

Insights in Aging and Home Care

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“The greater danger for most of us lies not in setting our aim too high and falling short, but in setting our aim too low, and achieving our mark”

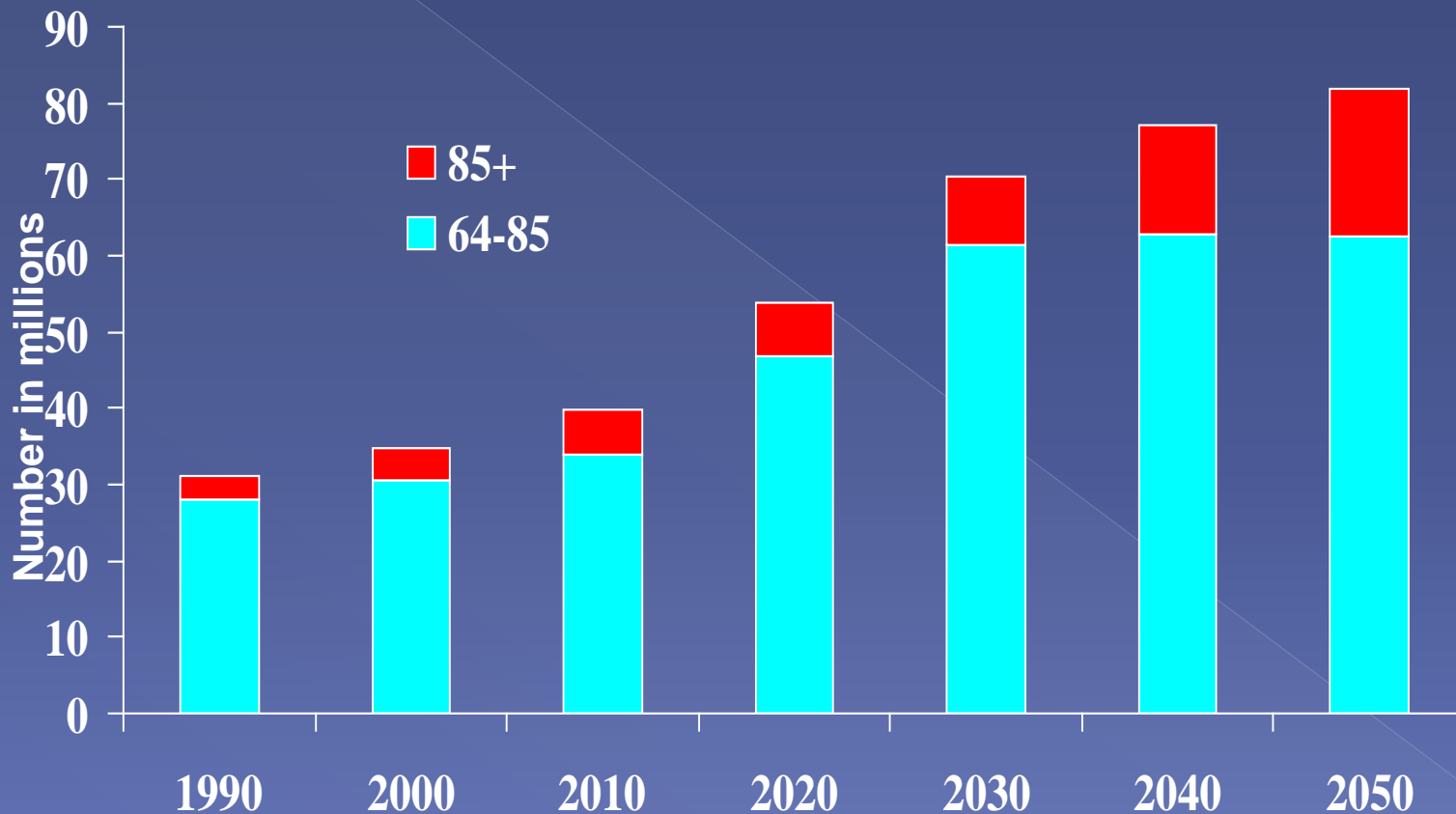
---Michelangelo



GOALS

- Provide a perspective of what it means to age in the US
- Provide a description of a non-institutional (home-based) model of care at Southeast Louisiana Veterans Health Care System

Older Population by Age 1990 – 2050



U.S. Bureau of Census middle series projections, Jan. 2000

Life Patterns

| | 1900 | 2000 |
|---------------------|------|------|
| Life Expectancy | 47.3 | 76.9 |
| Aver. Yrs Remaining | | |
| 35 yo | 31.9 | 43.6 |
| 65 yo | 11.9 | 17.9 |
| 85 yo | 4.0 | 6.3 |
| 100 yo | 1.6 | 2.6 |

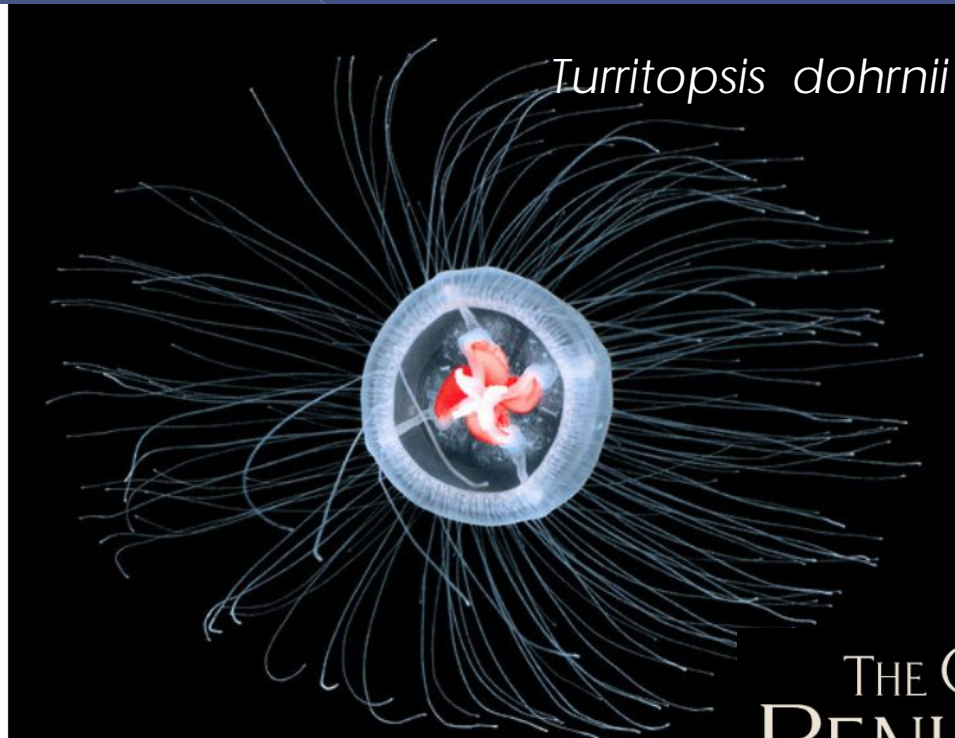
- Perceptions versus Realities
- Trends affecting the aging experience

[HOME PAGE](#)[TODAY'S PAPER](#)[VIDEO](#)[MOST POPULAR](#)[U.S. Edition ▼](#)**The New York Times**

Magazine

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Can a Jellyfish Unlock the Secret of Immortality?



