

Impact of Life Extension on the Health Care System

Robert L, Kane, MD
Havana, Cuba
January 8, 2006

Theories of Life Extension

- Compression of morbidity
- Increased life expectancy with less morbidity
- Survival of the unfittest
- Compensatory risk

Compression of morbidity

- Prevention causes the reduction of morbidity
- People survive with no resulting illness
- Increase in disease free years

Increased life expectancy

- Increased life expectancy with postponed morbidity
- Same period of terminal disability

Survival of the unfittest

- Better care allows people to survive with disease
- Increase in numbers of diseased years

Competitive risk

- Elimination of disease means people are at risk of getting other diseases
- Fewer deaths
- Increase in chronic illness for those who survive

Most scenarios imply an increase in or maintenance of chronic disease

- Need to re-orient approach to care to address chronic disease
- More proactive primary care
- Cuba has the infrastructure to mount such a program

Principles of Chronic Disease Care

- Patient centered
- Time sensitive
- Information dependent
- Outcomes oriented
- Mythology

Chronic disease management

- The goal of chronic disease management is to prevent medical catastrophes
- Active involvement of patients in their own care
- Close monitoring of patient status to detect minor changes early
- Aggressive assessment and treatment to prevent serious problems

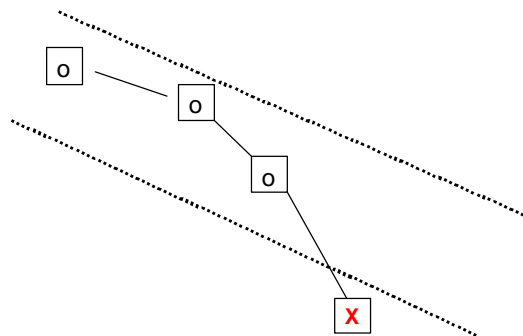
Clinical Glidepaths

- For each chronic problem, identify one or two salient parameters that reflect the patients status
 - Different patients may manifest their disease differently
- Develop a expected course for each problem
- Monitor the patient's status frequently
 - Patients can do most of the monitoring

Clinical Glidepaths 2

- Report significant deviations from the expected course
 - Establish rules for what represents a significant deviation
 - Teach patients what constitutes a significant change and train them to report changes at once
- Investigate deviations

Clinical Glidepath Example



Evaluating deviations

1. Confirm observation of a significant deviation
2. Determine if the patient has been following the treatment plan
3. Determine if there has been some change in the patient's situation
 - Diet
 - Infection
4. Perform a thorough assessment

Use of time in chronic disease care

- Replace routine follow up visits with immediate access when there is a deviation from the expected course
 - Routine care can be given less frequently and is used to re-enforce positive self-care
- Allow enough time for these visits to conduct a thorough evaluation
- Use time saved by avoiding routine visits

Implications of higher female mortality

- Informal care is the heart of long-term care
- Females are the heart of long-term care
- Most informal care is provided by spouses and daughters
- Fewer older females will place greater strain on daughters and formal care
- Cuba will need more formal home care, but the absence of informal care givers may create a need for more supportive housing with services

Increased formal long-term services

- Many frail older people will need both housing and formal social support
- Nursing homes are poor models for providing this
- It should not be necessary to enter an institution to receive the needed support
- New forms of care that provide at least basic independent living and needed support must be created

Coordinating long-term care and medical services

- Good long-term care requires effective social support and active primary care
- This partnership implies shared goals; too often they are not
 - Social care implies supportive services
 - Whereas chronic medical care seeks to slow the rate of decline
- Both need to adopt a model that recognizes success as slowing decline in both medical and social parameters
 - Quality of care
 - Quality of life

Measuring success

- The key to demonstrating success in both social and chronic medical care is the same
- Because decline is virtually inevitable, success can only be seen by comparing the observed outcomes to what would be expected in absence of good care

