



WYOMING *diabetes quarterly*

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for treating diabetes

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University of Wyoming Community Nutrition Class

Eagle Books and Laramie Public Library

The Wyoming Diabetes Prevention and Control Program (WyDPCP) teamed with a student from Dr. Enette Larson-Meyer's community nutrition class at the University of Wyoming to complete a project with the Eagle Books at the Albany County Public Library in Laramie. Julia Knox, UW student, selected the WyDPCP for her fall project for the class.



animated videos, display poster files, and lesson plan ideas.

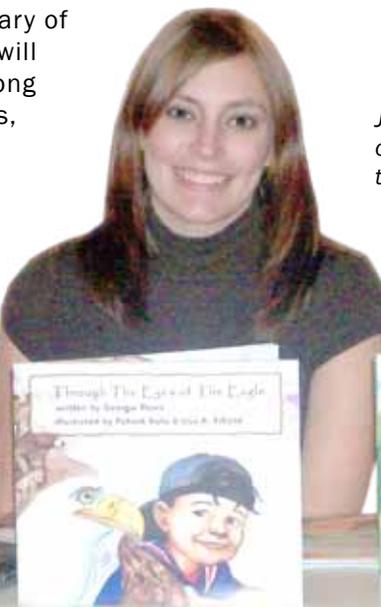
The Eagle books introduce the characters of Mr. Eagle and Rain that Dances, the American

Indian boy he befriends. Mr. Eagle reminds the young boy of the healthy ways of his ancestors. Other books in the series promote physical activity and healthy eating, along with the concept of not being tricked into eating unhealthy foods.

Using the recently completed Eagle Books from the Centers for Disease Control and Prevention (CDC) and Indian Health Service (IHS), Julia worked with the library to host a children's story hour about the Eagle Books. The efforts with the library in Laramie served as a pilot project for the entire state. In January of 2010, all Wyoming public libraries will receive a packet of Eagle Books along with a CD containing coloring books,

A single set of the four Eagle books can be ordered at no charge from the CDC. Visit their website at: <http://wwwn.cdc.gov/pubs/diabetes.aspx>. If you would like a CD of the animated videos, coloring books and other resources, contact Betty Holmes at betty.holmes@health.wyo.gov or (307) 777-6011.

Julia Knox, UW student, works on promotional materials for the Eagle Books.



The Burden of Diabetes in Wyoming

Updated document released in 2010



This report is intended to capture the burden diabetes imposes on Wyoming and its residents. It is now available for download from www.health.wyo.gov/phsd/diabetes. The causes, risk factors, complications, and impact the disease places on our healthcare system are outlined. This report also summarizes steps the Wyoming Diabetes Prevention and Control Program is doing to reduce the burden of diabetes in Wyoming.

Here are a few main points from the report:

- More than 7% of Wyoming's adult population has diabetes, which translates to approximately 29,000 - 30,000 individuals.
- The prevalence of diabetes in Wyoming adults has been increasing over the years; from 3% in 1997 to 7.4% in 2008.
- In 2007, diabetes was the 6th leading cause of death in Wyoming, accounting for the deaths of 130 residents.
- From July 2006 through June 2007, 50 lower-extremity amputations were diabetes related.
- During this same time frame, there were 615 hospitalizations in Wyoming where diabetes was the primary diagnosis at a cost of \$7.5 million.
- As of 2006, there were 103 Wyoming citizens on dialysis due directly to diabetes.
- Wyoming's small population and lack of diabetes-related specialists present problems in treating individuals with diabetes. Wyoming is the least populated state in the United States with approximately 532,668 residents.

- Wyoming's population of people age 65 and over is estimated to increase by 113% by the year 2020. As increased age is a significant risk factor for the development of diabetes, the state's aging population will most certainly increase the burden of diabetes in Wyoming.
- Wyoming has a difficult time recruiting and retaining physicians in diabetes-related specialties. As of 2009, there were only 14 endocrinologists, 29 cardiologists and 28 podiatrists licensed in the state.

