Prevention & Chronic Care Management Advisory Council

March 2010

Iowa Department of Public Health

Issue Brief: Chronic Disease Management

Link to Report Recommendations

The 2008 Iowa General Assembly created the Prevention and Chronic Care Management (PCCM) Advisory Council in House File 2539, Iowa's Health Care Reform Act.[1] The Council's charge is to study and develop recommendations to improve health promotion, prevention and chronic care management in Iowa. The Council released a set of six recommendations in July 2009 to guide PCCM efforts in Iowa. The recommendations and accompanying report can be found at http://www.idph.state.ia.us/hcr_committees/common/pdf/prevention_chronic_care_mgmt/pccmac_first_report.pdf.

Recommendations:

1. **Create the Iowa Prevention and Chronic Care Advisory Council to provide guidance and oversight for prevention and chronic care management.**
2. **Empower people with the knowledge and resources to live healthy lives and manage their own chronic illnesses.**
3. **Identify and recommend consensus guidelines for the use in chronic care management beginning with those that address the state chronic disease and prevention priorities.**
4. **Establish a chronic disease practice registry product that could be easily and readily incorporated into medical practices.**
5. **Improve incentives for prevention and chronic disease management by providing support for care through payment systems, organization and delivery of care, and care coordination.**
6. **Improve the health workforce and their skills in prevention and chronic disease management.**
7. **Create a societal commitment to health through implementing policies to remove barriers that prevent Iowans from leading healthy lives. Empower and expect Iowans to take personal responsibility for being as healthy as genetically possible and improving their own health, as well as the health of those around them.**

The report was presented to the State Board of Health on July 8th. The recommendations given from the State Board of Health regarding the report are (1) The council should include evidence-based, population-based public health strategies in future efforts; (2) Substance abuse and hepatitis should be recognized and included in the prioritized list for chronic conditions (page 4); (3) The council should (a) include a focus on pediatric/childhood prevention and chronic disease management strategies and (b) be mindful of newer populations entering the state so the issues of those populations are also addressed (multicultural awareness).

To address the State Board of Health's recommendations, the Council decided to produce informative issue briefs that will also create a solid foundation of understanding for the six recommendations. The following issue brief is the first of what will be a series of briefs on topics surrounding PCCM issues.

Inside this issue brief:

What is a Chronic Disease?

A chronic disease is defined as "an established clinical condition that is expected to last a year or more and that requires ongoing clinical management".[1] Chronic diseases are also known to be ongoing physical and mental conditions, such as diabetes, heart disease, cancer, asthma, and mental illness which may limit activities of daily living. They are often preventable and frequently manageable through early detection, improved diet, exercise, and treatment therapy.

What is the Problem?

Chronic diseases, including heart disease, cancer, and diabetes, account for seven out of every 10 deaths and affect the quality of life for tens of thousands of Iowans. In 2007, chronic diseases accounted for 68% of all deaths in Iowa.[2] Chronic diseases have a dramatic impact on both the individual and the larger community. This impact can be seen on both a quality of life and a financial level. When an issue has a large influence on individuals and communities, it is inevitable that it also have a dramatic consequence on a statewide level.

Obesity and Diabetes in Iowa

The Council was charged with identifying two chronic disease priorities for Iowa. They discussed prioritization and concluded priorities for treatment and prevention were distinctly different. Prevention priorities are broader and impact several diseases as they address the underlying causes of disease. The disease priorities were built upon the incidence and impact of chronic disease and related to treatment and management. The council elected to identify two rank-ordered lists; one related to prevention and the other related to chronic disease management. Number one for prevention was **obesity** and number one for chronic care management was **diabetes**.

