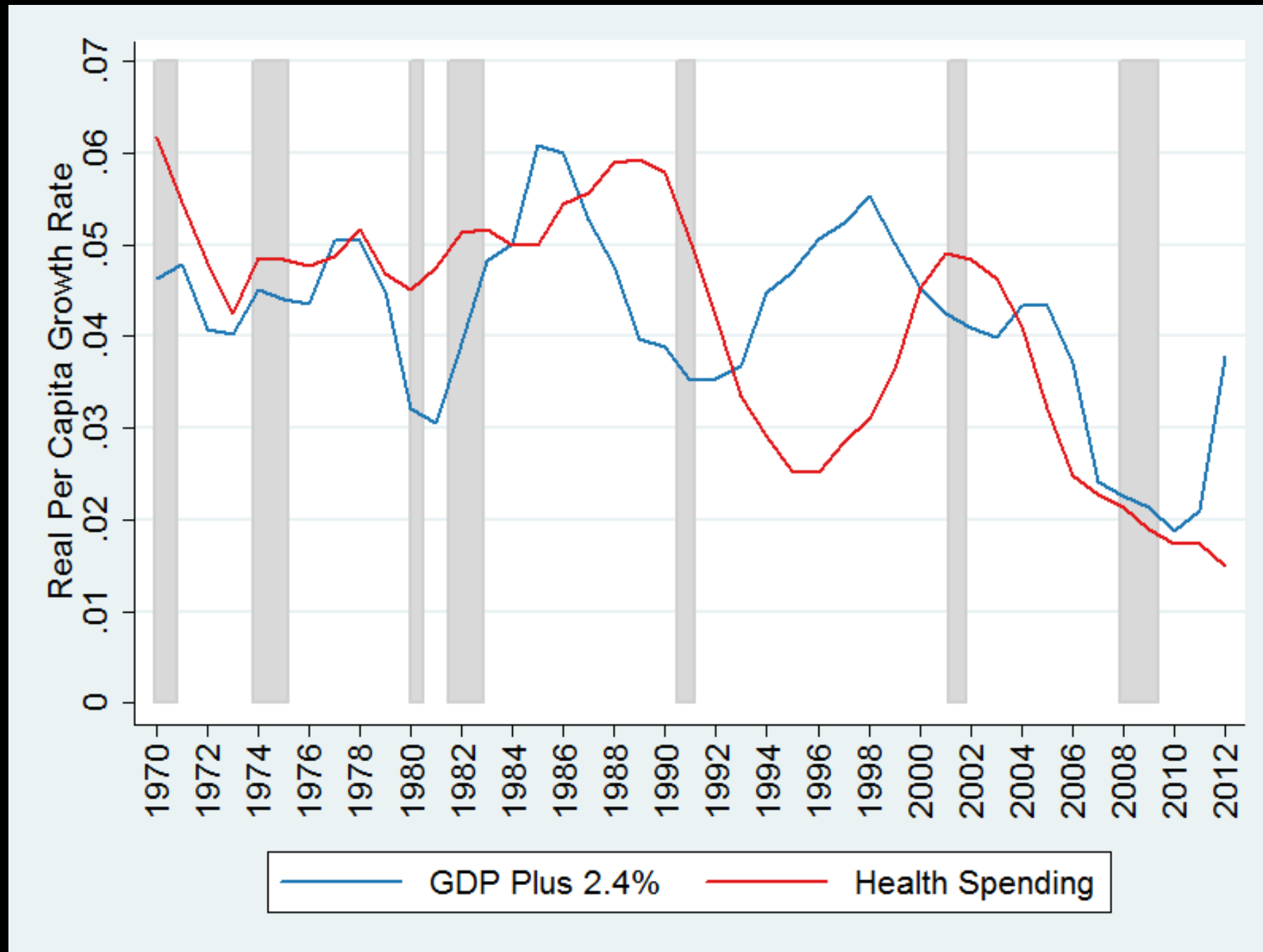


The Innovation Dilemma

Amitabh Chandra
HARVARD UNIVERSITY



Healthcare Growth= GDP Growth + 2.4%