Turritopsis dohrnii

THE CURIOUS CASE OF
BENJAMIN BUTTON

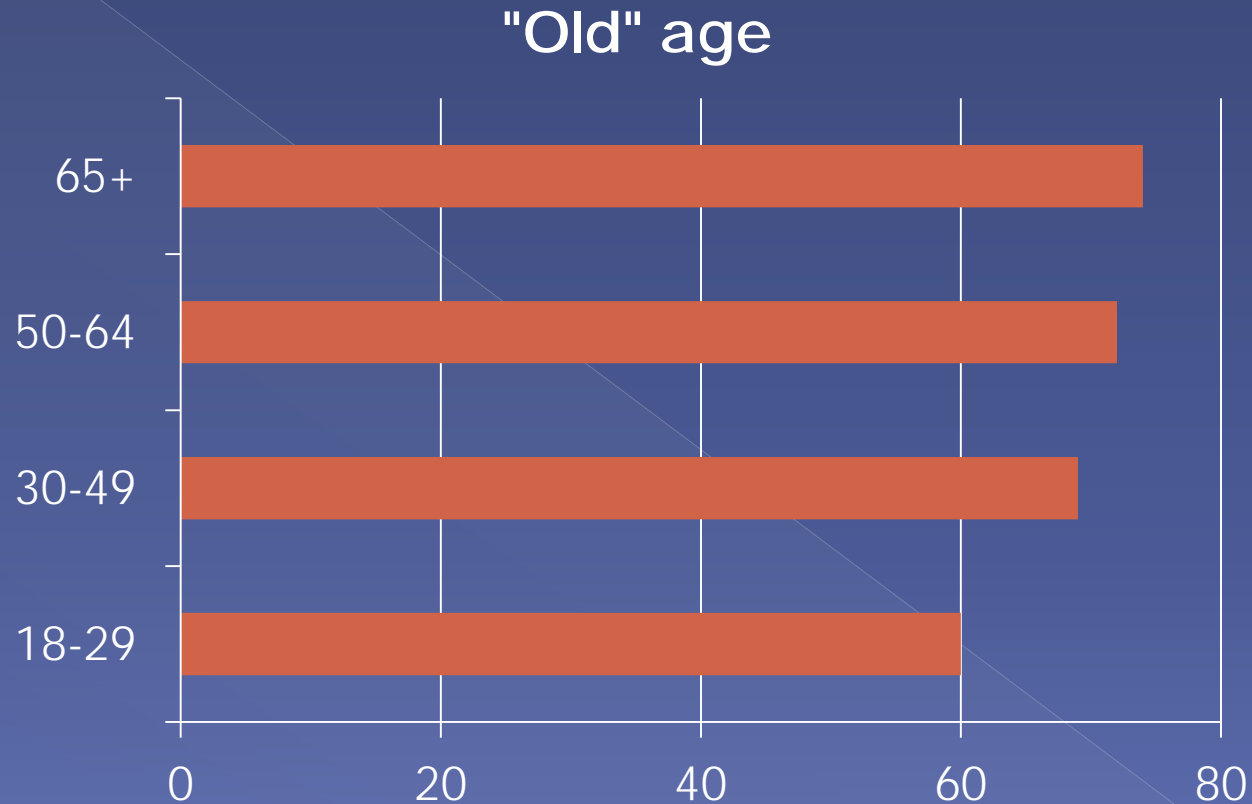
What age would you like to live to?

PewResearchCenter Publications , 6/29/2009

<http://pewresearch.org/pubs/12699/aging-survey-expectations-versus-reality>

Expectation?
Getting “old” is dreadful

When does old age begin?



PewResearchCenter Publications , 6/29/2009

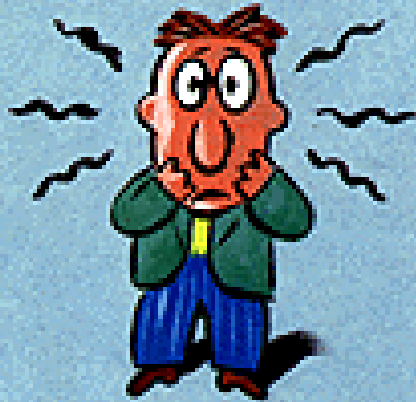
<http://pewresearch.org/pubs/12699/aging-survey-expectations-versus-reality>

**A widening gap of growing
old, but feeling younger**

Ageism

Stereotyping and discriminating against individuals or groups because of their age. It is a set of beliefs, attitudes, norms, and values used to justify age based prejudice, discrimination, and subordination

You're 50?



AGEISM

Another birthday?
Well, look in the mirror!

Do you see
wrinkles?
Do you see
gray hairs?
Of course
you don't!



....Your eyesight's gone!

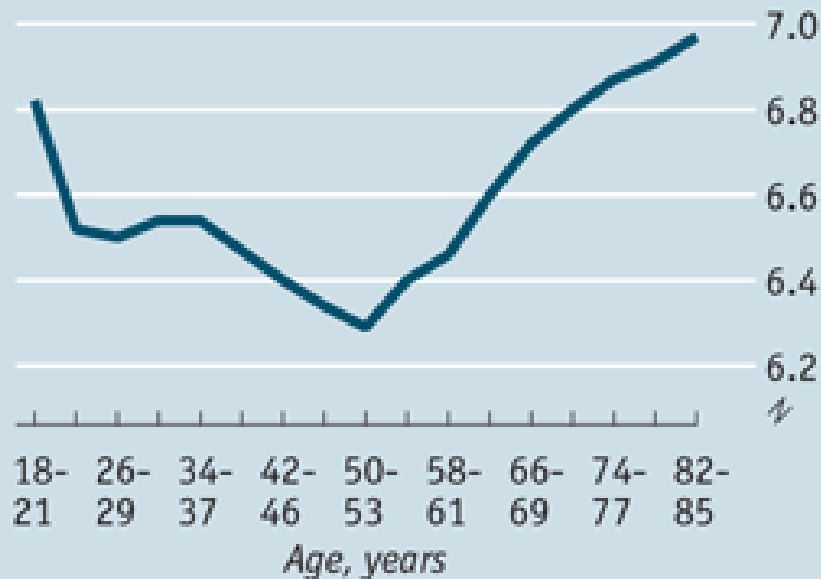
... but you look so natural and
lifelike!