Obesity

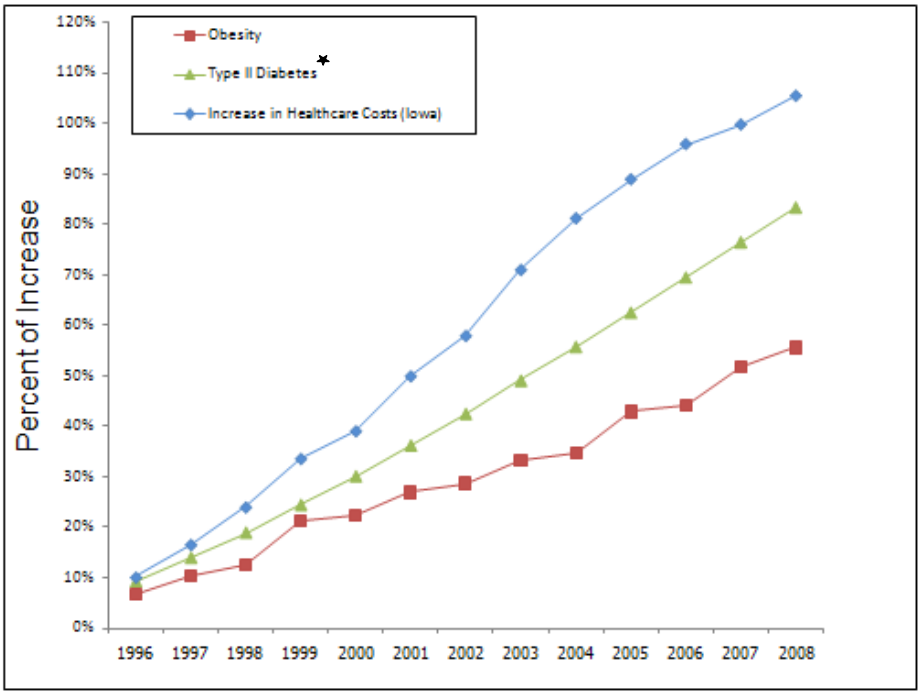
In 2007 37% of Iowans are overweight and 27.7% are obese, based on body mass index. The combined percentage of individuals who are overweight or obese is 64.7%.[3]

Diabetes

Increasing obesity rates throughout the United States have rapidly changed the face of diabetes. Today more than 90 percent of cases are type 2 (developed over time) caused by obesity and genetic predisposition.[4] In 2007, 6.8 percent of Iowans have diabetes, compared to 8.1 percent nationally.[3]

Obesity, Diabetes & Healthcare Costs in Iowa

1988: 10-14% of population in Iowa obese
1996: 15-19% of population in Iowa obese
2008: 25-30% of population in Iowa obese



* Type II Diabetes is commonly associated with people who smoke, or have inactive lifestyles, or have certain dietary patterns that increase the risk of developing Type II diabetes.

Source: Centers for Disease Control and Prevention and Wellmark Blue Cross and Blue Shield

Pediatrics

In 2007, the percent of Iowa children (age 10-17) that were overweight or obese was 27 percent, compared to 32 percent nationally.[5] Obese children may develop medical conditions related to obesity, such as type II diabetes and hypertension. Overweight children tend to become overweight adults, putting them at greater risk for heart disease, high blood pressure and stroke.

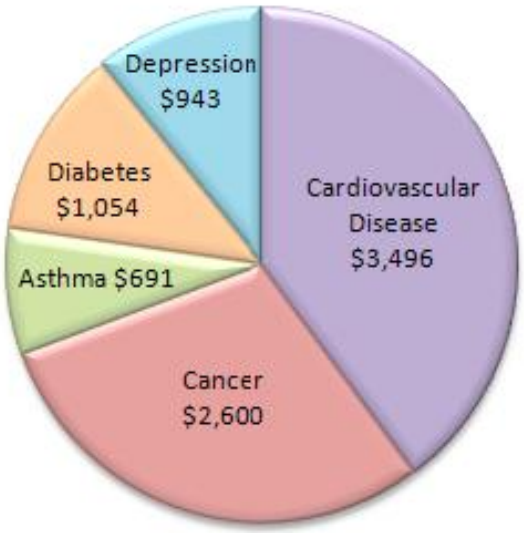
Cost of Chronic Diseases

In 2005, 133 million people, or almost half of all Americans, lived with at least one chronic condition. Seventy percent of all annual deaths in the U.S. are due to chronic diseases. The medical care costs of people with chronic diseases account for more than 75 percent of the nation's $2 trillion spent on health care annually.[6] Three out of every four dollars spent on health care is related to chronic diseases. The U.S. spends 15.5 percent of its Gross Domestic Product (GDP) on health care, more than any other industrialized country.[7]

