Chronic Disease Prevention Today
...a state perspective

Paula F. Clayton, MS, RD, LD
Director, Bureau of Health Promotion, Kansas
Board of Directors, National Association of Chronic Disease Directors
September 18, 2013
Chronic Disease Prevention Has Been in Spotlight in the Health Care Debate

- In recent years, the issue of *prevention* has becoming an increasing focus in the health care conversation.

- TIME published five separate cover stories on health and wellness issues, including a special issue, “It’s All About Prevention”

- Americans ranked prevention as the most important health care reform priority under consideration by Congress
Mission:

The National Association of Chronic Disease Directors improves the health of the public by strengthening state-based leadership and expertise for chronic disease prevention and control in states and at the national level.
Chronic Disease Rates are Staggering in the United States

Current Toll on The United States TODAY

Over 162 million cases of seven common chronic diseases — cancers, diabetes, heart disease, hypertension, stroke, mental disorders, and pulmonary conditions — were reported in The United States in 2003. These conditions shorten lives, reduce quality of life, and create considerable burden for caregivers. The following map shows how states compare based on the prevalence of the seven common chronic diseases.

Reported Cases in The United States, 2003 (and as % of population*)

<table>
<thead>
<tr>
<th>Condition</th>
<th>Cases</th>
<th>% of Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cancers</td>
<td>10,555,000</td>
<td>(3.7%)</td>
</tr>
<tr>
<td>Diabetes</td>
<td>13,729,000</td>
<td>(4.9%)</td>
</tr>
<tr>
<td>Heart Disease</td>
<td>19,145,000</td>
<td>(6.8%)</td>
</tr>
<tr>
<td>Hypertension</td>
<td>36,761,000</td>
<td>(13.0%)</td>
</tr>
<tr>
<td>Stroke</td>
<td>2,425,000</td>
<td>(0.9%)</td>
</tr>
<tr>
<td>Mental Disorders</td>
<td>30,338,000</td>
<td>(10.7%)</td>
</tr>
<tr>
<td>Pulmonary Conditions</td>
<td>49,206,000</td>
<td>(17.4%)</td>
</tr>
</tbody>
</table>

* As % of non-institutionized population. Number of treated cases based on patient self-reported data from 2003 MEPS. Excludes untreated and undiagnosed cases.

Milken Institute State Chronic Disease Index
States in the top quartile have the lowest rates of seven common chronic diseases.
Chronic disease is #1 cause of death & disability in the U.S.

162 million Americans, representing over 45% of the total population, have at least one chronic disease.

Chronic diseases kill more than 1.7 million Americans per year, and are responsible for 7 of 10 deaths in the U.S.
26 million with Diabetes

79 million with Prediabetes

- 1 in 10 U.S. adults have diabetes now
- 1 in 3 will have diabetes by 2050 if unchecked.
The doubling of obesity between 1987 and today accounts for nearly 30% of the rise in health care spending.

The percent of children and youth who are overweight has tripled since 1980.

If the prevalence of obesity was the same today as 1987, health care spending in the US would be 10 percent lower per person—about $200 billion less.

*BMI ≥30, or ~ 30 lbs overweight for 5’4” person
Chronic diseases place a Significant Burden on our Economy

- Direct costs = Health care costs associated with treatment of chronic disease
- Indirect costs = Productivity losses such as absenteeism and presenteeism associated with people with chronic diseases

*This study evaluated the burden of seven of the most common chronic diseases/conditions (cancer, diabetes, heart disease, hypertension, mental disorders, pulmonary conditions, and stroke.

Health spending related to chronic diseases is dwarfed by the indirect costs of these health problems.

- Chronic conditions accounted for $1 trillion in lost productivity in 2006.

The most costly chronic diseases are also among the most common.

- Cancer and hypertension are among the most costly chronic conditions, accounting for over $500 billion annually in treatment expenditures and lost economic output.
Costs Related to Chronic Disease

Of every dollar spent…

…the dollar is spent treating patients with chronic disease

“The United States cannot effectively address escalating health care costs without addressing the problem of chronic diseases.”

-- Centers for Disease Control and Prevention

- Expenses for people with 1 chronic condition are twice as great as for those with no chronic condition, and spending for people with 5+ chronic conditions are 14 times higher.
The vast majority of cases of chronic disease could be better prevented or managed

- The World Health Organization (WHO) estimates that...
  - At least 80% of all heart disease, stroke, and type 2 diabetes, and
  - More than 40% of cancer

would be prevented if only Americans were to do three things:

- Stop smoking
- Start eating healthy
- Get in shape
The U.S. spends little on prevention, despite behavioral & environmental factors that account for 70% of deaths.
Impact of Chronic Disease

1. Diabetes
2. Coronary Artery Disease
3. Hypertension
4. Back Pain
5. Obesity
6. Cancer
7. Asthma
8. Arthritis

8 risks and behaviors

1. Excessive Alcohol Consumption
2. Insufficient Sleep
3. Poor Standard-of-Care
4. Poor Stress Management
5. Smoking
6. Lack of Health Screening
7. Physical Inactivity
8. Poor Diet

Drive 15 chronic conditions

9. Allergies
10. Sinusitis
11. Depression
12. Congestive Heart Failure
13. Lung Disease (COPD)
14. Kidney Disease
15. High Cholesterol

Accounting for 80% of total costs for all chronic illnesses worldwide

Source: 2010 World Economic Forum
We Know What Works

- Stabilize health of individual to avoid hospitalizations and emergency department visits
- Integrate mental and physical health services
- Address costs in long-term care beneficiaries with programs that prevent or delay long-term care, integrate long-term and regular care, and provide low-cost community based options
- Manage transitions between care providers and physicians
System Changes at multiple levels

- Environmental changes to support healthy lifestyles
- Facilitate public-private, state-federal collaboration
- Celebrate and share best practices; facilitate replication
- Support health information technology infrastructure
We Know What Works

People walk to get to places they want to go when places are nearby.