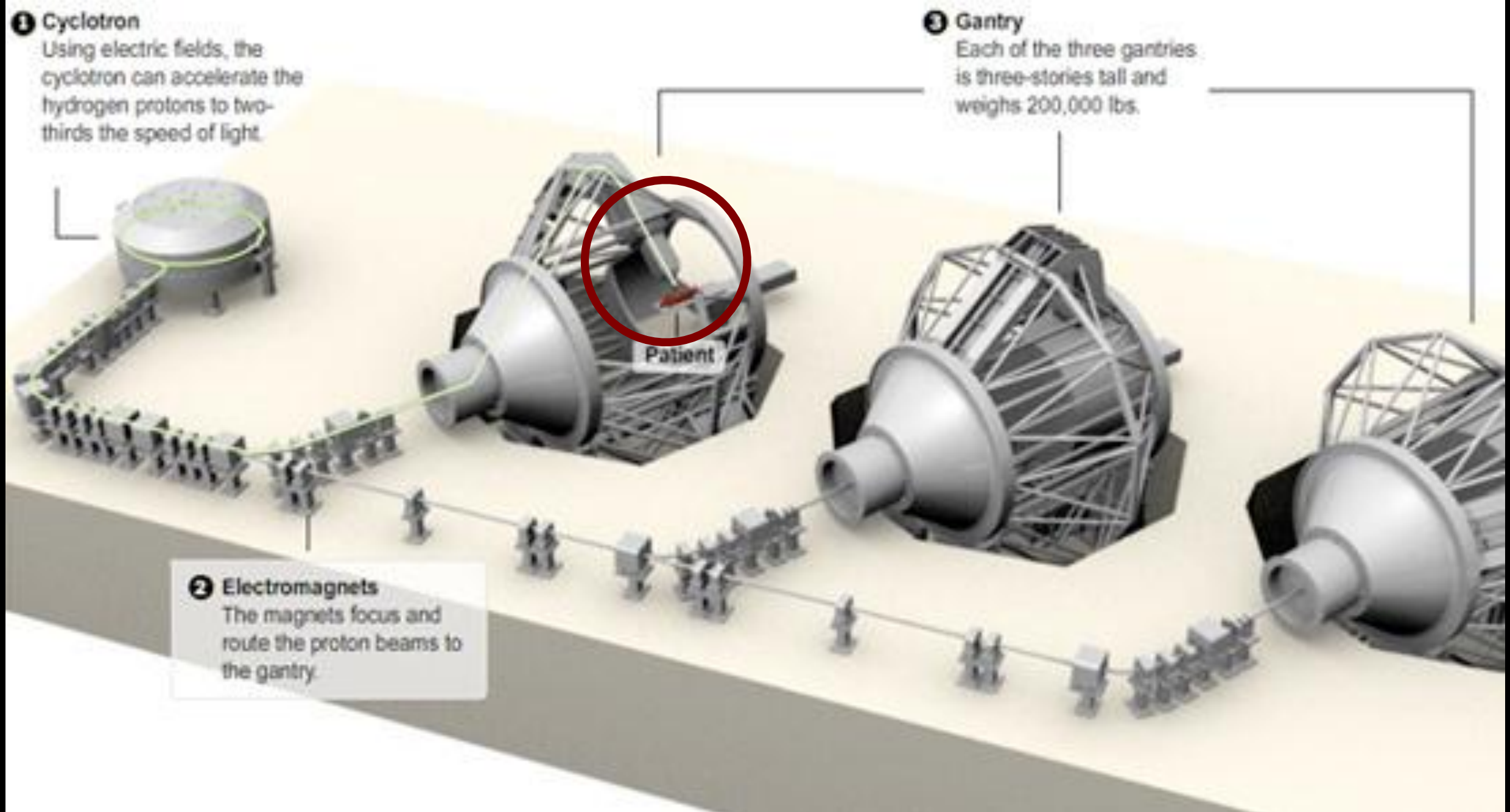




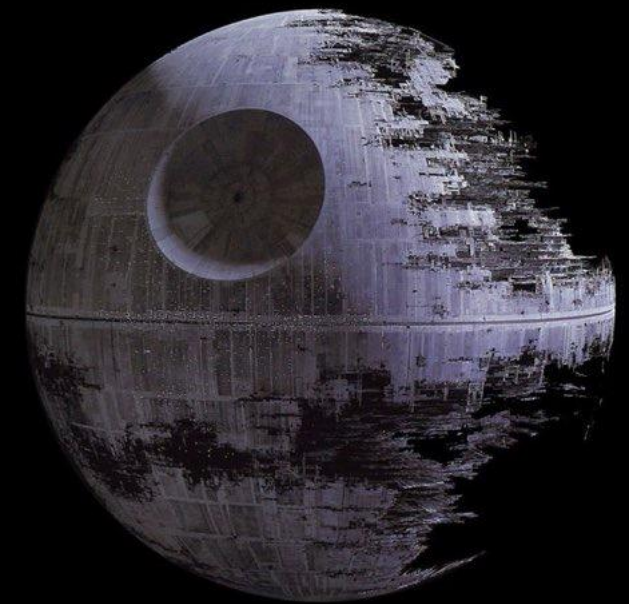
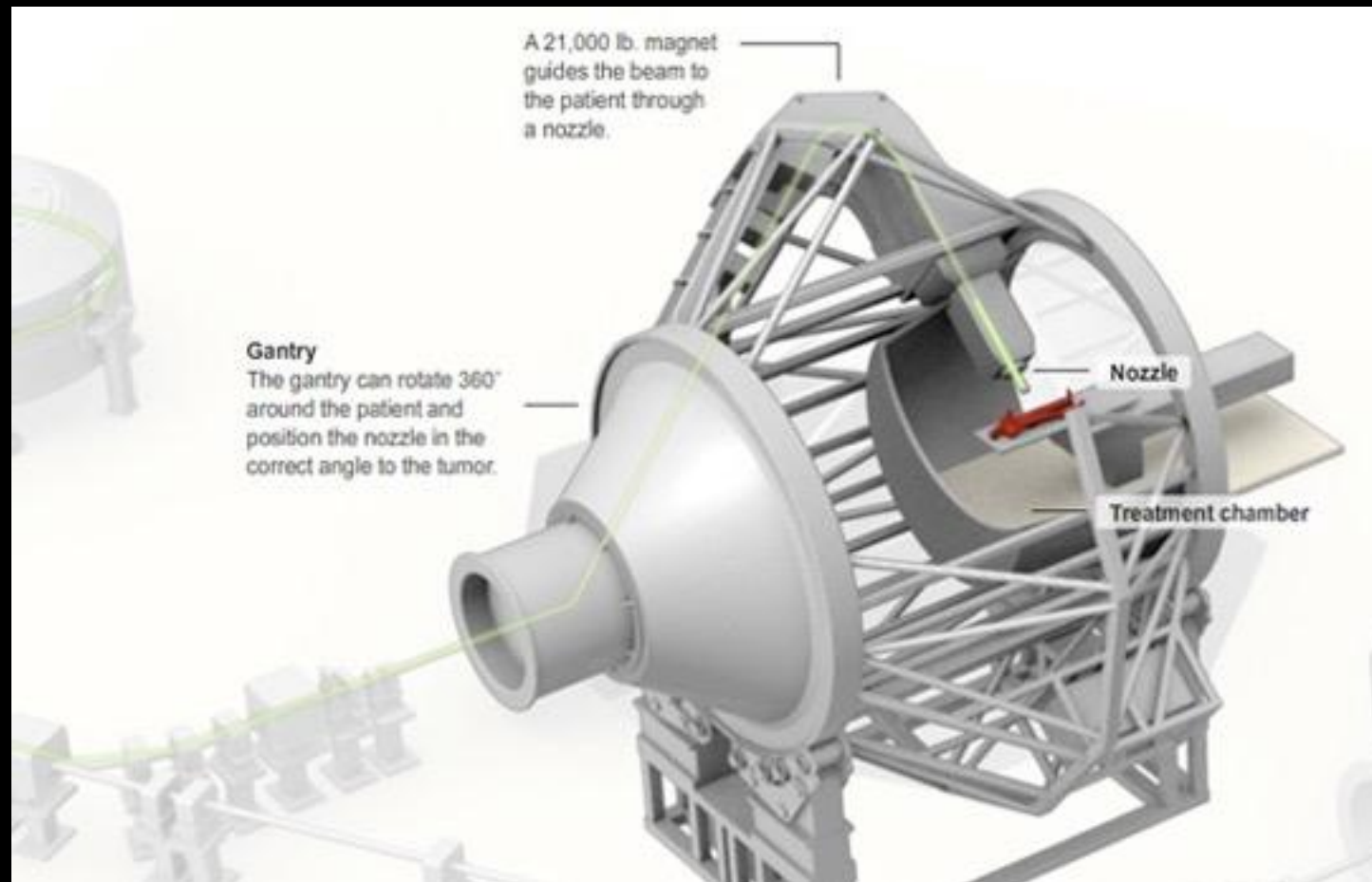
Innovation