Iowa

Chronic diseases cost Iowa billions of dollars -- total costs related to chronic diseases, including direct expenditures (e.g., health care costs) and indirect costs (e.g., lost productivity) amount to **$7.6 billion**.[4]

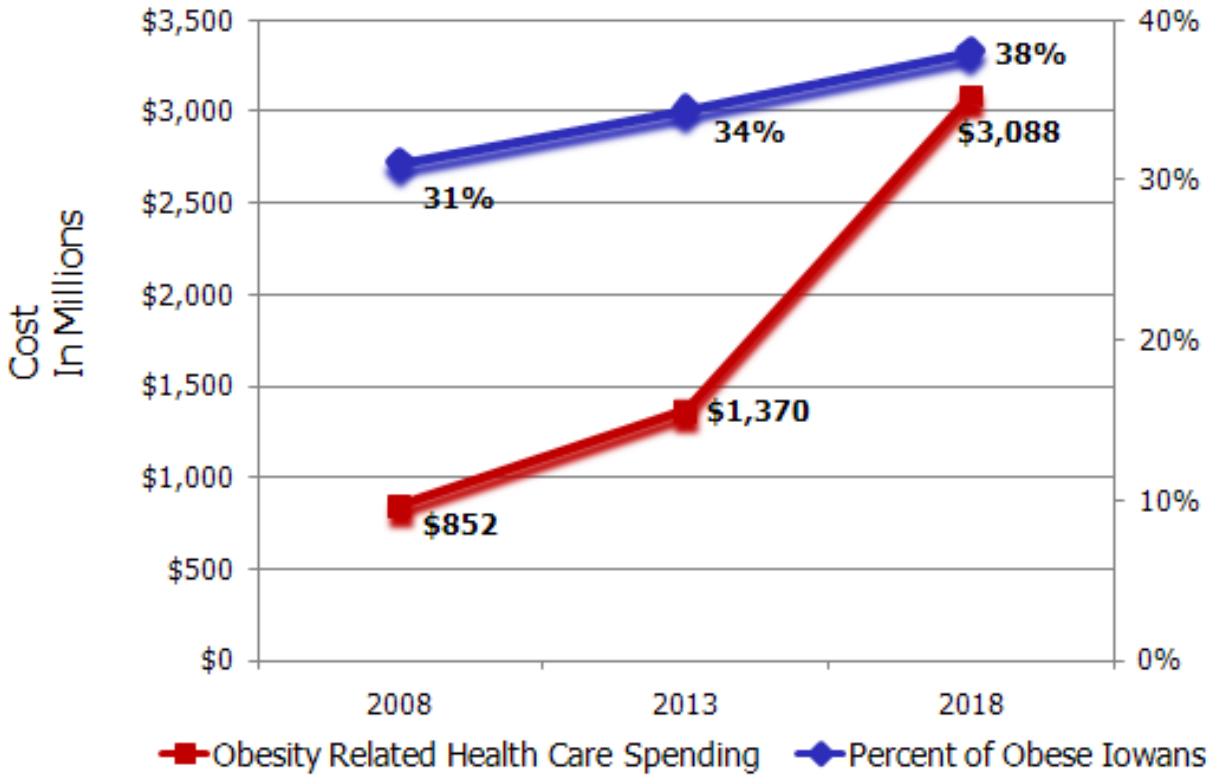
Iowa Annual Cost (in millions) of Chronic Diseases



