Jefferson
School of Population Health

Chronic Disease Prevention in Population Health

Kathryn M. Kash, PhD
Associate Professor
Jefferson School of Population Health

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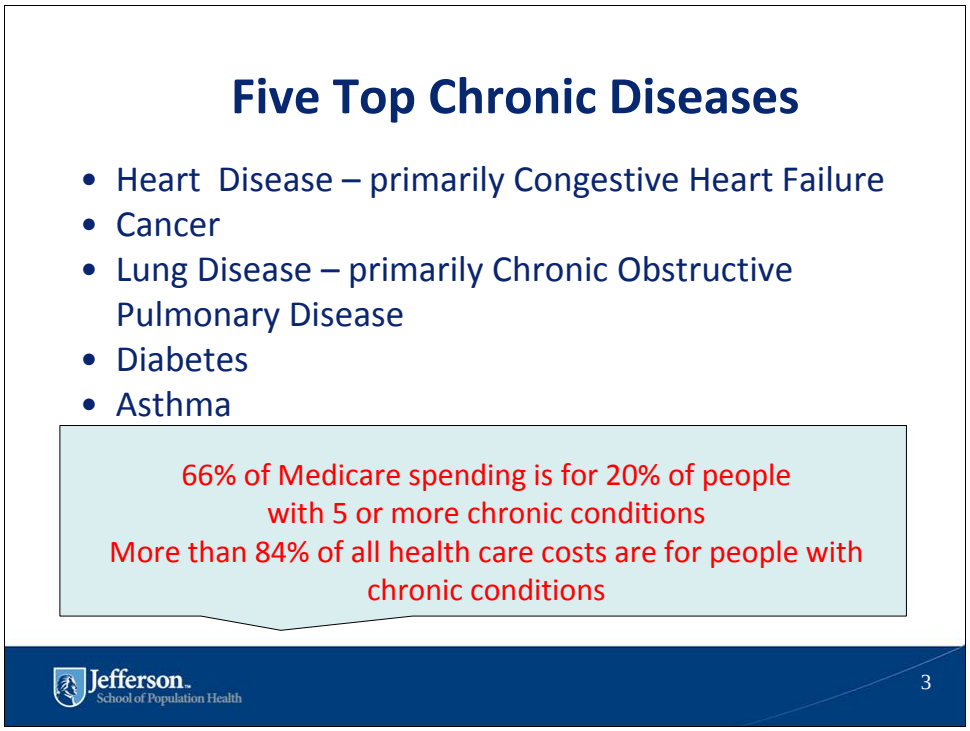
THOMAS JEFFERSON UNIVERSITY

Overview

- Burden of chronic disease
- Role of Expanded Chronic Care Model in chronic disease prevention and health promotion
- Models for lifestyle behavior change
- Patient-Centered Medical Homes and Accountable Care Organizations
- What's Next?


Five Top Chronic Diseases
Heart Disease – primarily Congestive Heart Failure
Cancer
Lung Disease – primarily Chronic Obstructive Pulmonary Disease
Diabetes
Asthma
66% of Medicare spending is for 20% of people with 5 or more chronic conditions
More than 84% of all health care costs are for people with chronic conditions
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Prevalence

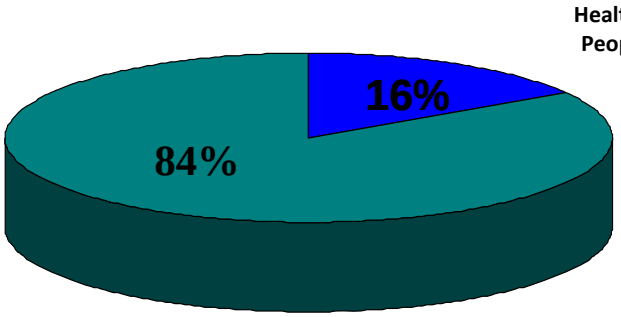
Burden of Chronic Disease - 1

- 7 out of 10 deaths among Americans each year are the result of chronic diseases
- Heart disease, cancer and stroke account for more than 50% of all deaths each year
- 133 million Americans (almost 1 out of every 2 adults) or 45% had at least one chronic illness
- Obesity affects 1 out of every 3 adults and 1 out 5 children (ages 6 - 19)