Proton Beam Therapy



PROTON BEAM THERAPY

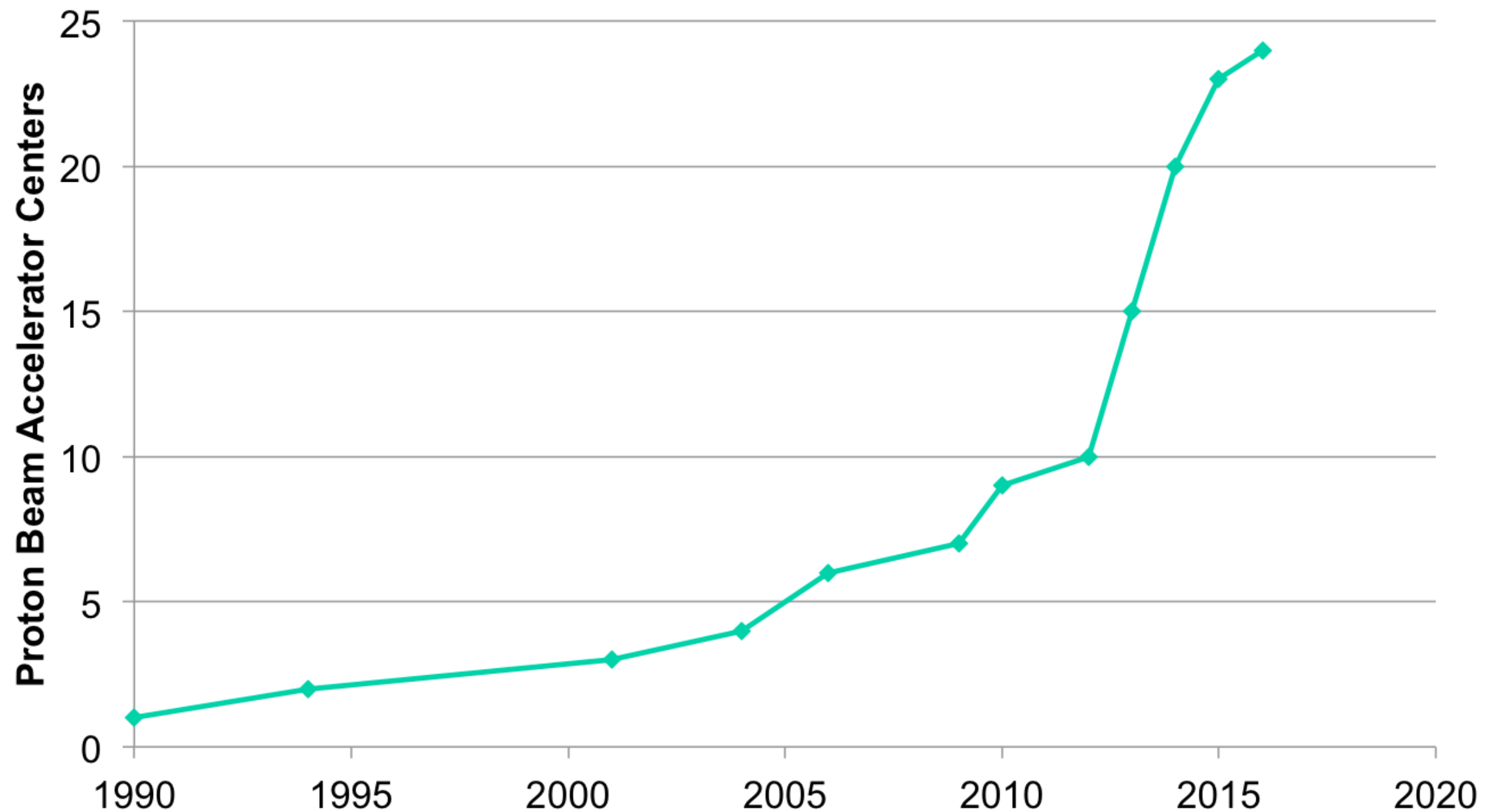


Cost: \$120 million

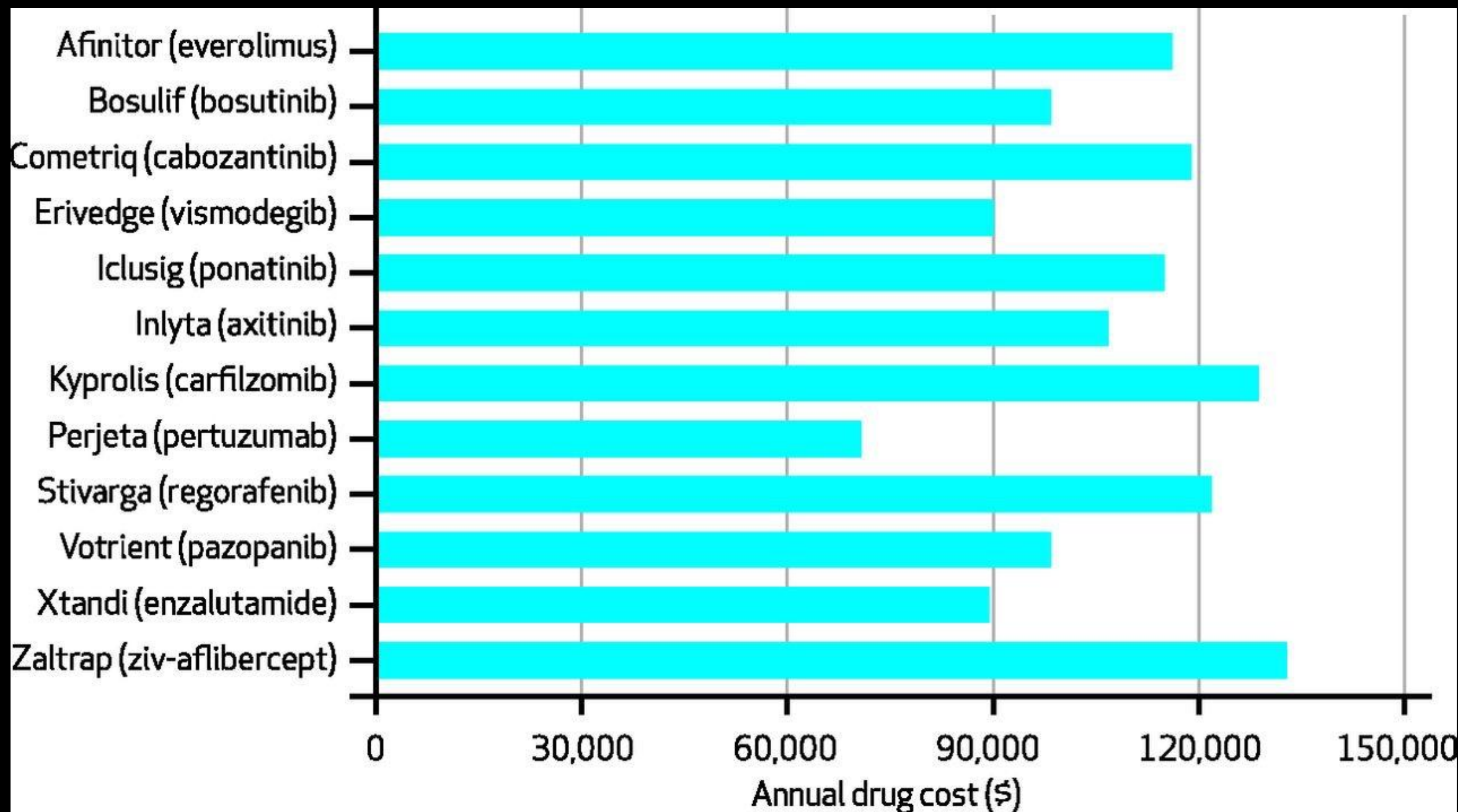
Benefit for prostate cancer: unknown

Medicare reimburses \$32,000 per treatment
(= cost of insuring 8 people)