Source: Prevalence and Cost of Select Chronic Diseases. http://www.lewin.com/content/publications/PrevalenceCostChronicDiseasesRev.pdf

Projected Cost of Obesity to Iowans

Obesity is expected to cost Iowans $3.088 BILLION by 2018



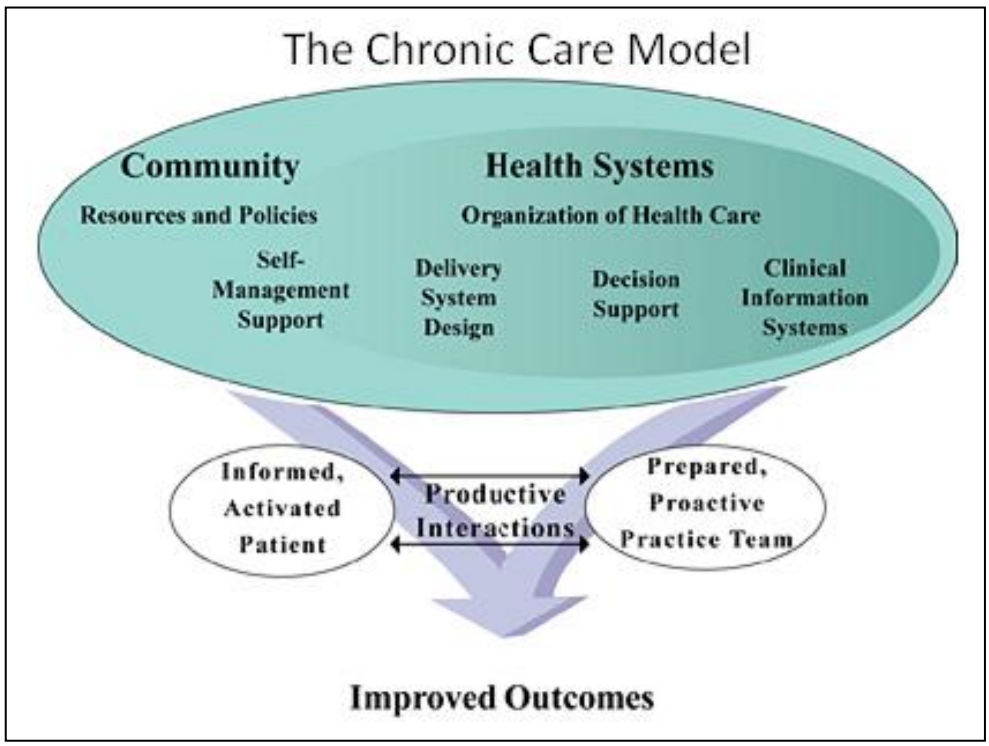
Source: The Future Costs of Obesity. A Report from United Health Foundation, the American Public Health Association and Partnership for Prevention. http://www.fightchronicdisease.org/pdfs/CostofObesityReport-FINAL.pdf

What is Chronic Disease Management?

Chronic disease management is defined as "a system of coordinated health care interventions and communications for individuals with chronic conditions, including significant patient self-care efforts, systemic support for the health care professional and patient relationship and a chronic care plan emphasizing prevention of complications utilizing evidence-based practice guidelines, patient empowerment strategies and evaluation of clinical, humanistic and economic outcomes on an ongoing basis with the goal of improving overall health." Managing a chronic disease can be complex and overwhelming for most individuals. The goal of chronic disease management is to increase a patient's ability to manage their chronic disease, increase a person's quality of life, and reduce health care use and costs.

The Chronic Care Model is the leading framework for improving care for chronic diseases and an excellent tool for improving care at both the individual and population level. The model encourages more productive interactions between the patient and their health care team. The Chronic Care Model identifies the essential elements of a health care system that encourage high-quality chronic disease care. These elements include:

- the community,
- the health system,
- self-management support,
- delivery system design,
- decision support, and
- clinical information systems.