The Wyoming Diabetes Prevention and Control Program (WyDPCP) is committed to reducing the burden of diabetes in Wyoming through education, interventions, and quality care improvement. The WyDPCP works closely with hospitals, clinics, communities, and counties to develop effective interventions to educate people about diabetes and the steps they can take to reduce their personal risk. WyDPCP provides the Diabetes Quality Care Monitoring System (DQCMS) software and technical support to 32 clinics and diabetes education sites in the state. DQCMS allows physicians and diabetes educators to monitor the care received by their patients/clients with diabetes. WyDPCP also works to educate health-care providers across the state about quality diabetes care and the importance of helping patients effectively manage their diabetes.

Printed copies of the report will be mailed to Wyoming diabetes providers and educators in January 2010, so being looking for a hard copy of the report in your mailbox.

News Briefs



Research on the horizon: tattoos that detect glucose levels

Scientists are testing a tattoo that changes color with rising blood sugar levels. The high-tech tattoo, which is less than a quarter of an inch in diameter, is made up of tiny spheres that are injected into the outermost layer of skin. These nanospheres contain a special kind of ink that reacts with glucose. Heather Clark, a biomedical engineer at Draper Laboratory in Cambridge, Massachusetts, is the inventor of the glucose tattoo. When blood sugar levels rise, glucose levels increase everywhere in the body, including the outermost layer of the skin. Each tattoo sensor is made up of millions of tiny rubbery beads that can be injected into the skin like the dye that makes up a regular tattoo. The tiny beads are infused with two substances. One is a molecule that can pull glucose into the sphere and bind to it. The other is a special fluorescent dye. When no sugar is present, the two molecules bind to each other and turn the sphere yellow. When sugar levels rise in the skin, molecules with glucose attached alter the dye and the sphere turns purple. In mouse experiments, the tattoo color has tracked well with blood samples.

Source: <http://www.msnbc.msn.com/id/33831728/ns/health-diabetes/>

Longevity in the U.S.: A new perspective

A prominent health care researcher, Samuel H. Preston, finds no evidence that America's health care system is to blame for the longevity gap between the U.S. and other industrialized

countries. He concludes the American health care system, in some ways, provides superior treatment; arguing the U.S. system does a good job of identifying and treating major diseases. No one denies that the American system has problems, including high costs and unnecessary treatments. But there are many differences between other industrialized countries and the United States than just the health care system, including a more diverse population in the U.S. Perhaps most important, Americans used to be exceptionally heavy smokers. For four decades, until the mid-1980s, per-capita cigarette consumption was higher in the United States than anywhere else in the developed world. Dr. Preston calculated that if deaths due to smoking were excluded, the United States would rise to the top half of the longevity rankings for developed countries.

For all its faults, the American system compares well by some important measures with other developed countries. Americans are more likely to be screened for cancer, and once cancer is detected, they are more likely to survive for five years. Americans also do relatively well in surviving heart attacks and strokes, and some studies have found that high blood pressure is treated more successfully in the United States.

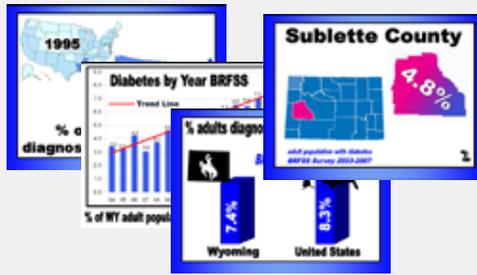
Dr. Preston points out the U.S. had one of the most successful preventive health efforts in the world with the largest drop in cigarette consumption per adult. If Americans keep shunning tobacco, Dr. Preston predicts the longevity gap with other developed countries could shrink no matter what happens with the health care system.

Source: John Tierney, *New York Times*, September 22, 2009



Bulletin Board: Wyoming Diabetes Updates

Diabetes Trends: Wyoming and U.S.



The PowerPoint slide program for diabetes trends in Wyoming and the U.S. was recently updated and can be downloaded from the WyDPCP website at: www.health.wyo.gov/phsd/diabetes. Thanks to a suggestion from Kathy McGuire, public health nursing in Wheatland, the slide program now includes a script for each slide.

