Technology Diffusion and Healthcare Cost Growth Jonathan Skinner Dartmouth College

Two question addressed in this talk

- Why are health care costs growing so rapidly around the world?
- What can be done to slow the growth in spending without adversely affecting health?

Health Expenditures as % of GDP, 1995-2005



Long-term care included in Japanese data 2010+



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Prime suspects in healthcare cost growth

• Aging of the population

- Diffusion of medical innovations
- Sluggish "exnovation" of low-value treatments

Rising shares of elderly people around the world



Healthcare spending by age in Japan, 2001 & 2010



Oshio et al., in Ikegami, 2014

Health share of GDP and elderly share (65+): 2013



Source: OECD Health Statistics

Change in elderly share & health spending, 1990-2013*



Source: OECD Health Statistics

How can this puzzle be reconciled?



Population Aging and the Growth of Health Expenditures

Thomas E. Getzen

"Age affects the allocation of spending, but not the total amount of funds available. The increasing burden of health expenditures is largely a policy and cost management problem rather than a demographic one" (p. S98, 1992)

Across OECD countries, there is only a modest association between the age composition and healthcare spending as a percentage of GDP.

Prime suspects in healthcare cost growth

- Aging of the population
- Diffusion of medical innovations
- Sluggish "exnovation" of low-value treatments

Large literature on the diffusion of new innovations





EVERETT M.ROGERS

Example: Surgery for back pain