Generally, the management of chronic conditions happens either through a clinic setting or through a self-management program or both. The Council intends to address all the elements of the Chronic Care Model in future issue briefs, but for the purpose of this issue brief, we will focus on the health system and self-management support. To learn more about the Chronic Care Model please visit http://www.improvingchroniccare.org/.

What is Chronic Disease Self-Management?

Due to the low-cost associated with administering chronic disease self-management programs and potential high return on investments, these programs are becoming more and more popular with many healthcare stakeholders and policymakers. The goal of a chronic disease self-management program is to enable the participant to build self-confidence to assume a major role maintaining their health and managing their chronic health conditions. The initial evaluations of these programs have shown promising cost savings and improvement in health status. The most widely used community-based self management program was designed and implemented by Stanford's School of Medicine. This program is conducted for two half-hour sessions twice a week for six weeks with participants who have various chronic diseases. The community-based sessions are facilitated by two trained lay leaders who also live with a chronic disease themselves.

"Good health requires a joint philosophy between personal responsibility and a societal commitment to remove the obstacles preventing too many Americans from leading healthy lives."
- Robert Wood Johnson Foundation

Outcome: Participants in this type of self-management program show significant improvement in health and behavior changes. Cost savings are also significant. Every dollar invested in such program can cut health care costs by approximately four dollars. These improvements are shown to last as long as 3 years.[8] [See page 6 for Iowa's Healthy Links program.]

Chronic Care Health Team

Health care providers that implement the Chronic Care Model take the role as the provider to a new level by implementing a chronic care health team. The model emphasizes that patients with chronic illness are themselves the principal caregiver. While many aspects of managing the illnesses – diet, exercise, self-measurement, and medication use are under the direct control of the patient, the provider has a team of professionals ready to offer support through monitoring of the illness, education, motivation and reinforcement. This may take the form of a clinic staff person calling once a week checking on a person with diabetes sugar levels to an on-site diabetes class addressing foot care. The chronic care health team is also an important aspect of the patient-centered medical home model.

The Chronic Care Model cannot properly be administered without a clinic registry. Health systems harness technology to provide clinicians with a list (registry) of patients with a given chronic disease. A registry provides the information necessary to monitor patient health status and reduce complications. It is the intention of the council to devote an issue brief on the use of chronic disease registries.

Chronic Care Model Efforts in Iowa

➢ Clinical example- Mercy

The Mercy Clinics had incorporated portions of the clinical information component of the Chronic Care Model as early as 1998, but adopted the entire model in 2002. "We are operating this model in four of our clinics, beginning with a focus on diabetic patients, and then expanding to those with hypertension," explains David Swieskowski, M.D., Vice President of Quality Improvement. "Each of our clinics is responsible for creating its own populated data base, and the work flow in caring for those patients is a little different in each setting."Within each setting, there are clinic-tailored processes that relate to all six elements, such as decision support (standing orders and best practice guidelines), self-management support (as practiced through the 5 –A's of assess, assist, arrange, advise, agree), and making local community resources available to patients and families. Dr. Swieskowski, in his administrative role, sends system level monthly reports to his physicians to provide feedback on pre-established clinical indicators. "It is important that our health care team knows how they are doing in terms of moving the indicators in positive directions, and how their office practice compares to their peers," states Dr. Swieskowski. As an added incentive, these clinics are part of a "Pay for Performance" pilot project of Wellmark Blue Cross Blue Shield. "We will be incented by Wellmark to keep our patient's HbA1c. Dr. Swieskowski also values using a team-based approach to supporting patient care. Each health professional, be it a nurse, dietitian, or other, has a skill set and keeps up their knowledge according to their specialty. This takes pressure off the physician to be "up to date" with best practices in all areas. For more information visit http://www.mercydesmoines.org/.