% of Trips to Shops by Walking
- Within 1 mile - 40%
- Within 3-4 miles - 1%

% of Trips to Work by Walking
- Within 1 mile - 35%
- Within 3-4 miles - 1%

% of Trips to School or Church by Walking
- Within 1 mile - 46%
- Within 3-4 miles - 1%

% of Trips for Social or Recreational Fun by Walking
- Within 1 mile - 60%
- Within 3-4 miles - 5%

Source: 2013 CDC
Governor’s council on Fitness

- To encourage increased physical activity, healthy diets and tobacco use prevention by sharing information with Kansans and partnering with businesses, schools and individuals to promote healthy lifestyles.

- Kansas Kids Fitness Day
- Health Champion Awards
- State Obesity Summit
- Get Active Kansas!
GET Active Kansas! Aim statement

- Increase Kansas residents who meet physical activity recommendation guidelines to 35%. By 2014, 105 physical activity champions will be connected in the 105 counties and 4 tribes to help promote physical activity within their local communities. Physical activity champions will foster and encourage physical activity within their community and provide leadership to increase physical activity levels in Kansans across the state.
Potential activities

- Physical Activity Champions will:
  - Promote Get Active Kansas! as a part of the Governor’s Move Across Kansas initiative
  - Facilitate development of new connections and partnerships at the local level
  - Involve Mayors and other local elected leaders (e.g. Kansas Moves competition);
  - Serve as a local physical activity spokesperson and as a liaison to the Governor’s Council on Fitness
  - Serve as a source of local data and information
Current Smoking Prevalence Among Kansas Adults and Kansas High School Students - YTS, YRBS & BRFSS, 2000-2011

- High School smoking prevalence*
- Adult smoking prevalence

State cigarette tax increases $0.46
State cigarette tax increases $0.09
KS Indoor Clean Air Act

Survey Year


*High school smoking prevalence plotted using combination of Kansas Youth Risk Behavior and Youth Tobacco Surveys

Source: High school smoking prevalence – Youth Tobacco Survey (KDHE) and Youth Risk Behavior Survey (KSDE)
Adult smoking prevalence – Behavioral Risk Factor Surveillance System (KDHE)
Success: Increased Quitline Usage

KanQuit!
1-800-QUIT-NOW (784-8669)
www.QuitNow.net/Kansas

The average smoker spends about $150 a month on cigarettes. That's almost $2,000 a year!

If you're tired of paying the price of smoking, Kansas Tobacco Quitline counselors are ready to help you quit. A counselor will work with you during one-on-one phone calls to create your plan to quit, help you find strategies that work to combat cravings and keep you on track to becoming tobacco free. Call 1-800-QUIT-NOW.

“I HAD ALL THE REASONS TO QUIT, I JUST NEEDED A PLAN.”

A Kansas Tobacco Quitline counselor will work with you during one-on-one phone calls to create your plan to quit. We'll help you find strategies that work to combat cravings and keep you on track to becoming tobacco free. Call 1-800-QUIT-NOW.
Number of Phone and Web-Only Kansas Tobacco Quitline Registrations by Tobacco Users, January 2010 - April 2013

Registrations by Tobacco Users

Source: Quitline Experience Extract, Alere Wellbeing

Source: Behavioral Risk Factor Surveillance System (KDHE).
Note: 2011 BRFSS data are not comparable with previous years.
What We Know Works

Source: 2013 CDC
2004 – Program launched by Kansas Department of Health and Environment’s (KDHE) Diabetes Prevention and Control Program (DPCP)

2007 – DPCP collaborated with Heart Disease and Stroke Prevention Program (HDSP)
Implementing the PDSA cycles

• The KQOC project provides tools for improving chronic illness care by providing training and guidance to participants on Quality Improvement efforts through the Plan-Do-Study-Act (PDSA) cycle.
Collection of Patient and Clinic Level Data

Electronic Health Record (EHR)
- Electronic records containing patient health information
- Collected at the clinic level
- KDHE uses EHRs for reporting and QA

Chronic Disease Electronic Management System (CDEMS)
- Database to track patient care and outcomes
- Collected at clinic level through a lab interface add-on
Mapping to EHR’s

• Links EHR systems from all KQOC participating clinics.

• Guides QI team decision making for quality of care improvements.

• Supports robust evaluation designs to assess impact both narrowly and across domains.

• All information accessible in a single interface.
Thank you!

Paula Clayton, MS, RD, LD
Chronic Disease and Health Promotion Director
Kansas Department of Health and Environment
pclayton@kdheks.gov
785-296-8916