a decrease in heart disease, decrease in cancer mortality, better management of chronic diseases, more cancer screenings and fewer medical-related lawsuits. Another extensive study of the medical home (Starfield and Shi, Pediatrics, 2004) in 2004 demonstrated better utilization and health outcomes, earlier and more accurate diagnoses, reduced emergency department visits, fewer hospitalizations, lower costs, better prevention of diseases, and increased patient satisfaction. A study from the Annals of Family Medicine in 2004 estimated that if every American made appropriate use of primary care we would save $67 billion in health-care costs per year. We should continue to encourage primary care in our state, particularly as it provides the comprehensive care coordination of a medical home. Primary care clinicians like family practitioners, pediatricians, internists and many mid-level practitioners are in an excellent position to coordinate the comprehensive care of patients and encourage wellness if appropriately incentivized. This is the basic concept of the medical home that Dr. Hanekom from Blue Cross and Blue Shield of North Dakota has been emphasizing.

My mother in her latter years had several chronic conditions. Several times treatment of one condition complicated other conditions she had. It’s difficult as a son to be objective with your own mom, though I tried to coordinate her care as best as I could from a distance. I finally asked a family practice friend of mine to provide coordination and oversight and mom’s complications and quality of life improved dramatically. This demonstrates the power of primary care and the concept of a true medical home.

We should consider options to appropriately shift the orientation of our health-care systems from disease to wellness, somehow better incentivize outcome versus the fee for service system we currently have, and support a better balance of primary care to specialties. I want to emphasize the word balance. Though we need to develop more aggressive ways to keep people well, we also need a strong system of specialists and institutions to treat the inevitable illnesses we will encounter throughout our lives.

Community Engagement and Worksite Wellness
I would like to suggest a few additional practical considerations that we may want to consider. All of us are members of many communities. Communities by nature throughout each of our lives have shaped our beliefs, our values, our institutions (marriage, governance, education, business practice, etc.), and our resultant behaviors. A community is defined as people who know each other by first name and have a sense of shared responsibility for each other. Communities can be divided into five groups or spokes: rural towns, schools, workplaces, faith-based communities, and others (Rotary, Knights of Columbus, Optimists, etc.). Receiving consistent messages, through the many communities an individual belongs to (the more the better), increases the potential of changing risky behaviors. Because communities have such an incredible influence on our
beliefs, values and ultimately on our behaviors, it seems reasonable to work with these communities to change the risky behaviors of their members. We call this approach community engagement; facilitating communities to own their own problems and solutions. Much work done in community engagement in our nation and world is truly community coercion. Community coercion often starts with external experts studying a community, defining the problem, determining a solution, often getting a grant and then trying to sell the plan to the community. This is not engagement, but coercion, and will almost never result in the community owning their own problems and solutions. There are special tools to facilitate true community engagement. The Department of Health and Healthy North Dakota have developed community engagement training programs. Several encouraging pilots in schools and worksites have been developed in the state.

It’s been very difficult to find grant funding to support facilitation of all five spokes of communities; therefore, I will suggest a focus initially on workplaces and schools (specialized worksites). This would give consistent complementary influence on family behaviors from two strategic directions: the parents and children.

A study in the 2009 Journal of Occupational and Environmental Medicine described that poor health impacts the bottom line of businesses in four areas: clinical care (hospital and clinic), medications, absenteeism and presenteeism. Presenteeism is where employees are at work, but not performing well due to health concerns. Presenteeism accounted for 35% of costs related to poor health, followed by absenteeism at 33%, clinical costs at 24% and medications at 8%. Absenteeism and presenteeism accounted for 68% of costs to businesses related to poor health. We often focus on the glaring clinical and medication costs and fail to realize the greatest impact on the bottom line of business is presenteeism and absenteeism. Another article from the same journal in 2005 looked at productivity loss associated with employee risk factors like high blood pressure, being overweight, smoking, lack of adequate exercise, excessive stress, etc. With 0-2 risk factors (the productivity base), employees had a productivity of 85%. With 3-4 risk factors, employees had productivity of 49%. With five or more risk factors, the productivity was at 14%. These are the real life issues that worksite wellness addresses.

