

## Chronic Disease and the Chronic Care Model

The Birmingham Academic Chronic  
Care Collaborative

### CHRONIC DISEASE

In the United States, chronic disease is:

1. The main cause of disability.
2. The principal reason for use of health services.
3. Responsible for approximately 70% of health care expenditures.

### The BURDEN of Chronic Disease

- Behavior changes (e.g. smoking cessation)
- Undulating symptoms, no cure
- Renegotiating social and work circumstances
- Drugs: Continuous medication use
- Emotional distress
- Need for the patient to interpret symptoms and participate in the treatment plan

### WHAT DO PATIENTS WANT?

1. Access to information concerning:
  - diagnosis and its implications
  - available treatments and their consequences
  - potential impact on patient's future
2. Continuity and coordination of care
3. Infrastructure improvements (scheduling, wait times, billing, prompt care).

### WHAT DO PATIENTS WANT? – Cont'd

4. Ways to cope with symptoms such as pain, fatigue and disability.
5. Ways to adjust to disease consequences (uncertainty, fear, depression, loss of independence, anger, loneliness, sleep disorders, memory loss, sexual dysfunction).

### Current State of Chronic Illness Care Training in the U.S.

MDs reported that training did not prepare them to:

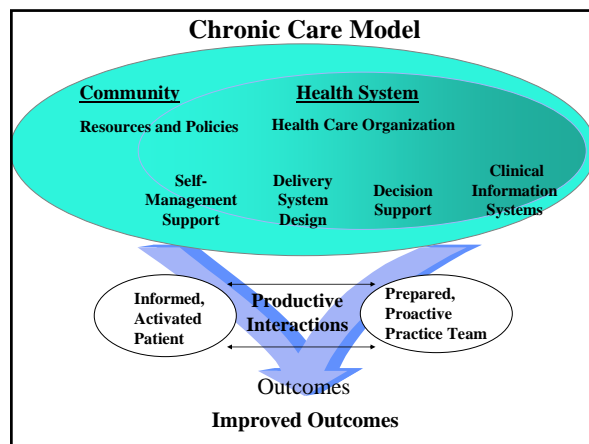
1. Educate patients with chronic conditions (66%).
2. Coordinate in-home/community services (66%).
3. Manage psychological and social aspects of chronic care (64%).
4. Assess caregiver and family needs (63%).
5. Develop teamwork with non-physician care providers (61%).

Acad Med. 2004 Jun;79(6):541-8

The American Academy of Medical Colleges  
Academic Chronic Care Collaborative

Initiative to:

- Improve the care of person with chronic conditions who receive their care in academic health systems
- Improve chronic illness education
- Address the 6 domains that influence chronic illness care



#### 6 Domains of Chronic Illness Care

Higher-quality disease management within primary care consisting of the following interrelated components:

- Self-management support
- Clinical information systems
- Delivery system redesign
- Decision support
- Health care organization
- Community resources

Bodenheimer T, Wagner EH, Grumbach K  
JAMA 2002; 288: 1775-1779

#### 6 Domains applied to COPD: **Self management support**

Patients are:

- Principal caregivers of their own condition
- In direct control of medications as long as able and capable
- Considering and engaging in behavior changes that improve their condition (e.g. smoking cessation)
- Knowledgeable of their medications/proper use of spacers, peak flow meters and nebulizers

#### 6 Domains applied to COPD: **Clinical Information Systems**

- Population management of COPD through establishment of a registry of all patients with COPD
- Registry serves as a method to generate reminders and care-planning tools for individual patient
- Registry provides feedback to providers on outcomes measures and adherence to clinical guidelines

#### 6 Domains applied to COPD: **Delivery System Redesign**

- Proactive review of care and planned visits
- Roles, duties, and tasks assigned for planned visits
- New methods of follow-up identified through outreach workers, telephone calls
- Appointment systems support the need of COPD patients for urgent visits, planned visits and health promotions (flu vaccinations)

6 Domains applied to COPD: **Decision support**

- Embed evidence-based clinical practice guidelines into health system processes to provide standards for optimal chronic care
- Adhere to flow sheets and pathways for COPD care
- Establish ready linkages with specialists
- Empower entire practice team
- Educate patients about guidelines

6 Domains applied to COPD: **Health care organization**

- Make improving chronic care a part of the organization's vision, mission goals
- Engage senior leaders
- Make chronic care a part of reimbursement business plans
- Purchasers and insurers to reward chronic care quality (pay for performance)

6 Domains applied to COPD: **Community resources**

- Linkages with community-based resources (exercise programs, senior centers, self-help groups)
- Participation in community education classes and support groups encouraged
- Lists of community resources available to patients, families, and staff

Timeline

- Decide on chronic disease focus- decided on COPD June-05
- Establish patient registries- complete August-05
- Address systems issues and education in chronic care model- ongoing
- Monitor clinical and educational outcomes- ongoing