Proton Beam Accelerator Facilities Operating, Planned, or Under Construction

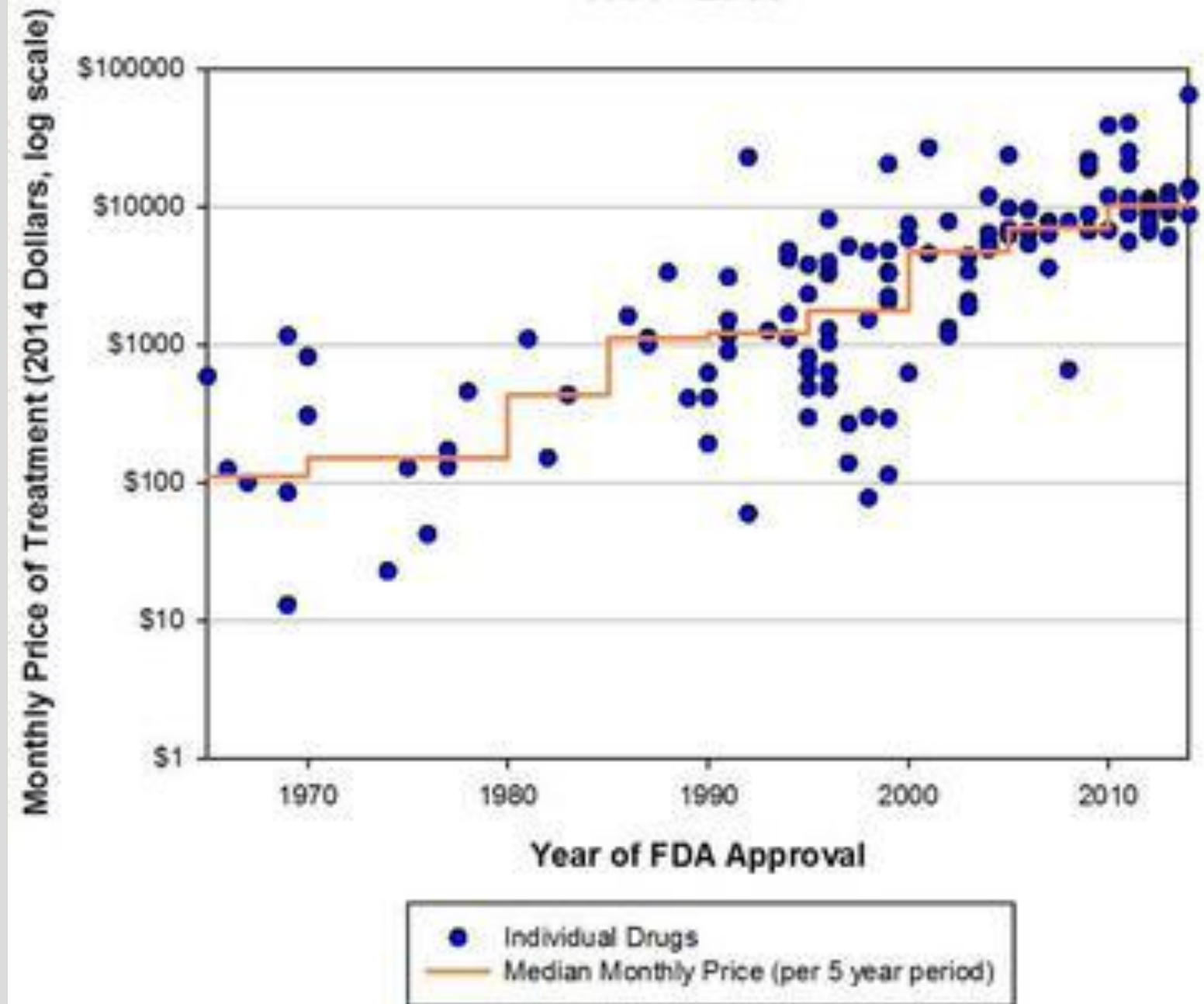


Source: Chandra, Holmes and Skinner (Brookings 2014)



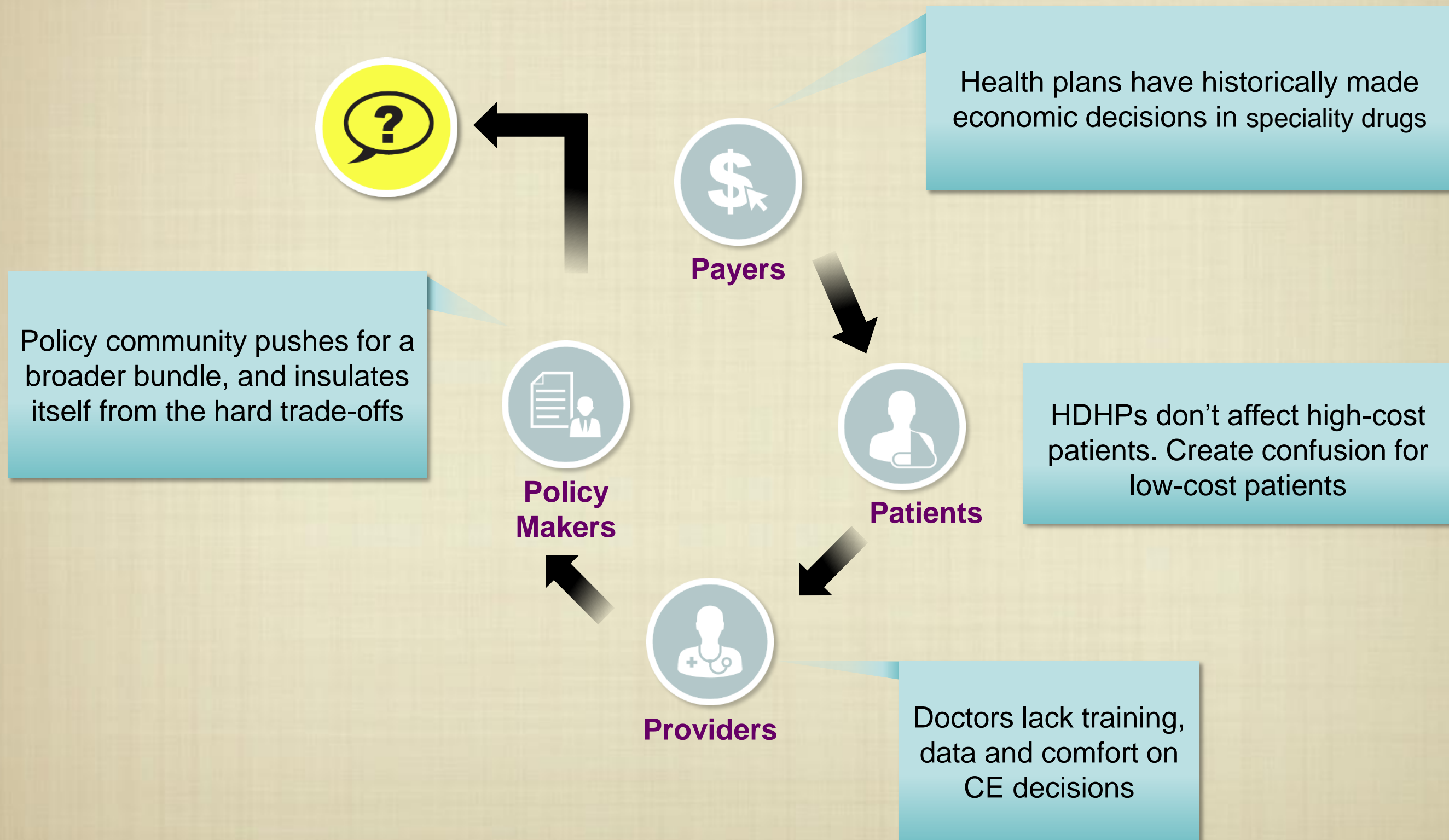
- **ACA will increase innovation and Prices**
 - Expanded Market-Size
 - Medicaid Rebates
 - reforms increase value of insurance
- **Personalized Medicine increases Arrival of High Priced Rx**
 - Targeted Therapies= higher Efficacy
 - Orphan Rx get 7 yrs of exclusivity
- **21st Century Cures Act will increase innovation**
 - Easier for FDA to approve on surrogate-endpoints