Perspective: Ageism

- Homes
- Technology
- Nursing homes

The U-bend

Self-reported well-being, on a scale of 1-10



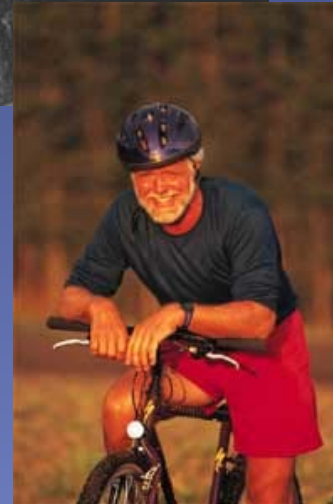
Source: PNAS paper: "A snapshot of the age distribution of psychological well-being in the United States" by Arthur Stone

Beyond middle age, people get happier as they get older...



*Before you contradict an old man,
my fair friend, you should
endeavor to understand him.*

--George Santayana



...and as we get older...

- Hearing problems
- Vision problems
- Incontinence
- Falls
- Dementia

...and as we get older...

- If you a woman in her 80s...
- If you are a man in his 80s...
- Education is improving...
- Working longer...

Older Workforce

- The maximum age for Social Security benefits to rise
- Dependent family members/caregiving responsibilities

...as we get older...

- Common

- 4 out of 5 Americans

- Multiple

- 48% Medicare, 3+ conditions
- 21% 5+ conditions

- Complexity of care

- Disability

Frailty

1/3 of patients over the age of 70 develop delirium while in the hospital...

...and are hospitalized six days longer...

Frail adults are at higher risk for adverse events in hospitalizations

...Nearly one-tenth died within a month ...

...35-40% died within one year...

...and are placed in nursing homes 75 percent of the time, 5x as often as those without delirium...

Clinical Encounters with Frail Older Adults

- ◉ Longer hospital stays
- ◉ Increased mortality
- ◉ Increased institutionalization
- ◉ Vulnerabilities to transitions
- ◉ Adverse outcomes



With Medicaid, Long-Term Care of Elderly Looms as a Rising Cost

The Atlanta Journal-Constitution

Social Security, Medicare systems facing possible crisis as baby boomers grow old

By CHERYL SEGAL
csegal@ajc.com

Washington — Efforts to revamp Social Security and Medicare are coming none too soon, new census data made clear today. They show that...

CHANGES IN U.S. POPULATION'S AGES, 1990-2000

Their 45 to >

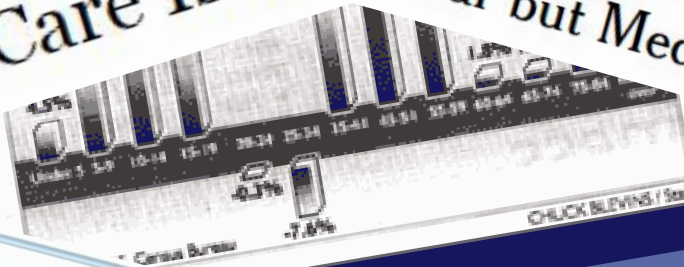
Percent aged

49.4%

Cost of Elderly Care Is Double Prior Estimates

ear but Medicare Cuts

percentage, analysts
Americans aged
ever



CHUCK BLEVINS / Staff

House and Senate at Impasse on Medicare Payments

Medicare Menu

Frailty and Disasters

- Increased Deaths
- Unmasked dementia

How are we
dying?

Top 10 causes of death

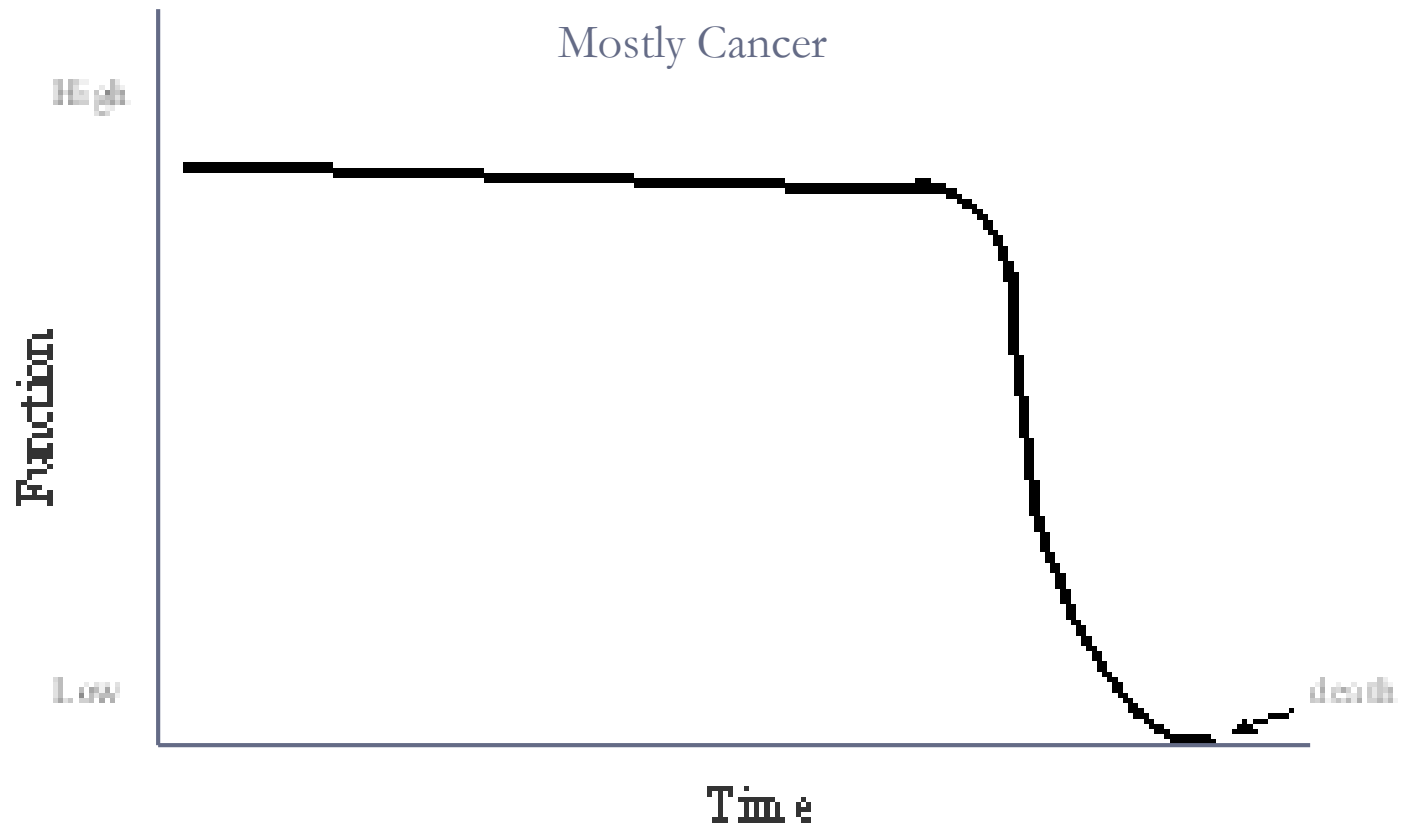
1900

Pneumonia
Tuberculosis
Diarrhea/enteritis
Heart disease
Liver disease
Injuries
Stroke
Cancer
Senility
Diphtheria

