

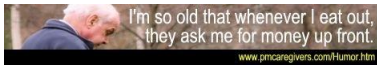
Age Appropriate Behavior



Aging Humor



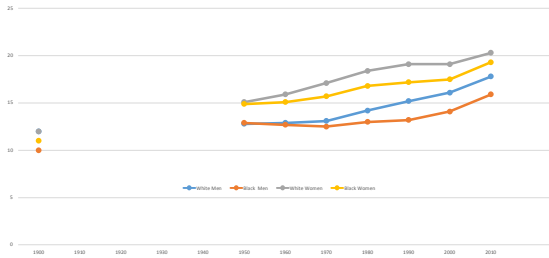
Aging Humor



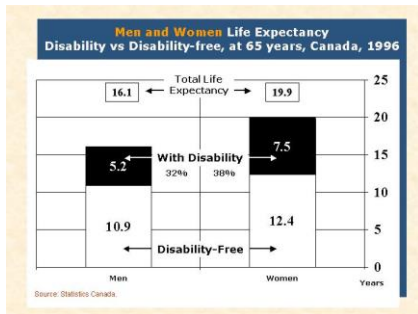
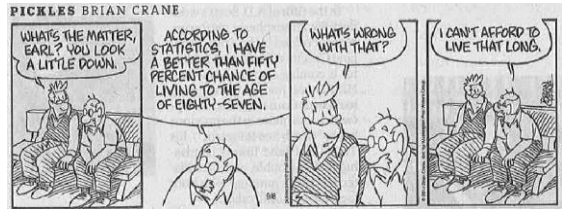
Theories about Aging

- Wear and tear
- Garbage accumulation
- Genetics
- Combination
  - Telomere replication errors
  - Telomerase

### Changing Life Expectancy at Age 65



### Saving for Retirement



### Caregiving is Virtually Inevitable

- Yourself
- Your parents
- Your spouse
- Your in-laws
- 25% of families care for an older relative at any one time

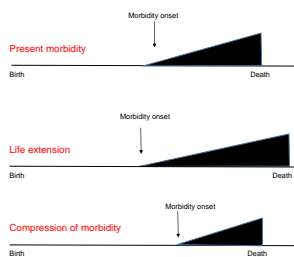
### Factors Reputed to Affect Longer Life

Positive	Negative	Inconsistent
Slightly overweight	Loneliness	Sleep
Genes (but which?)	Single men	Blueberries
Exercise		Free radicals
Smaller/shorter		Wine (red)
Young blood		Dieting
Less growth hormone		Vitamins
		Rapamycin
		Green tea
		Coffee

NY Times Magazine, Oct 26, 2014

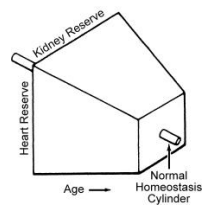


### Compression of Morbidity



Fries, Milbank Quarterly, 1989

### Homeostenosis



Fries and Crapo, Vitality and Aging, 198

## Syndromes vs. Diseases: Multiple Etiologies

### The I's of Geriatrics

Immobility	Instability
Incontinence	Intellectual impairment
Infection	Impairment of hearing and vision
Irritable colon	Isolation
Inanition	Impecunity
Iatrogenesis	Insomnia
Immune deficiency	Impotence



## Multimorbidity

- Interaction of multiple diseases and their treatments
- If you followed all the recommendations for several diseases, you might do more harm than good (Boyd, JAMA, 2005)





## Walking Chemistry Set

### Polypharmacy



### Function Equation

Function =

$$\text{physical capabilities} \times \text{medical management} \times \text{motivation}$$

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$$\text{social, psychological, and physical environment}$$

Targeting Care



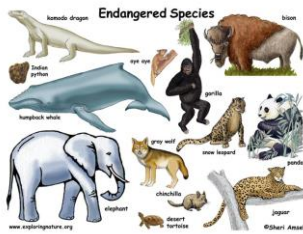
Fixing long-term care piecemeal

is like trying to patch the roof of a house that is falling apart.



We need to rebuild

Caregivers are Becoming an Endangered Species



We need to act now to improve long-term care



Creative intolerance

- What kind of care do we want?
- Sustained societal advocacy
- Revised regulations
- Rewards for better care

If you want to fix the LTC system,  
now is the time.  
You can't do it once you are in it.

## References

- Kane RL and JC West [It Shouldn't Be This Way: The Failure of Long-Term Care](#), Vanderbilt University Press, Nashville, 2005.
- Kane RL, R Priestler, and AM Totten, [Meeting the Challenge of Chronic Illness](#), The Johns Hopkins University Press, Baltimore, MD, 2005.
- Kane RL and J Ouellette, [The Good Caregiver](#), Avery, New York, 2011.
- Kane RL, JG Ouslander, IB Abrass, and B Resnick (eds.), [Essentials of Clinical Geriatrics](#), Seventh Edition, McGraw Hill, New York, 2013.