**Monthly and Median Costs of Cancer Drugs at the Time of FDA Approval
1965 - 2014**



Source: Peter B. Bach, MD, Memorial Sloan-Kettering Cancer Center

Unprepared for Difficult Choices



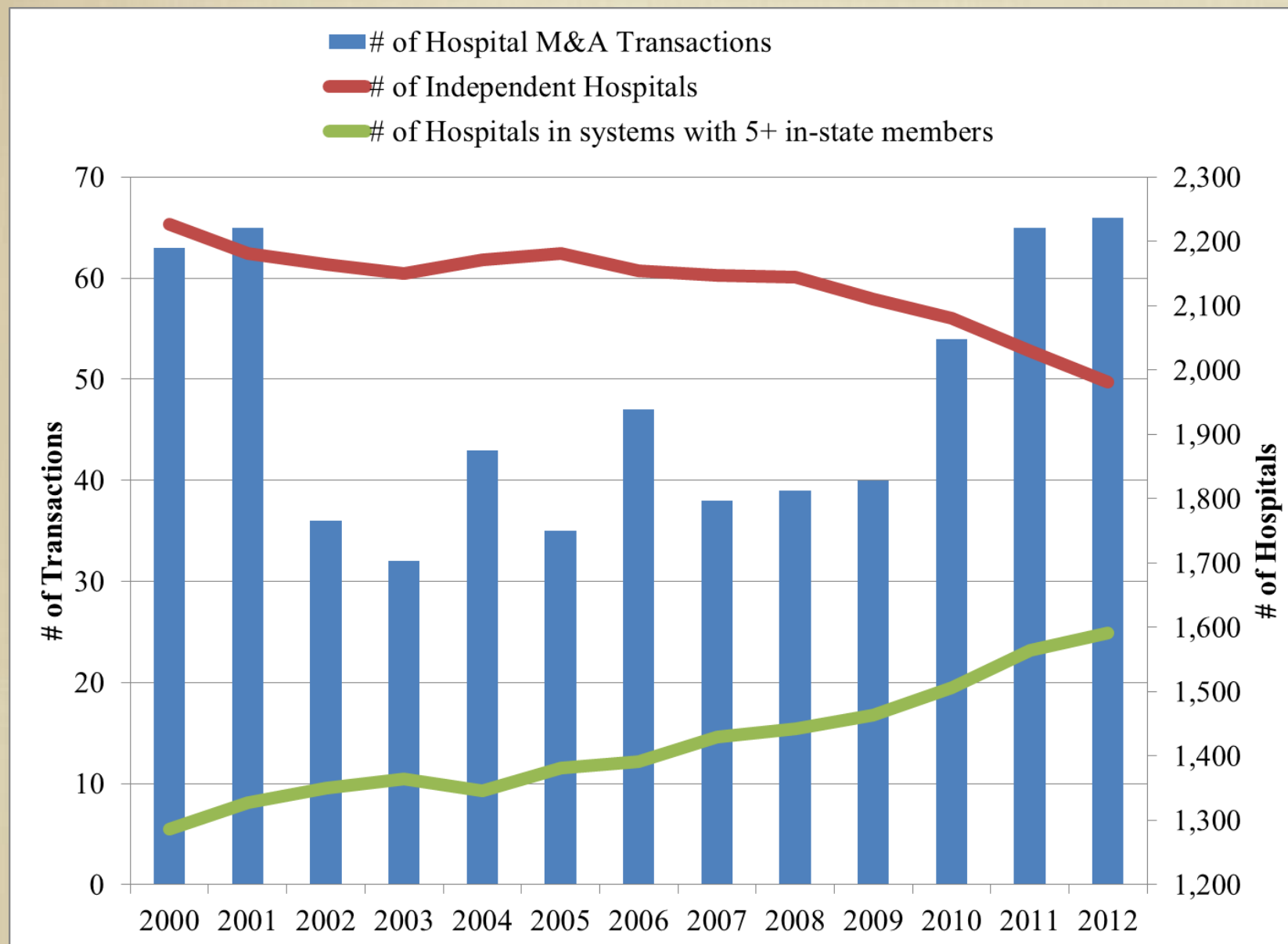
Takeaways

- Innovation responds to market size— future bodes more innovation
- States are unlikely to affect innovation in Rx or Tx
- But can lead on every other form of reform!

Opportunities

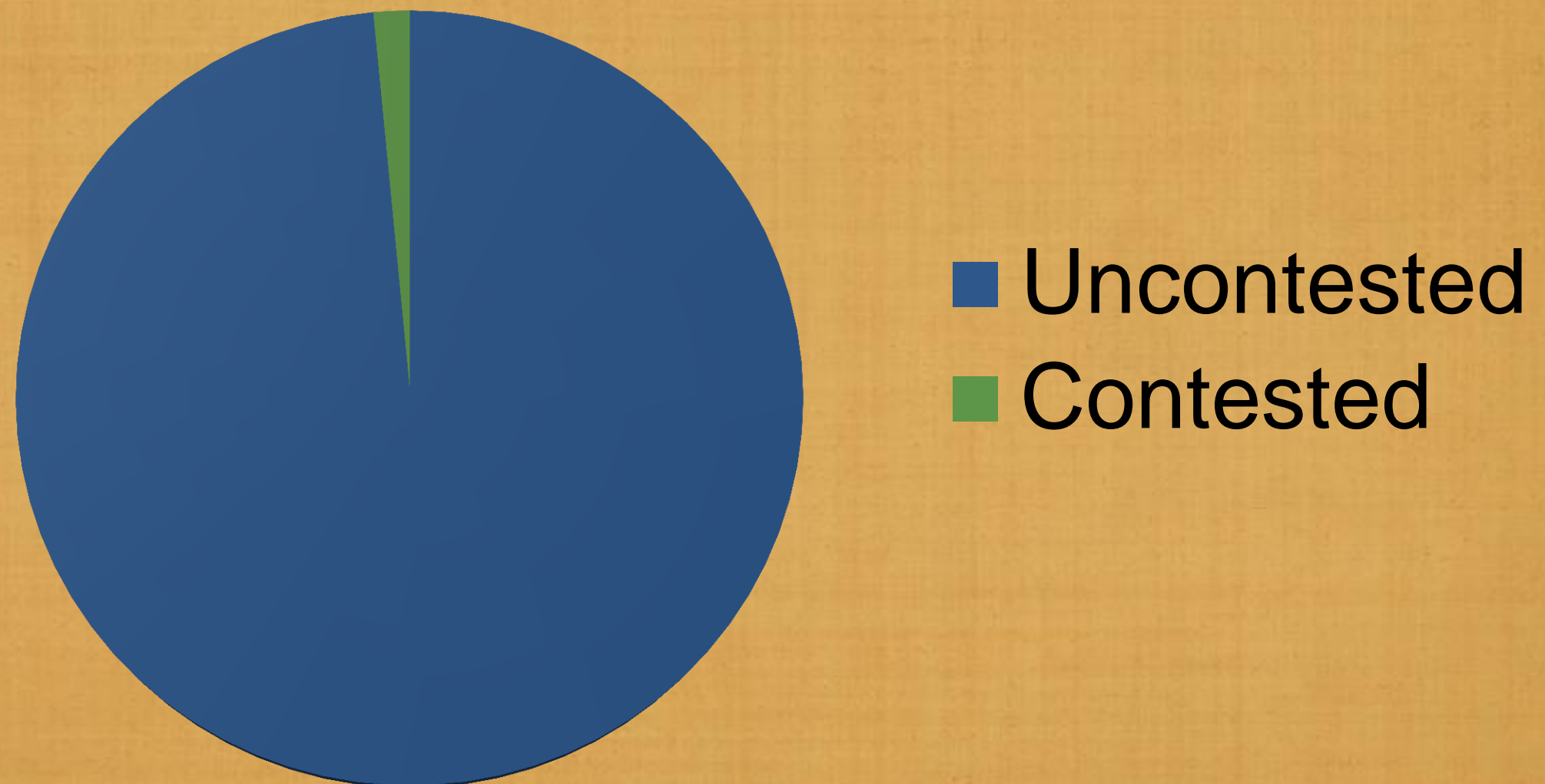
- Competition— in provider markets and in insurance markets