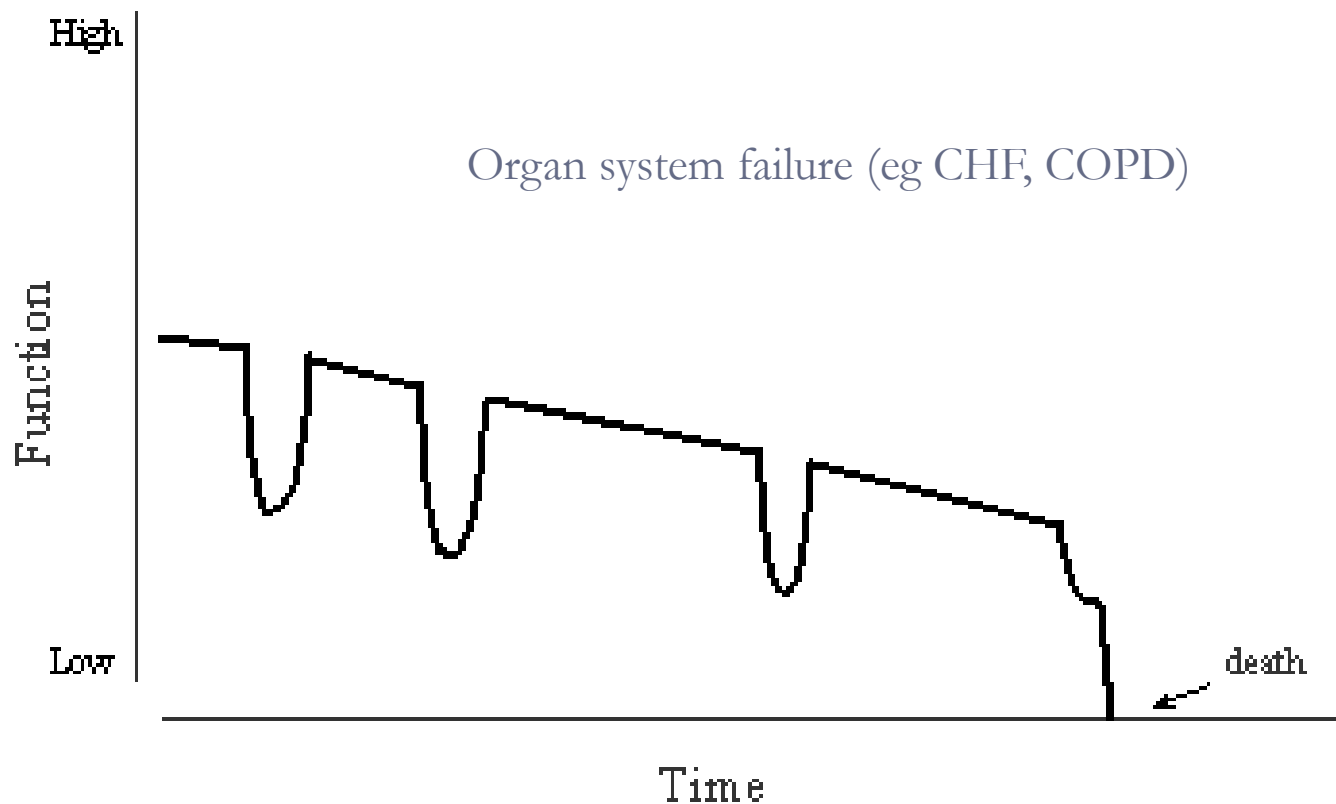
2000

Heart disease
Cancer
Stroke
Emphysema
Unintentional injuries
Diabetes
Pneumonia and influenza
Alzheimer's disease
Kidney failure
Septicemia