Burden of Chronic Disease - 2

- Approximately one-fourth of those with chronic diseases have one or more daily activity limitations
- Arthritis is the most common cause of disability (19 million report activity limitations)
- Diabetes is leading cause of kidney failure, non-traumatic lower-extremity amputations, and blindness among those ages 20-74
- Chronic disease is the greatest contributor to healthcare costs; accounts for 84% of spending

84% of ALL Health Spending is for People with Chronic Conditions



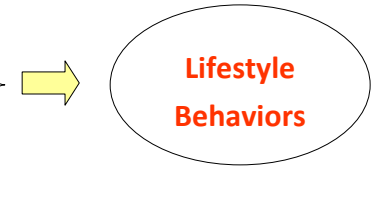
Health Care Spending for People without Chronic Conditions

Health Care Spending for People with Chronic Conditions

Source: Medical Expenditures Panel Survey (MEPS), 2006. Data pulled from "Chronic Conditions: Making the Case for Ongoing Care 2010". Presentation by Anderson G. PhD. Accessed from www.rwjf.org/pr/slide.jsp, on February 6, 2012.

Four Top Risk Factors for Chronic Diseases

- Unhealthy diet
- Lack of physical activity
- Excessive use of alcohol
- Tobacco use



Current Risk Reduction Recommendations

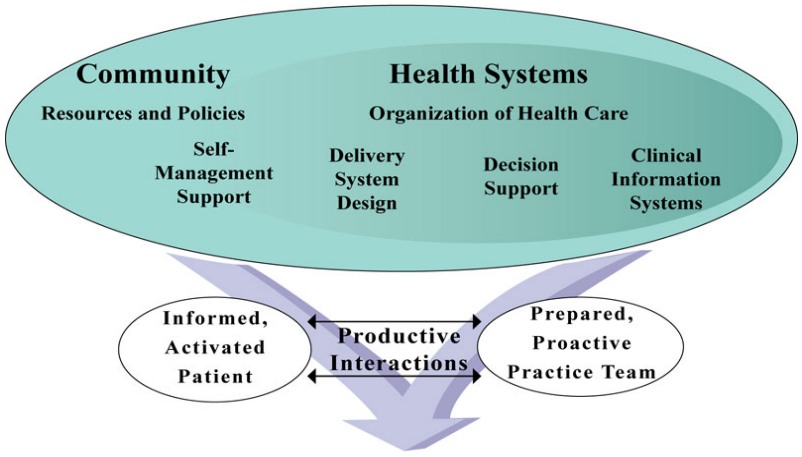
- Eat 5 or more servings of fruits and vegetables every day
- Intense aerobic physical activity for 30 minutes at least 3 times a week
- Moderate alcohol use for those over 21
- No tobacco use at all

Annual Cost of Tobacco in US

- Cigarette smoking results in 5.1 million years of potential life lost
- $96B in direct medical spending due to smokers
- $97B in lost productivity from our national workforce in preventable deaths

http://www.cdc.gov/tobacco/data_statistics/fact_sheets/economics/econ_facts/#costs Accessed on February 6, 2012

The Chronic Care Model



Improved Outcomes

Chronic Care Model (CCM)

- The CCM identifies 6 essential elements of a health care system that encourage high-quality chronic disease care:
  - Community Resources and Policies
  - Self-management support
  - Health system
  - Delivery system design
  - Decision support
  - Clinical information systems
- Evidence-based change concepts foster productive interactions between informed patients and providers with resources and expertise
- Implementation of the CCM in health care settings results in healthier patients, more satisfied providers and cost savings

AAFP Web site. http://www.aafp.org/online/en/home/practicemgt/quality/qitools/quality/chroniccare.html Accessed February 6, 2012.
AAFP Web site. http://www.improvingchroniccare.org/index.php?p=Model_Elements&s=18 Accessed February 6, 2012.