Hospital M&A Overtime



FTC DOES NOT CONTEST MOST MERGERS

General Acute Care Hospital Mergers in
2013



Anthem®



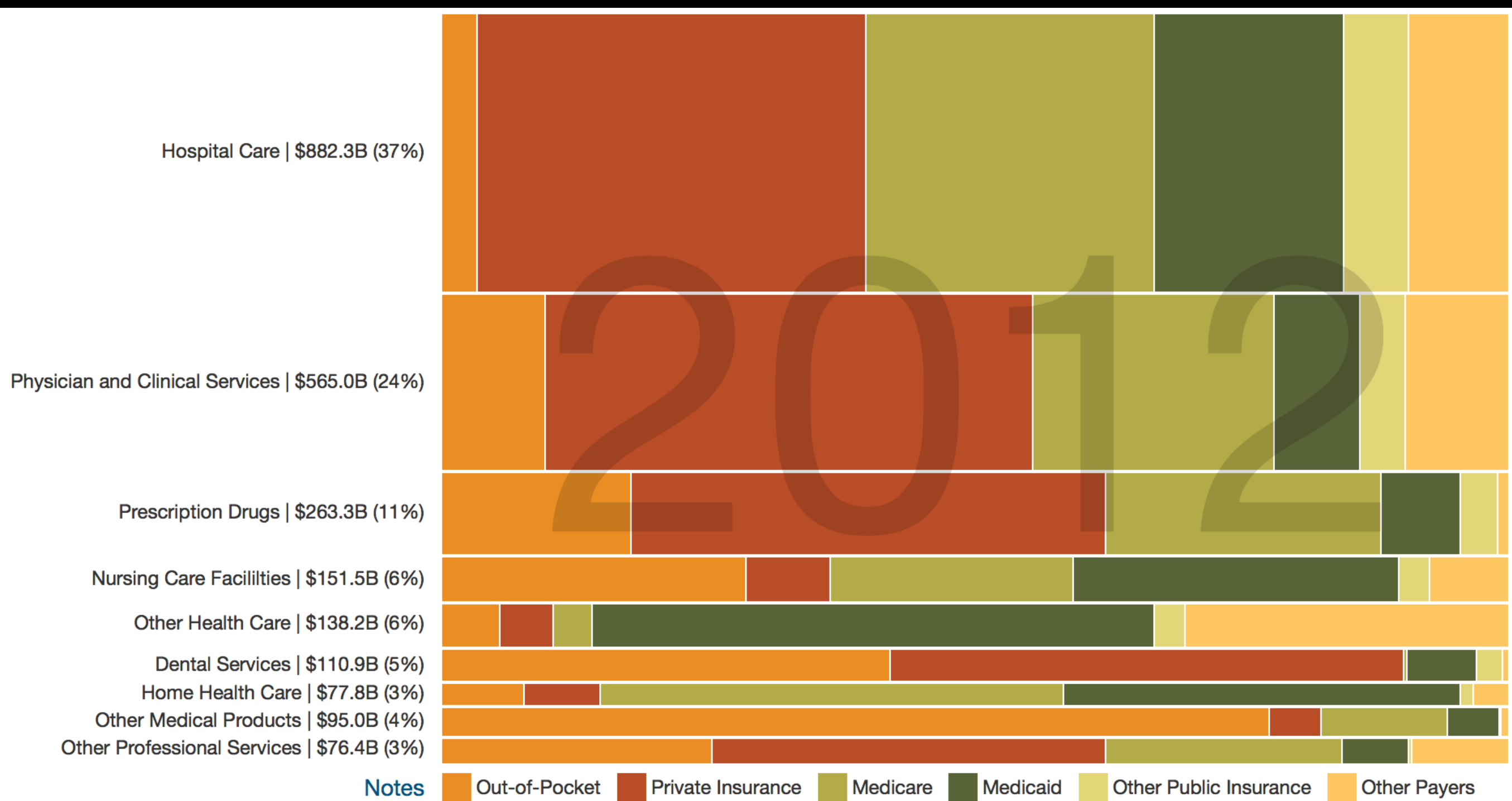
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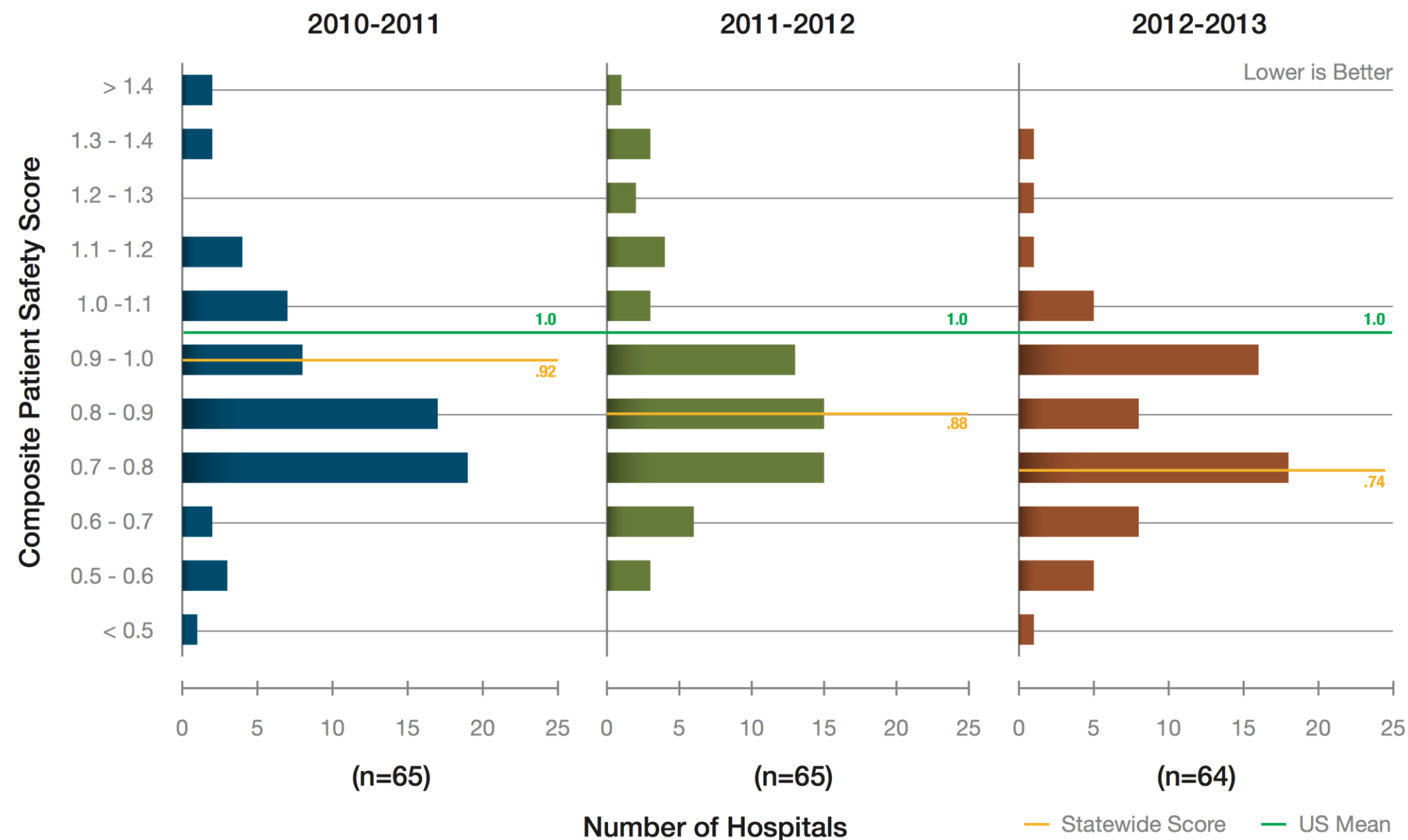
Humana®

Opportunities

- Competition— in provider markets and in insurance markets.
- Because of CHIA , encourage MassHealth and GIC to move to full risk-contracts (including Rx) and bundled payments



The Massachusetts state average declined by 18 points over three years.



Source: CHIA Hospital Discharge Database | Note: All Payers, Age 18+

Provider decision making: Implications of for oncology drugs



Five oncology groups participated from 2009-12, all patients with breast, colon and lung cancer—1,024 patients in all

Identified 19 different “episodes” based on tumor site, stage, HER2 status, whether chemo is used, etc.

Each group selected a single chemo regimen for each adjuvant therapy episode “on the basis of their interpretation of the medical literature”

Practice receives an episode payment at initial visit to cover 4-12 months of treatment, depending on episode

Episode payments covered chemo drugs (based on the practice-selected regimen) **at acquisition cost**

Eliminated incentive for providers to choose more expensive therapies simply because they are more profitable

Results of United experiment: Compared to FFS



Total medical costs

Decreased
by
34%

(\$33M vs. \$98M)



Chemotherapy drug costs

Increased
by
179%

(\$8M vs. \$21M)

Study not powered to determine which costs drove the decline in total medical costs, but some evidence suggests declines in hospitalizations and therapeutic radiology use