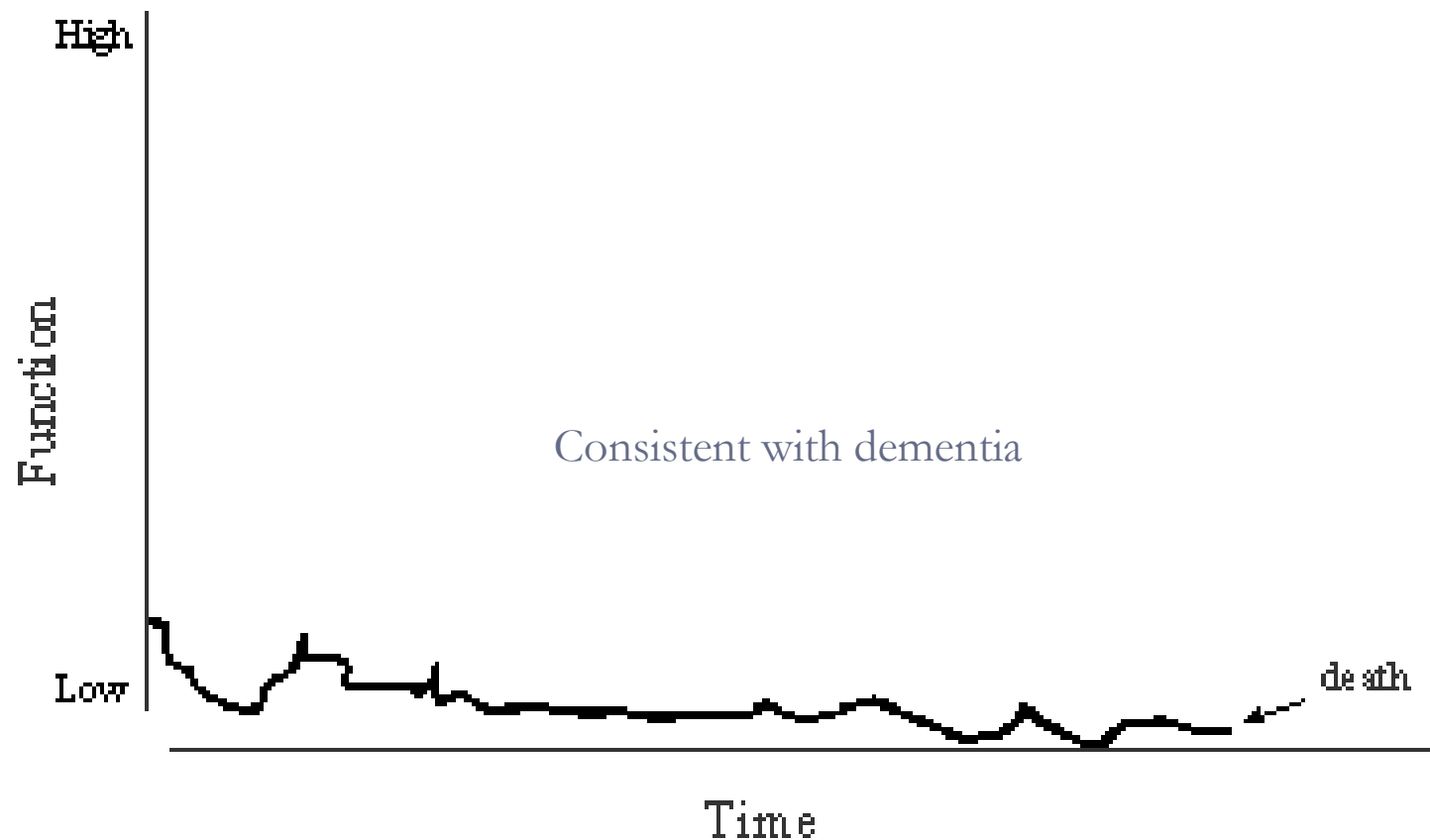
Short Period of Evident Decline



Long-term Limitations with Intermittent Serious Episodes



Prolonged Dwindling



Are we good at predicting death?

Ask Oscar



Better Care for Older People With Chronic Diseases

An Emerging Vision

David B. Reuben, MD

WITH THE INCREASE IN LIFE EXPECTANCY AND AGING of the baby boom generation, the United States is rapidly becoming a country in which health care needs are driven by older persons with chronic diseases. Unfortunately, the current health care system is unable to provide high-quality care for this population, particularly for those who have geriatric conditions such as dementia, falls, and urinary incontinence.¹ In response to poor quality, the Institute of Medicine has called for fundamental changes in how care is provided.² Such change has been exceptionally difficult because of an outmoded financing system, slow adoption of information technology, and overwhelming inertia in all sectors of the health care delivery system.

Over the last 2 decades, a variety of models have been developed and tested to improve the care of older persons.^{3,4} The sum of this research is an emerging vision of optimal health care delivery for older persons with chronic diseases.

First, care must be personalized to meet each patient's goals, values, and resources. These are often influenced by the patient's age, health, function, economic and social situations, ethnicity, and culture. Clinicians must then provide information on the realities of the patient's medical conditions to formulate, with the patient, a plan that best meets the patient's goals. Sometimes this means eschewing more intensive services and accepting clinical outcomes that are less than the best possible health and function. For example, after a stroke, a patient may choose to remain wheelchair bound rather than participate in physical therapy to attempt to regain mobility—the key is that the outcome meets the patient's goals.

Second, care should be provided in accordance with best practices. Care should be evidence-based, when evidence is available. When evidence is unavailable, care should be provided according to some consensus, such as from expert panels. The basic approach to clinical management is that patients with the same conditions should receive the same care. However, particularly in geriatrics, care must then depart from rigid guidelines and be tailored to patients' individual needs. A principle of quality improvement is to reduce variation across clinicians but retain variation across patients as needed.⁵ The implementation of evidence-based care frequently involves protocols or guidelines and requires systems to ensure that they are followed.

See also p 2623.

In practice, implementation of recommended care has been difficult for many reasons. Physician barriers to adhering to guidelines include lack of awareness of guidelines, disagreement with specific guidelines or guidelines in general, disbelief that the performance of guideline-specified care processes will lead to desired outcomes, and inability to overcome existing practice habits.⁶ Additional obstacles include patient factors (eg, preferences, adherence) and environmental factors (eg, lack of resources, reimbursement).⁶ Perhaps most important, clinicians commonly believe that evidence-based care takes more time. For most clinicians and health care systems, adding time to each encounter is not a viable option.

Third, physicians cannot do the job alone. Team care, which has been a hallmark of geriatrics, is essential for providing high-quality care for patients of all ages who have chronic diseases.⁷ Many aspects of chronic disease management and care coordination are managed better by other health professionals and office staff.⁸⁻¹² Moreover, team care is more efficient as members expand their roles to their highest levels of competence. However, this care needs physician oversight and must be integrated within the practice. The adoption of team care has been impeded by the lack of financing and physician barriers. Physicians are poorly trained to work with teams and are frequently reluctant to delegate components of care.¹³

Fourth, care must be coordinated among those caring for patients. All necessary information should be available at the time of decision making. A necessary, but not the sole, requirement for coordination is an electronic health record. This record should span across health care systems and between clinicians and community agencies. Such bridges are possible and have been integral to providing higher-quality care for older persons.⁶ In addition to information linkages, coordination requires discussion, exploration of available resources, negotiation, and compromises.

Fifth, care must consider the resources and environment of the person. With aging, the social support system becomes much more tenuous and the individual's interaction with the environment and nonmedical resources assumes increasing importance. Herein lies the value of home visits for many interventions^{11,12,14} and assessment of social support in all successful models of care.

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Transitions from the hospital to the home are a particularly vulnerable period. Poor discharge planning and lingering clinical effects – including cognitive changes associated with delirium and functional decline associated with hospital-related disability – place additional responsibilities upon caregivers at home.

...difficulty finding time for one's self (35%)...

Caregivers are a vital component in the health care system but caregiving places a tremendous toll on caregivers

...difficulty managing emotional and physical stress (29%)...

Approx. 44 million people were providing unpaid care, valued at \$306 billion, for an estimated 22.9 million households (21% of U.S. households)

In 2007, 37% of caregivers for adults older than 50 years old reported reduced work hours or quit their jobs.

...difficulty balancing work and family responsibilities (29%)...