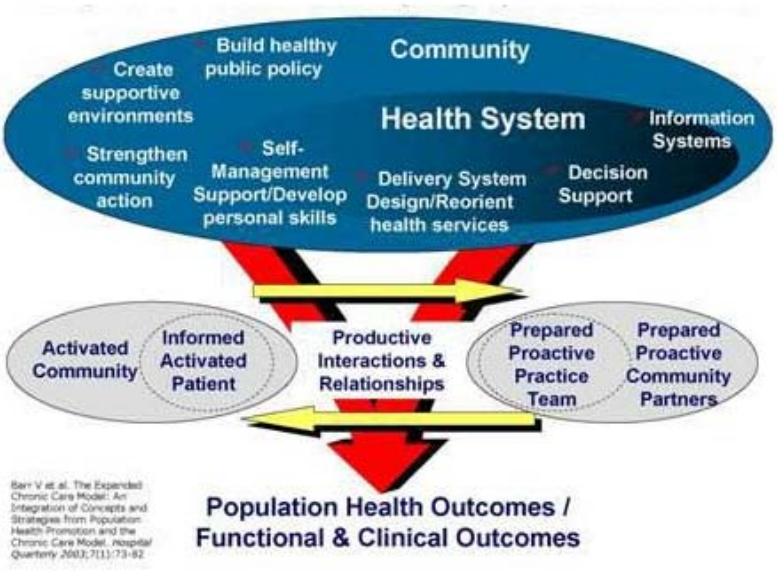
Pennsylvania Chronic Care Initiative

- The Chronic Care Commission - strategic plan for implementing the chronic care model in all primary care practices (170) across the Commonwealth.
- Involve strong collaboration by providers, payers, and professional organizations.
- Incorporates the PCMH standards as a validation tool that practices are transforming their care delivery to effectively manage chronically ill patients.
- Seven regional learning collaboratives underway across the Commonwealth.

http://www.pcpcc.net/content/pennsylvania-chronic-care-initiative Accessed on February 6, 2012.

Chronic Care Management in Primary Care

- Goal is function and comfort…not cure
- Healthcare provider role changes from principle caregiver to teacher and partner
- Need to go from a system that reacts to an acute illness to one that is proactive in preventing disease
- Old model is “Tell the patients what to do and it is up to them to follow my advice”
- New model is “What can I do to involve my patients in their care and empower them to manage their disease”
- Role of patient changes from passive to active participant


Community
Build healthy public policy
Create supportive environments
Health System
Information Systems
Strengthen community action
Self-Management Support/Develop personal skills
Delivery System Design/Reorient health services
Decision Support
Activated Community
Informed Activated Patient
Productive Interactions & Relationships
Prepared Proactive Practice Team
Prepared Proactive Community Partners
Barr V et al. The Expanded Chronic Care Model: An Integration of Concepts and Strategies from Population Health Promotion and the Chronic Care Model. Hospital Quarterly 2003;7(1):73-82
Population Health Outcomes / Functional & Clinical Outcomes

Chronic Disease Prevention

- Chronic care will be less costly and more effective if clinical prevention and management of chronic disease use similar strategies for improvement
- Expanded Chronic Care Model integrates population health promotion into prevention and management of chronic disease
- Support people & communities to be healthy; greater focus on:
  - Determinants of health
  - Delivering high quality healthcare services