Does it work? Worksite wellness has been shown to be effective in numerous studies. Larry Chapman in 2005 summarized 56 articles that looked at worksite wellness. Businesses utilizing worksite wellness had a 26.8% decrease in absenteeism, 26.1% decrease in health-care costs, a 32% savings in worker’s compensation, and a cost / benefit ratio of $5.81 saved for every dollar invested. Several large businesses nationally have utilized comprehensive worksite wellness to bend the curve of health-care expenditures. One of these was Johnson and Johnson who saw a savings of $8.5 million per year for their 37,000 employees with a decrease in all major health risks over a 10-year period. That decrease in risk factors increases the productivity of employees and the company.
These examples emphasize the need for businesses in North Dakota to utilize the community engagement tools of worksite wellness to improve the health of their employees and improve their economic future.

**Other Clinical Programs to Support Worksite Wellness**

Other important clinical statewide programs that would significantly support worksites and also provide health benefits to the general population would include chronic disease management, case management, call-a-nurse services, and onsite clinics by mid-level practitioners.

**Chronic Disease Management**

Chronic disease management has been shown to improve quality of life and decrease health-care costs for individuals with several chronic diseases like asthma, congestive heart failure, diabetes and depression. Chronic disease management, much like community engagement, teaches people and families to manage their own disease. A study on congestive heart failure demonstrated a 50-85% reduction in hospitalizations and a cost savings of $1,591 per patient per year for those on chronic disease management. A New York City study on diabetes demonstrated a decrease in hospitalizations and a decrease in amputations by 39%. An asthma study in Virginia demonstrated up to a 47% reduction in emergency department visits.

**Case Management**

Case management is for complex cases; people with multiple chronic diseases or those with many complications. Case management commonly utilizes mid-level practitioners to monitor and advise patients, similar to the situation I described for my mother, but using cost effective mid-level practitioners for more consistent follow-up. Johnson and Johnson saved approximately $890,000 per year providing case management for complex cases. Case management and chronic disease management are common services provided by a medical home.

**Call-a-Nurse**

There are numerous studies showing the benefit of call-a-nurse services. One of the major impacts shown is that it can reduce inappropriate emergency department visits from 15-70%. We only have a small area of our state covered by call-a-nurse at this time (Fargo area via Sanford Health). An effective call-a-nurse system would save millions of dollars of health-care costs and could provide many other value-added services, including emergency response, and even the provision of clinical advice for schools lacking school nurses.

**Onsite Clinics Staffed by Mid-Level Practitioners**

Onsite clinics staffed by mid-level practitioners in businesses and communities can impact the bottom line of businesses and families. Many of my employees who need
clinic follow-up often lose several hours of work for a clinic visit. Onsite clinics by mid-levels (e.g., blood pressure check, draw blood work, vaccination clinics, etc.) could decrease time away from work dramatically. Large companies have demonstrated these savings.

Community Paramedics
As noted above, the appropriate use of mid-level practitioners in the state, particularly in rural areas, could have a great impact on quality of life and health-care costs. One such use could be an expanded role for paramedics to help resolve the current sustainable challenges of our state’s emergency medical services, particularly in the western part of the state. Several states, including our neighbors of Minnesota and Montana, utilize community paramedics for sustainable EMS services. Data from the North Dakota Rural EMS Improvement Project study completed in June, 2011, showed that fiscal sustainability is generally not possible until 650 or more runs per year are performed. Only ten percent (14 of 134) ground services in the state currently make 650 or more runs per year leaving a significant fiscal challenge for the remaining 90 percent of those services. Utilizing community paramedics in these situations may offer a sustainable option. Community paramedics may provide value added billable services in the community to augment their EMS availability. They could provide mid-level worksite wellness clinical support, chronic disease management counseling, case management, call-a-nurse, and basic clinical assessments and care in rural areas, etc. This may require an expanded scope of work for paramedics in North Dakota.

Conclusion
In summary, we may need to consider how to enhance our focus on wellness, outcomes, and enhanced primary care. A community engagement program to facilitate comprehensive wellness in worksites and schools would be helpful. Additional clinical tools to support worksite and school wellness, as well as general community wellness particularly in rural areas, could include chronic disease management programs, case management, a statewide call-a-nurse system, and increased use of mid-level practitioners (nurse practitioners, physician assistants and community paramedics) across the state to provide clinical support services in collaboration with current health systems.

Emergency Room Usage Data
As requested by the committee, I will quickly provide you with some information regarding emergency room usage in North Dakota. The North Dakota Department of Health does not collect emergency room use data, so the information we have was gathered from two different sources: the Kaiser Family Foundation and the North Dakota Hospital Association. The Kaiser Family Foundation data shows approximately 295,000 visits to an emergency room in 2009. The North Dakota Hospital Association shows approximately 300,000 visits to an emergency room in 2010.

This concludes my testimony. I would be happy to answer any questions at this time.