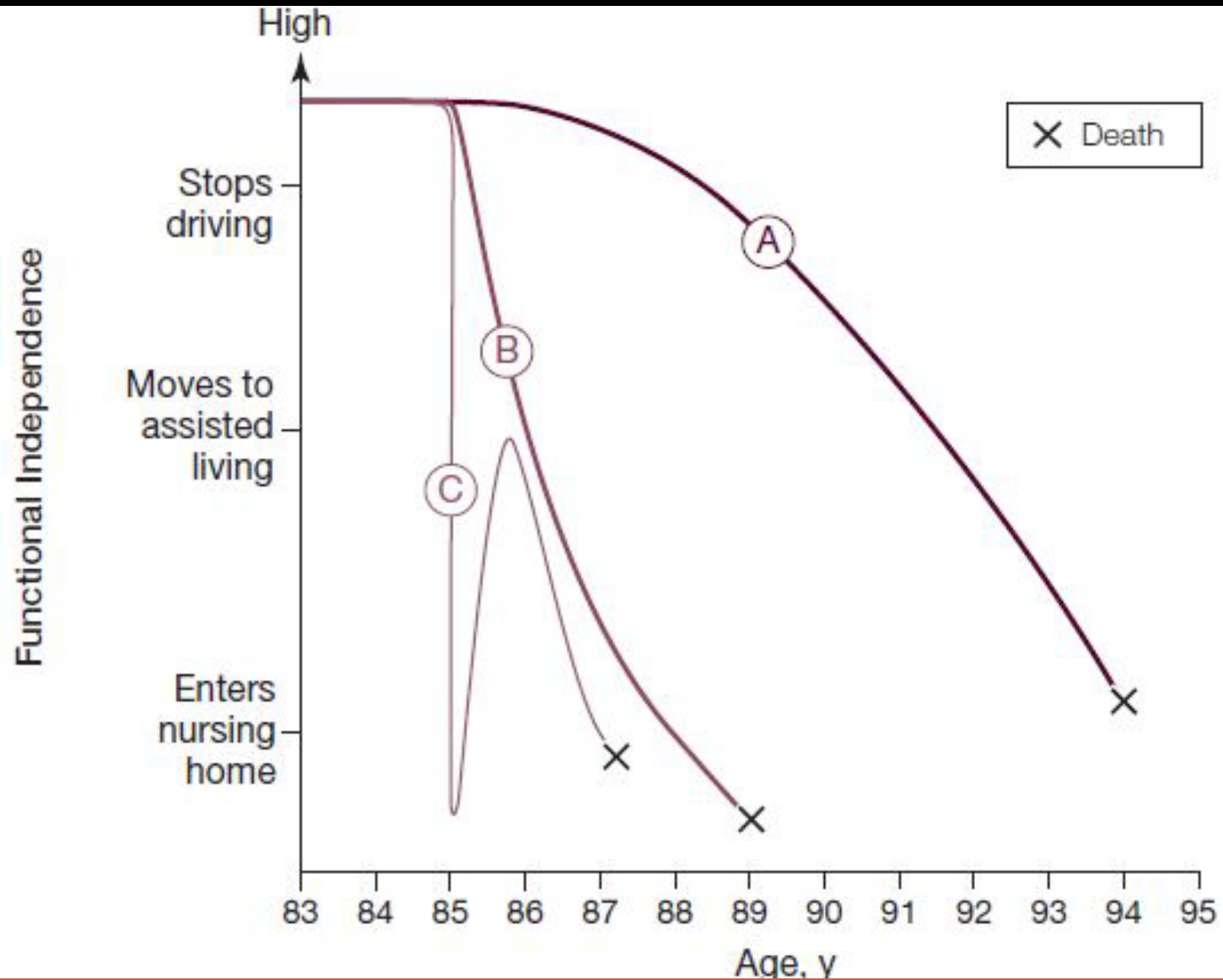
FUNCTIONAL ASSESSMENTS

- Activities of Daily Living (ADLS)

- › Toileting
- › Transferring
- › Feeding/Eating

- Instrumental Activities of Daily Living (IADL)

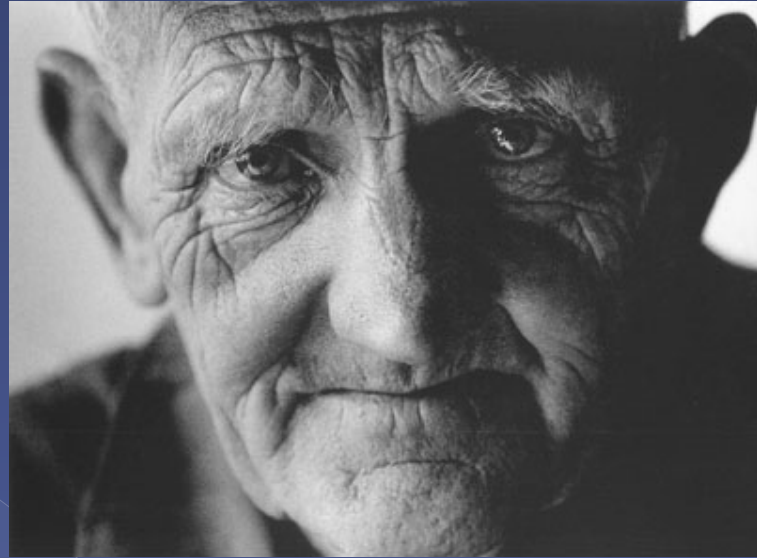
- › Shopping
- › Cooking
- › Cleaning
- › Finances



COMPRESSION OF MORBIDITY

TRENDS

- Fiscal focus
- Team Approach
- Patient-Centric
- Caregiver



87% of Americans prefer to live at home

Baby boomers are more fearful of loss of independence and nursing home placement than death

HOME



The Concept of Home

- ◉ Physical Structure
- ◉ Territory
- ◉ Locus in space
- ◉ Self and self-identity
- ◉ Social and cultural unit
- ◉ Familiar
- ◉ Center
- ◉ Protector
- ◉ Healer



“The image of a physician delivering care to a sick patient at home is one of the essential and enduring images in the collective consciousness of medicine. It is an image that no doubt once inspired, and perhaps still inspires, some to pursue a career in medicine. It is an image from which the medical profession, as a whole, once drew inspiration so as to say “Yes, this is what physicians are about. Physicians take care of patients.”

Leff, B. “The Future History of Home Care and Physician House Calls in the United States,” 2001

ARCHITECTURAL DIGEST
THE INTERNATIONAL MAGAZINE OF DESIGN
JANUARY 2009

Brad Pitt

Makes It Right
in New Orleans



www.ArchitecturalDigest.com



**BRAD
PITT
FOR
MAYOR**



Uniqueness of Home Visits

Improved balance of power

- Qualitative interview study performed, as part of a large randomized psychosocial intervention study on the effects of home visit to Danish patients with colorectal cancer. N=21 informants.
- “Healthcare interventions in patients’ homes result in a *well-balanced contact* between the professional visitor and the patient by overcoming the barrier felt by patients in the hospital setting, where they are sometimes treated as objects. Meeting patients in their home setting gave the visitor a deeper understanding of them as persons and facilitated dialogue about their daily lives, problems, social network, and social resources.”

Ross, L, et al. Cancer Nursing. 2002

Uniqueness of Home Visits

Understanding the client's health need as he or she sees it

- N=200
- Prospective, repeated-measures design study, focusing on patient safety and caregiver issues.
- Compared the yield of a clinic-based home assessment with the yield of a home visit involving patients with dementia.
- 84% of serious problems were identified only at home visit, not at clinic visit. Issues: social isolation, caregiver stress, fall risk.