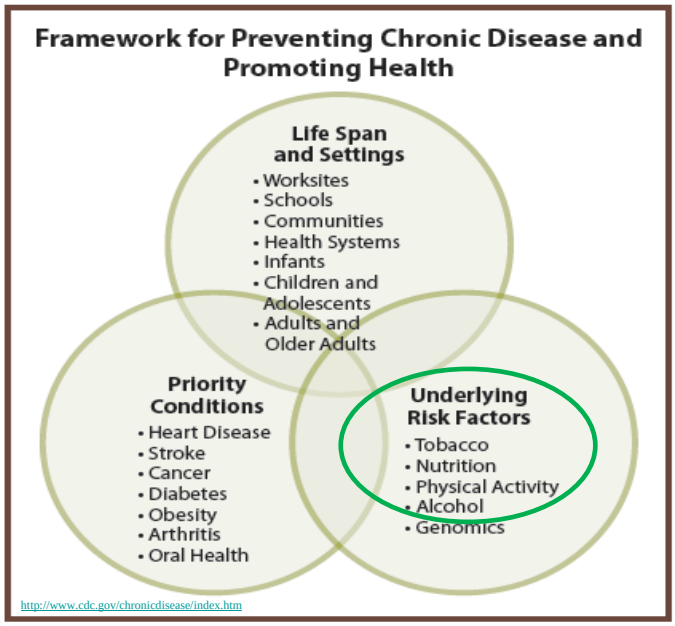
Levels of Prevention

Preventive medicine strategies are typically described as taking place at the primary, secondary, tertiary and quaternary prevention levels.

Level	Definition
Primary prevention	Primary prevention strategies intend to avoid the development of disease. Most population-based health promotion activities are primary preventive measures.
Secondary prevention	Secondary prevention strategies attempt to diagnose and treat an existing disease in its early stages before it results in significant morbidity
Tertiary prevention	These treatments aim to reduce the negative impact of established disease by restoring function and reducing disease-related complications.
Quaternary prevention	This term describes the set of health activities that mitigate or avoid the consequences of unnecessary or excessive interventions in the health system

Health Promotion

- Health Promotion is “the process of enabling people to increase control over their health and its determinants, and thereby improve their health”
- Promote healthy living, especially for the disadvantaged and minorities
- Focus on the top priorities in terms of chronic diseases
- Take into account cultural differences
- Enable active participation in communities


Framework for Preventing Chronic Disease and Promoting Health
Life Span and Settings
• Worksites
• Schools
• Communities
• Health Systems
• Infants
• Children and Adolescents
• Adults and Older Adults
Priority Conditions
• Heart Disease
• Stroke
• Cancer
• Diabetes
• Obesity
• Arthritis
• Oral Health
Underlying Risk Factors
• Tobacco
• Nutrition
• Physical Activity
• Alcohol
• Genomics
http://www.cdc.gov/chronicdisease/index.htm

Patient Self-Management

Self-management is defined as the task that individuals must undertake to live with one or more chronic conditions. These tasks include having the confidence to deal with medical management, role management and emotional management of their conditions.

Institute of Medicine 2004

Self-Management Support

- Engages patients in the active self-management of their disease
- Customizes care to engage patients in setting realistic goals that change their behavior
- When informed patients take an active role and providers are proactive, their interaction is likely to be productive
- Primary care physicians and other healthcare providers should explore every opportunity to engage patients in the provision of self-care
- Implement strategies to support behavior change

Models for Lifestyle Changes

- Kate Lorig's Model at Stanford University
- 5 A's – behavioral counseling
- Transtheoretical Model (TTM) – Stages of Change
- Motivational interviewing

Lorig's Model of Self-Management

- Built on structured patient and professional needs assessments
- Systematically use strategies to enhance self-efficacy in peer-led small groups of 8-10 participants
  - Skills Mastery
  - Modeling
  - Reinterpretation of symptoms
  - Social Persuasion
- Standardized: training for leaders and manual for participants
- Highly structured teaching protocol
- Several topics per session
- Evaluated in randomized trials for long term outcomes

Lorig KR et al. *Medical Care*. 2001;39:1217-1223 and Lorig KR et al. *Medical Care*. 2006;44:964-971.