Sample size insufficient to evaluate survival or most other quality impacts

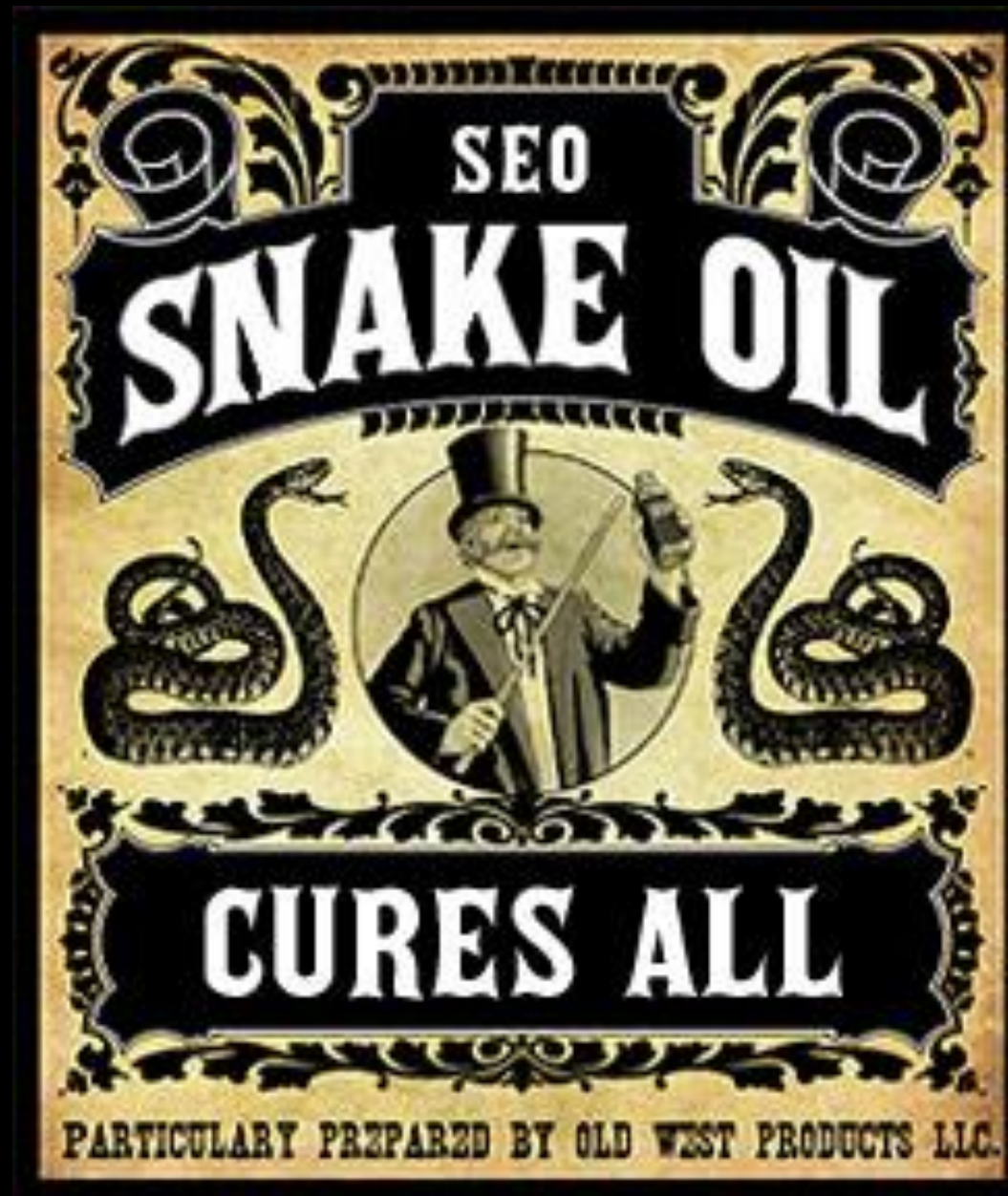
Opportunities

- Competition— in provider markets and in insurance markets.
- Because of CHIA , encourage MassHealth and GIC to move to full risk-contracts including Rx.
- Explore moving MassHealth to a PBM managed formulary (perhaps better than bulk-purchasing)

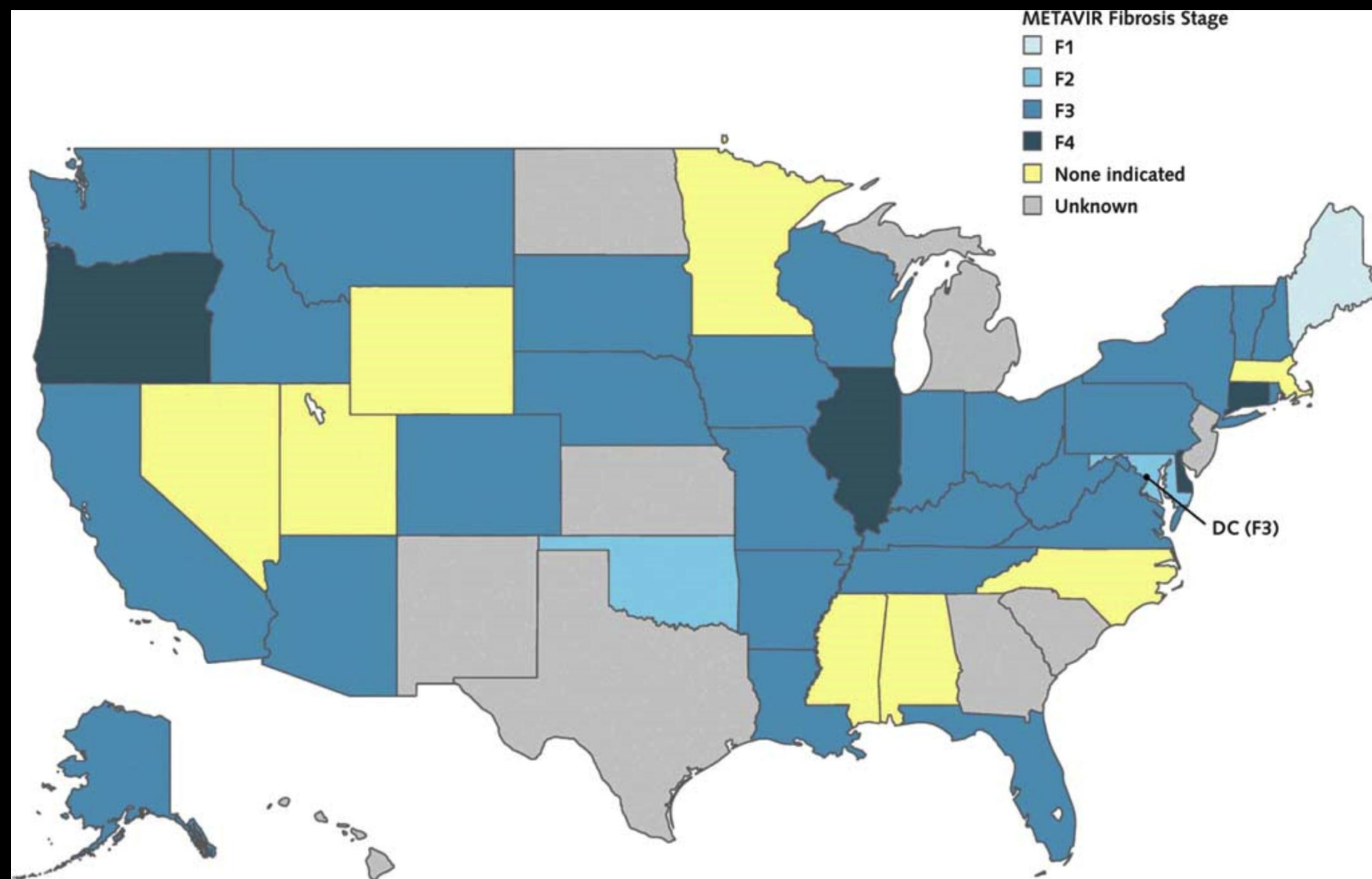
Opportunities

- Competition— in provider markets and in insurance markets.
- Because of CHIA , encourage MassHealth and GIC to move to full risk-contracts including Rx.
- Explore moving MassHealth to a PBM managed formulary (perhaps better than bulk-purchasing?)
- Examine novel pricing arrangements with Massachusetts providers— drug licenses and drug-warranties.