Ra,sde;,. KW. et al, *Alzheimer Dis Assoc Disord*, 2004

.... Home is where a family's values are expressed. It is in the home that people can be themselves...We can sense for ourselves either the peace or the tension in the home. In the home the patient can be in control of his or her own care, and this can be a powerful influence on healing.

McWhinney, Ian

Home and Community Focus

- Cost constraints
- Hospital bed availability
- Technology growth
- Vulnerability to older adults

Uniqueness of Home Care

- ◉ Equal balance of power
- ◉ Understanding of patient's health needs as he or she sees it
- ◉ Unique role of the health care provider
- ◉ Community connections
- ◉ Social model --
 - Improved understanding of physiological/psychological aspects of one's disease
 - Improved coping
 - Enhanced social supports and contacts
 - Broader understanding of patient

Home Care Models for Older Adults

- Preventive
- Transitions of care
- Primary Care/Long-term
- Acute Care Model

Preventive Care

- Meta-analysis, 15 studies
 - 9 studies to general elderly population
 - 6 studies to older adults at risk for adverse events
- Significant impact on mortality, admissions to long-term care institutions.

Elkan R, et al. BMJ 2001

- 3-year RCT, N=215, 75+yo, Geriatric APN in collaboration with geriatrician. Annual CGA with quarterly follow-up.
- Significant impact on disability (ADLs) and permanent nursing home stays.

Stuck A et al. NEJM 1994

- 3-year stratified randomized trial, 75+yo, RN in collaboration with geriatrician. Annual CGA with quarterly follow-up.
- Reduce risk for elderly at low risk, but not at high risk for functional impairment.

Stuck A et al. Arch Int Med 2000

Transitional Care

◎ *Care Transition Coaching*

- APN “transition coach,” begin in hospital and 30-day post-discharge
- Encourages family caregivers to assume more active roles during care transitions, focusing on med mgmt, follow-up with physician, red flag list. Personal health record maintained by pt/caregiver.
- Lower all-cause re-hospitalization rate at 30 and 90 days reduced. Lower costs. (Coleman et al, Arch Int Med, 2006)

◎ *APN transitional care model*

- APN-directed, begin in hospital, arranges post-discharge plans. 7-day per week telephone access.
- 3 RCTs: greater pt satisfaction, lower readmissions, decreased costs.

◎ *CHF/Disease Management*

- Post-discharge visit by RN, pharmacist, or cardiac nurse within 7-14 days for structured, comprehensive visit, including barriers to treatment adherence (e.g. social support).
- Reduced all-cause mortality, longer survival, longer event-free survival, fewer unplanned readmissions, shorter hospital stay if admitted, fewer ICU admissions. (Ahern MM et al, Disease Management, 2007; Simon S et al, Circulation, 2002)

Primary/Long-Term Care

- ⦿ VA- Home-Based Primary Care

Home Based Primary Care

- ◎ 1970s
- ◎ Interdisciplinary team-based
- ◎ Chronic disease model
- ◎ 24% reduction in total costs, 83% patient satisfaction

VA Home-Based Primary Care

Differences Between VA HBPC and Medicare Home Care

| <i>VA HBPC</i> | <i>Medicare Home Care</i> |
|---------------------------------|---------------------------|
| Targets complex chronic disease | Remediable conditions |
| Comprehensive primary care | Specific problem-focused |
| Skilled care not required | Requires skilled care |
| Strict homebound not required | Must be homebound |
| Accepts declining status | Requires improvement |
| Interdisciplinary team | One or multidisciplinary |
| Longitudinal care | Episodic, post-acute care |
| Reduces hospital days | No definitive impact |
| Limited geography and intensity | Anywhere; anytime |

Acute Care

SLVHCS Hospital at Home opened October 1, 2007....it is one example of the *silver-lining* of Hurricane Katrina

- Reduced hospital bed capacity and crowded ERs due to hospital closures, including the SLVHCS-based Inpatient Services closed
- Reliance on local non-VA hospitals (33), other VA hospitals within VISN 16 – fragmented care, redundant studies.
- Highlighted the vulnerabilities of older adults.
- Exponential growth in the SLVHCS veteran population as veterans returned “home”



Hospital at Home Model

- Alternative to traditional hospitalization, providing key hospital services within the home setting for those conditions that could safely be managed in the home setting.
- Established model overseas
- Positive outcomes in research studies

Acute Care

○ Hospital at Home

- **Similar clinical standards as traditional hospital care**
- **International presence with studies indicating positive clinical outcomes:**
 - **Reduced delirium rates**
 - **Improved patient, caregiver, provider satisfaction**
 - **Reduced costs**

Challenges

- **Acceptance**
 - *Marketing*
- **Safety risks**
 - *Limited diagnoses*
 - *Drive-by, telephones (pt/staff)*
 - *Limited admission hours*
 - *Highly-trained staff*
 - *Strict admission criteria*
 - *Patient education*
- **Caregiver impact**
 - *Careful screening*

SLVHCS H@H Operational Components

- Initial MD evaluation with close clinical oversight
- Daily skilled RN home evaluation
- 24-hour, 7 day a week telephone access to RN and MD
- Low RN to patient ratios
- Access to HBPC disciplines
- IV medications
- In-home lab draws and delivery
- Respiratory services

Initial Service Focus

- “Early Discharge” focus
- Limited diagnoses:
 - COPD
 - CHF
 - Cellulitis
 - Comm.Acquired
Pneumonia

Lessons Learned

- Need for a Program Coordinator – provided “face” to the program
- Leadership Support – support through initial challenges
- Dedicated staff – provided new ideas, helped maintain quality standards
- Continued education of the program – U.R., clinics, UCC
- Focus on what the patients/system needs
- Need for close monitoring of outcomes for sustainability

H@H Scope of Service

- **Early discharge** of veterans from the hospital
- **Substitution** of a traditional hospitalization (admission directly from the clinic, UCC, HBPC)
- **Long-term acute care service** ("LTAC") for patients in need of longer-term services (e.g. IV abx for osteomyelitis; intensive wound care mgmt)
- **Preventative** approach to minimize hospitalizations and/or ER evaluations for high-risk patients (e.g. high systemic users with frequent ER/hospitalizations)



Most Common Admitting Diagnoses

CHF

COPD

Cellulitis

UTI/urosepsis

DVT/PE

Osteomyelitis

Complex wound care

Pneumonia

At risk Hyperglycemia

At risk HTN

Hospital at Home Base Sites

- New Orleans
- Slidell
- Hammond
- Baton Rouge

H@H Admissions

| | |
|------------------------|--------------------------|
| Average length of stay | Early Discharge - 6 days |
| | Substitutive - 6 days |
| | Preventative- 6 days |
| | LTAC -15 days |