5 A's of Behavioral Counseling

- **ASSESS** – ask about and assess behavioral health risks and factors that affect choice of behavior change goals and methods
- **ADVISE** – give clear, specific, well-timed, and personalized behavior change advice, including information about personal health harms and benefits
- **AGREE** – collaboratively select appropriate goals and methods based on the patient's interest and willingness to change behavior
- **ASSIST** – using self-help resources and/or counseling, help the patient to achieve goals by acquiring skills, confidence, and social and environmental supports for behavior change
- **ARRANGE** – schedule follow-up (in person or by telephone) to provide ongoing assistance and support and to adjust the plan as needed, including referral to more specialized intervention

Glasgow RE et al. *Joint Commission Jnl on Quality and Safety*. 2003;29:563-574.

TTM

- Categorizes people based on where they are in the process
- 6 stages of change, 10 processes of change and decisional balance (pros and cons of changing)
- ***Stages of change***
  - **Pre-contemplation** – no intention within the next 6 months
  - **Contemplation** – do intend to change in the next 6 months
  - **Preparation** – take action in the next month
  - **Action** – make specific overt modifications in past 6 months
  - **Maintenance** – working to prevent a relapse
  - **Termination** – no longer tempted
- Decisional balance –more pros; more likely change will occur

Zimmerman GL & Olsen CG *Am Fam Physician*. 2000;61:1409-1416.

Motivational Interviewing and Collaborative Care

- Defined as a "*client-centered, goal-oriented method for enhancing intrinsic motivation to change by exploring and resolving ambivalence*"
- Encourages patients to engage in self-management by
  - Expressing empathy
  - Supporting their autonomy
  - Differentiating where they are and where they'd like to be
  - Exploring their ambivalence and identifying their need for change
  - Supporting the belief that they can make the change
  - Providing assistance with developing a realistic and sustainable action plan
- Philosophy and principles of Motivational Interviewing should be integrated into everyday use with emphasis on involving the entire care team

Anderson B. *Am J Manag Care*. 2007;13(suppl):S103-S106.

Collaborative Care Givers Reinforce Patient Self-Management Skills

Issue	Traditional Patient Education	Patient Self-Management
Relationships	Professionals are expert; Patients are passive	Shared expertise with active patients; Patient expert in their experience of disease
Needs Assessment	Provider defines what patients need to know	Patient defined problems
Content	Disease management	Disease, role, and emotional management
Process	Prescribed behavior change; Provider solves problems; External motivation; Didactic presentations	Patient sets goals and learns problem-solving skills; Focus is on internal motivation and self-efficacy
Outcomes	Knowledge and behavior	Health status and appropriate utilization

Adapted from Bodenheimer T et al.. *J AMA*. 2002;288:2469-2475.

Patient Centered Medical Home (PCMH)

- The tenets of the PCMH are closely tied to that of the CCM
- Incorporates quality measures, patient self-management; lifestyle change theory; decision support, health information technology, and organization of the practice for efficiency.
- Physician led and includes all team members (nurses, medical assistants, social workers, receptionists, etc.)

Accountable Care Organizations (ACOs)

- Medicare Shared Savings Program – January 2012 – 32 organizations
- High quality services, highly productive system, with shared-savings program for primary care, specialists, and hospitals
- Accountable for a patient population to CMS
- Fragmented to coordinated system of care
- Who should run ACOs?

What's Next ?

- Critical information technology (EHRs, exchange data with other PCMHs or ACOs) for improvement in quality of healthcare delivery
- Primary prevention in communities
- Health Promotion/Wellness programs
- Involvement of consumers in development of health care delivery systems

SUMMARY

- Burden of chronic disease
- Role of Expanded Chronic Care Model in chronic disease prevention & health promotion
- Models for lifestyle behavior change
- PCMHs and ACOs
- What's Next?

Thank you for your attention!

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References

- http://www.cdc.gov/chronicdisease/index.htm
- http://www.hhs.gov/ash/initiatives/mcc/
- http://www.cdc.gov/chronicdisease/resources/publications/AAG/chronic.htm
- http://www.improvingchroniccare.org/index.php?p=The_Chronic_Care_Model&s=2