➢ The Pre-Medicare Health & Wellness Program for Rural Iowans

The Center for Disease Control recently supported a population health improvement program for rural Iowans. Pre-Medicare Health and Wellness Program for Rural Iowans will formally kick-off on January 12, 2010. Individuals between the ages of 48-63 who live outside of major metropolitan areas are included. The program purpose is to manage health risk and stabilize health status during the period of life prior to Medicare enrollment.

Initially, over 23,000 members and an additional 15,000 spouses are in the initial eligibility pool. This pool will be reduced to those having high-speed Internet access; earlier survey work in the Iowa rural population indicates that such access may be present in about 20% of rural households. The target participation is 500 individuals from across the state.

The program was unveiled at Farm Bureau's annual meeting in December 2009 through a communication in members' registration packets. At that time, Farm Bureau and Iowa Chronic Care Consortium staff also met with county office assistants to brief them on the program and ask for feedback as the program is implemented.

The program was developed by ICCC and will be delivered through US Preventive Medicine, a company that uses health risk assessments as the foundation for an online portal that contains health information, health programming, activity trackers, and a repository for personal health data. This information will be supplemented by health coaching provided by nurse advocates at US Preventive Medicine.

The program is funded for a three-year period, with health risk assessments, labs and biometrics performed initially, at 12 months, at 24 months and at 36 months. Evaluation will focus on assessing health status of this population, engagement strategies – both telephonic and online, and attitudes toward self-efficacy about health. Comparisons of programming and engagement between this population and the more typical employer population will be evaluated.

For more information visit www.iowaccc.com.

➢ The Iowa Diabetes Prevention and Control Program

A statewide population health program to evaluate the effectiveness of telehealth strategies to improve the health of rural Iowans with diabetes, served by the Iowa Medicaid Program began in September of 2009. This pilot project was funded through HRSA, the Iowa Chronic Care Consortium, and Iowa Medicaid Enterprise. It will continue, at a minimum, through 2011.

This project will enroll 250 persons with high risk diabetes (high cost healthcare utilizers) who live in rural counties in Iowa and are members in the Iowa Medicaid Program. The enrollees will participate in a daily telehealth survey utilizing an interactive voice response system, to easily identify early health concerns. It is anticipated that this project will focus heavily on self-management support and patient education, although the care coordinators will also refer patients to physicians as appropriate. Participants will be encouraged to enroll in community-based chronic disease self-management support programs and will be referred to state-certified diabetes education programs as needed. Currently, the utilization of these education/support programs by Medicaid members is low at about 5%.

The project leadership includes the Iowa Chronic Care Consortium and Iowa Medicaid Enterprise along with key partners including: Iowa Medicaid Enterprise; Iowa /Nebraska Primary Care Association and Community Health Centers; Pharos Innovations; LLC Iowa Department of Public Health (Iowa Diabetes Program); Iowa Department on Aging (Chronic Disease Self-Management Support Program); Magellan Behavioral Care; and, Des Moines University (Evaluation partner).

Outcomes focusing upon patient cost, clinical outcomes, program satisfaction, quality of life and behavioral health will be evaluated. A matched cohort population will be employed to test efficacy of the program interventions.

For more information visit www.iowaccc.com.

➢ Healthy Links Chronic Disease Self-Management Program

The Iowa Healthy Links Chronic Disease Self-Management Program is a workshop given two and a half hours, once a week, for six weeks, in a community setting, such as senior centers, churches, libraries and hospitals. Workshops are conducted by two trained leaders, one or both of whom have health conditions themselves or have a family member that does. Participants learn:

- Techniques to deal with isolation, frustration, fatigue, pain
- Suitable exercises for maintaining and improving strength, flexibility, and endurance
- Appropriate use of medications
- How to communicate your feelings effectively with family, friends, and health professionals
- Healthy eating and nutrition tips
- How to evaluate new treatments