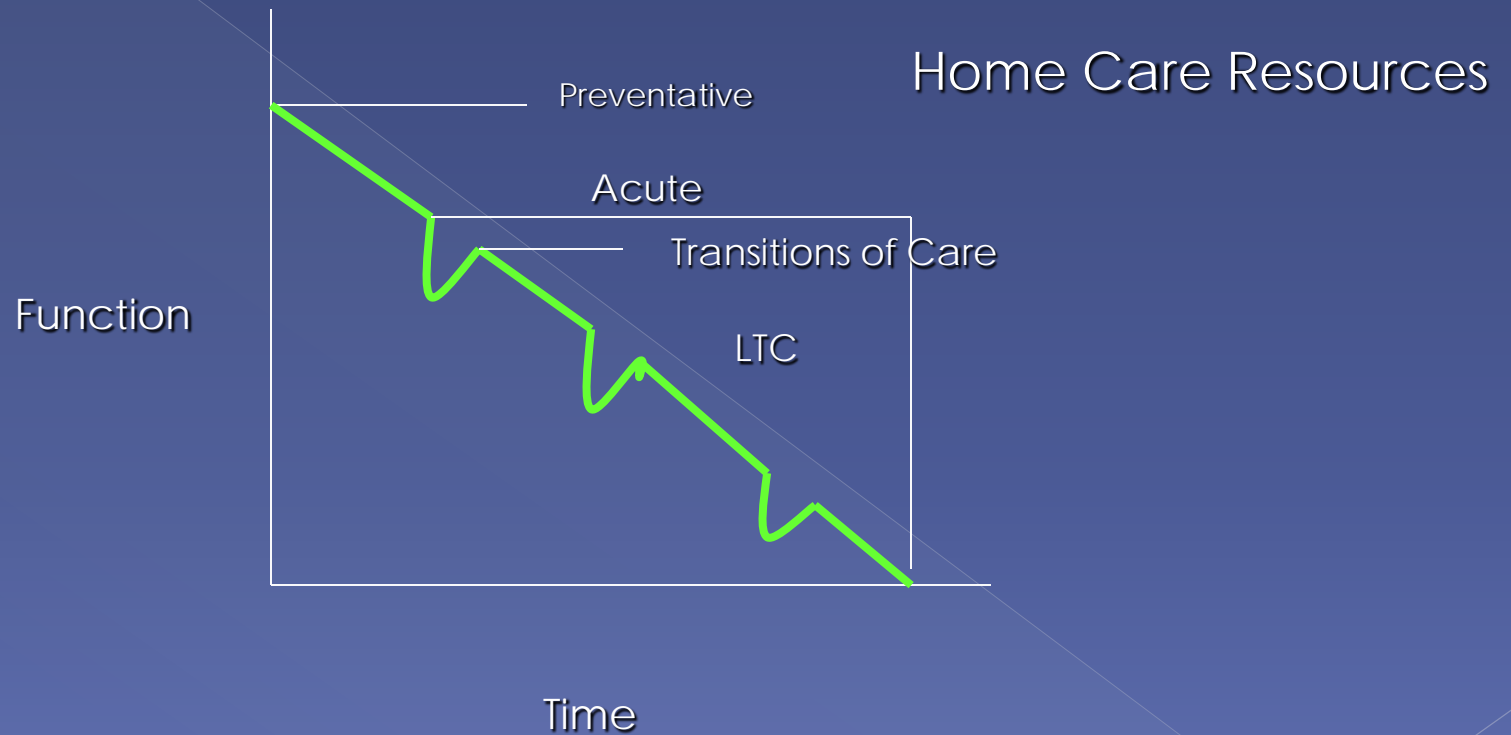
Evidence of cost savings > \$1MM

Post-d/c 30-d acute pattern: 11-30%

H@H Benefits

- Improved transitions of care
- In combination with the chronic disease model of HBPC, the two programs together provide a broad continuum of services, creating a potentially new paradigm in the model of home care.
- Encourages collaboration of services and partnerships with patients/caregivers.
- Veterans are given a choice in their care
- Less fragmentation of health care delivery.
- Potential cost savings
- Inherently patient-centric

Conceptual Role of Home Care for Older Adults



“I mend better in my own bed”



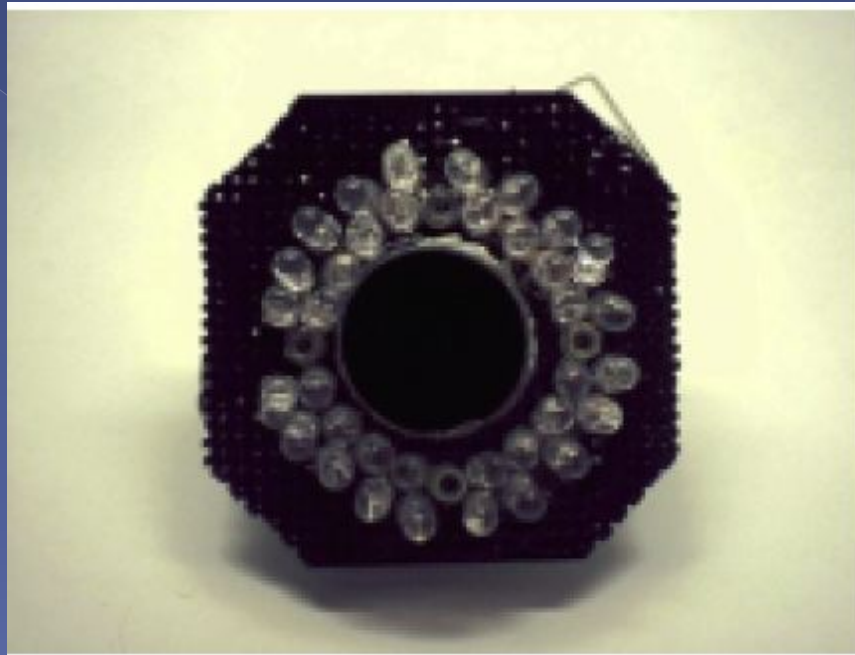
Aging in Place

The ability to live in one's own home and community safely, independently, and comfortably, regardless of age, income, or ability level

Aging in Place

- Community Effort
- Alternative Home structures
- Smart Homes
- Universal Design

Smart Homes



Gesture Pendant

Smart Homes



Cook's Collage

Smart Homes



Digital Family Portrai

Universal design

Designing products to be aesthetic and usable to the greatest Extent possible by as many people as possible, regardless of age, ability, or status in life.

- Lever handles for opening doors rather than twisting knobs
- Components requiring less than 5 lbs of force to operate
- Wide interior doors, hallways
- Slip resistant surfaces
- Ramp access in swimming pools
- Large print on signs

Power of Positive Aging