Wyoming Diabetes

Prevention and Control Program

Annual Conference 2010



The annual conference this year will be a joint conference with several other programs housed within the Wyoming Department of Health. The

conference will be held on May 5-6, 2010 at the Little America Resort and Hotel Convention Center in Cheyenne, Wyoming.

The conference will focus on addressing risk factors associated with chronic diseases. Mark your calendar for the first week of May.



Dian True receives regional award

The Centers for Medicare & Medicaid Services' (CMS) Denver Regional Office selected Dian True, RN, CDE as one of the 2009 recipients of the Francis T. Ishida Award for Customer Service. Congratulations Dian.



Looking for new diabetes resources? Check out this website of the "Diabetes Initiative." Resources come from a national program hosted by the Robert Wood Johnson Foundation.



<http://www.diabetesinitiative.org/index.html>



The Healing of America

book by T.R. Reid



Dr. Eric Wedell, retired endocrinologist from Cheyenne, recently gave a presentation on the U.S. health care system to the Wyoming Diabetes Advisory Council. Dr. Wedell highlighted points from the book by T.R. Reid, former reporter for the *Washington Post*. His recently published book is entitled, *The Healing of America: A Global Quest for Better, Cheaper, and Fairer Health Care*. The author believes an invaluable source of solutions for the U.S. health care system could come from other industrialized democracies around the world. In fact, Reid argues the current crazy-quilt health care system in the U.S. already uses elements from foreign health care models. For Native Americans or veterans, the system is similar to Britain where the government provides health care and the patients get no bills because the program is funded through general taxes. For people who get insurance through their employment, the system is similar to Germany, where premiums are split between workers and employers and private insurance plans pay private doctors and hospitals. For people over 65, the system is similar to Canada where everyone pays premiums for an insurance plan ran by the government and private doctors and hospitals are paid according to a fee schedule. Finally, the millions of Americans without health insurance reflect the health care model of the world's poorest nations where sick people pay for their own medical care and those who can't afford the bills stay sick or die.

Here are a few points from the book:

- ▶ Many Americans think most other countries offer only socialized medicine. Not so, says Reid, who has traveled extensively throughout the world to study health care systems. Many wealthy countries, including Germany, the Netherlands, Japan and Switzerland provide universal coverage using private doctors, private hospitals

and private insurance companies.

- ▶ Another myth is that most health care in other countries represents rationed care through limited choices and long lines. Reid acknowledges that some countries are plagued by these problems, but many nations including Germany, Britain and Austria outperform the United States on waiting times for appointments and elective surgeries. Waiting times in Japan are so short that most patients don't bother to make an appointment.
- ▶ Currently, U.S. health insurance companies have the highest administrative costs in the world, with about 20 cents of every dollar going for nonmedical costs like paperwork, reviewing claims, and marketing.
- ▶ American health insurance companies routinely reject applicants for pre-existing conditions. If a current customer is facing large medical bills, a special department at the insurance company looks for ways to cancel the policy. Insurance companies justify these actions by claiming it is the only way they can compete in a tough business. By contrast, most foreign insurance companies must accept all applicants and by law, they can not cancel a customer as long as they continue to pay the premiums. The system works because everyone is mandated to buy insurance, which gives an insurance plan an adequate pool of payers.

Why is health care so expensive in the United States? Reid argues that one key reason is that the United States in the only developed country that lets insurance companies profit from basic health insurance. Foreign health insurance plans exist only to pay people's medical bills, not to make a profit. Another reason for U.S. high costs comes from the current fragmented health care system. All other developed countries have settled on a single model. The U.S. has blended several models into a costly, confusing bureaucratic mess that still leaves millions without coverage.



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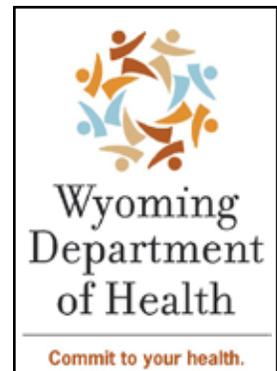
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