The program, administered by the Iowa Department of Aging and funded by grants from Administration on Aging, the National Council on Aging/Atlantic Philanthropies, Iowa Department of Public Health, and The Wellmark Foundation, gives them the skills to help coordinate and manage their chronic condition, as well as to help them keep active in their lives. For more information visit http://www.iowahealthylinks.org/

The PCCM Advisory Council is excited to share this information with Iowa's policymakers in hope that the Council can assist in moving Iowa to become part of a proactive healthcare system instead of a reactive system. This is the first brief in a series that the Council will develop on PCCM issues in Iowa. To find out more about the Council or about upcoming meetings, please visit their website here or contact the Council's coordinator, Angie Doyle-Scar at adoyle@idph.state.ia.us.

Prevention and Chronic Care Management Advisory Council Members

Name	City	Position
Jose Aguilar, MD	Des Moines	Iowa Nebraska Primary Care Association
Bill Appelgate, PhD	Des Moines	Iowa Chronic Care Consortium
Mary Audia, DC	Coralville	Iowa Chiropractic Association
Krista Barnes, PA-C	Des Moines	Iowa Physician Assistant Association
Steve Flood	Des Moines	Holmes Murphy and Associates
Trula Foughty, RN	Des Moines	Iowa Healthcare Collaborative
Della Guzman	Des Moines	Iowa Health System
Terri Henkels	Des Moines	Iowa State Association of Counties
Melanie Hicklin, ARNP	West Des Moines	Iowa Nurses Association
Tom Kline, DO	Des Moines	Iowa Medicaid Medical Director
Karen Loihl	Des Moines	Iowa Psychiatric Society
Noreen O'Shea, DO	Elk Point	Iowa Academy of Family Physicians
Patty Quinlisk, MD	Des Moines	State Government
Peter Reiter, MD, FACP	Ottumwa	Internal Medicine
Rev. Dr. Mary E. Robinson	Waterloo	Consumer
Suzan Simmons, PhD	Des Moines	Iowa Psychological Association
Donald Skinner, MD	Carroll	McFarland Clinic
Steve Stephenson, MD	Des Moines	Blank Children's Hospital
Jacqueline Stoken, DO	West Des Moines	Iowa Osteopathic Medical Association
John Swegle, PharmD, BCPS	Mason City	Iowa Pharmacy Association
David Swieskowski, MD	Des Moines	Iowa Medical Society
Debra Waldron, MD, MPH	Iowa City	Iowa Department of Public Health Representative
Jenny Weber	West Des Moines	Wellness Council of Iowa

References

1. http://coolice.legis.state.ia.us/Cool-ICE/default.asp?Category=billinfo&Service=Billbook&menu=false&ga=82&hbill=HF2539 retrieved November 2009.
2. Healthy Iowans. Iowa Chronic Disease Report. 2009. Available at http://www.idph.state.ia.us/apl/common/pdf/health_statistics/chronic_disease_report.pdf
3. Behavior Risk Factor Surveillance System (BRFSS). Health in Iowa 2007 Annual Report. http://www.idph.state.ia.us/brfss/common/pdf/2007BRFSSannual.pdf
4. Partnership to Fight Chronic Diseases. The Growing Crisis of Chronic Diseases in Iowa. Available at http://www.fightchronicdisease.org/pdfs/PFCD_IowaFacts.pdf
5. The Henry J. Kaiser Family Foundation. Iowa State Health Facts. http://www.statehealthfacts.kff.org/profileind.jsp?ind=51&cat=2&rgn=17
6. Centers for Disease Control and Prevention. 2009. Chronic Disease Overview. http://www.cdc.gov/NCCdphp/overview.htm
7. Partnership to Fight Chronic Diseases. 2009 Almanac of Chronic Disease: Impact of Chronic Disease on U.S. Health and Prosperity: A Collection of Statistics and Commentary. Available at http://www.fightchronicdisease.org/pdfs/2009_PFCDAlmanac.pdf
8. Stanford School of Medicine Website. Self-Management Programs. http://patienteducation.stanford.edu/programs.