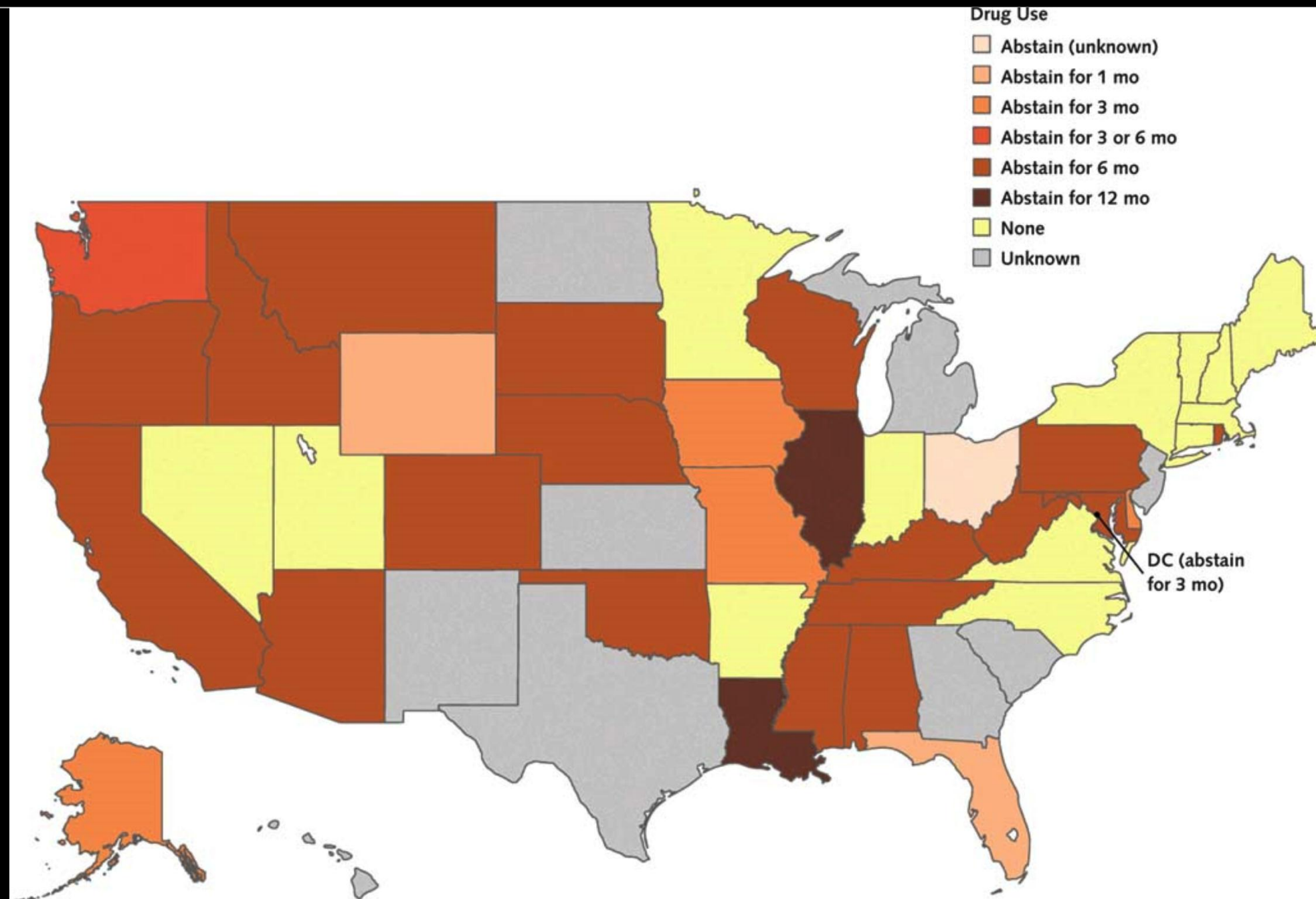
Cautions



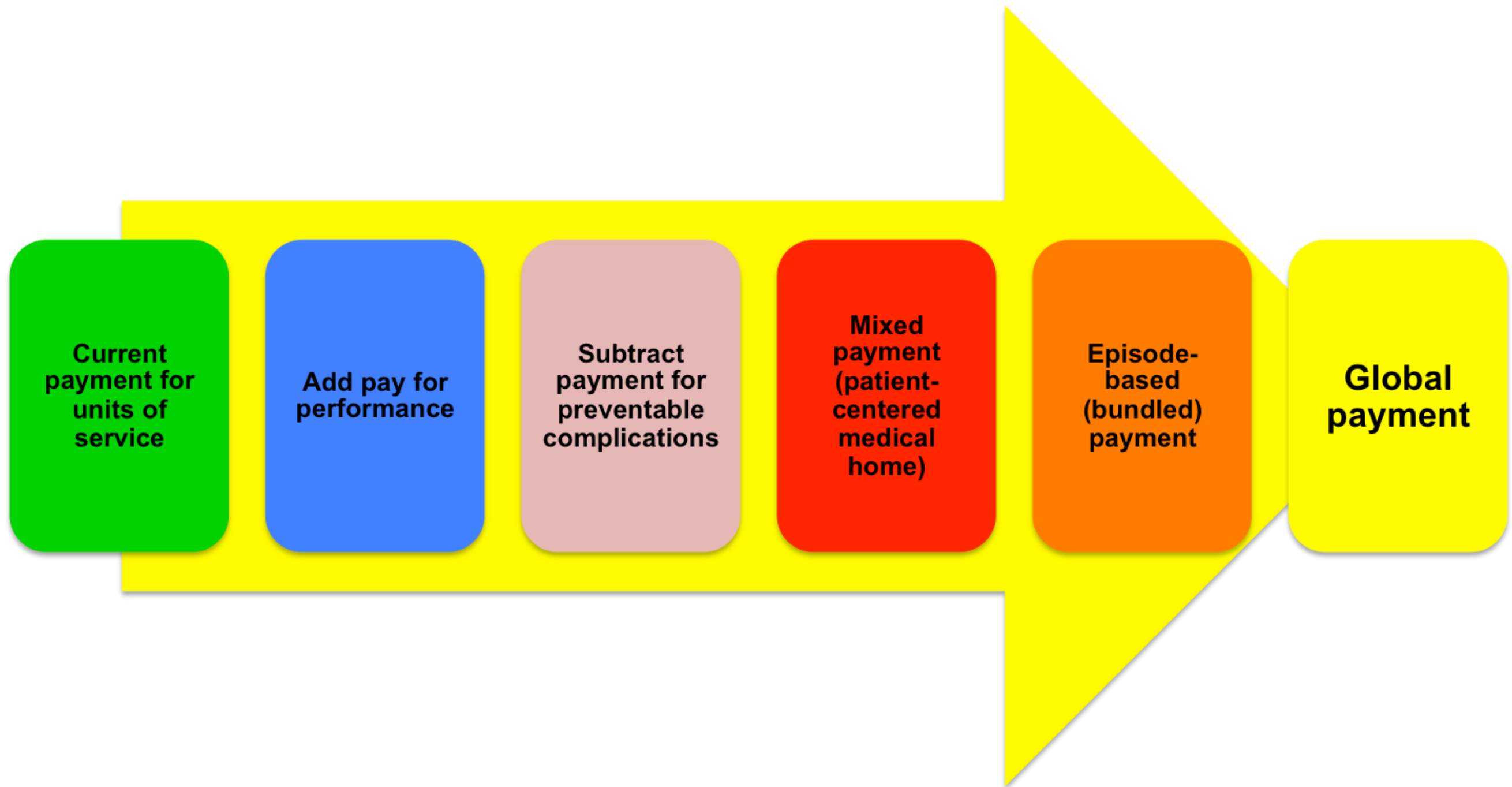
Restrictions for Medicaid Reimbursement of Sofosbuvir for the Treatment of Hepatitis C Virus Infection

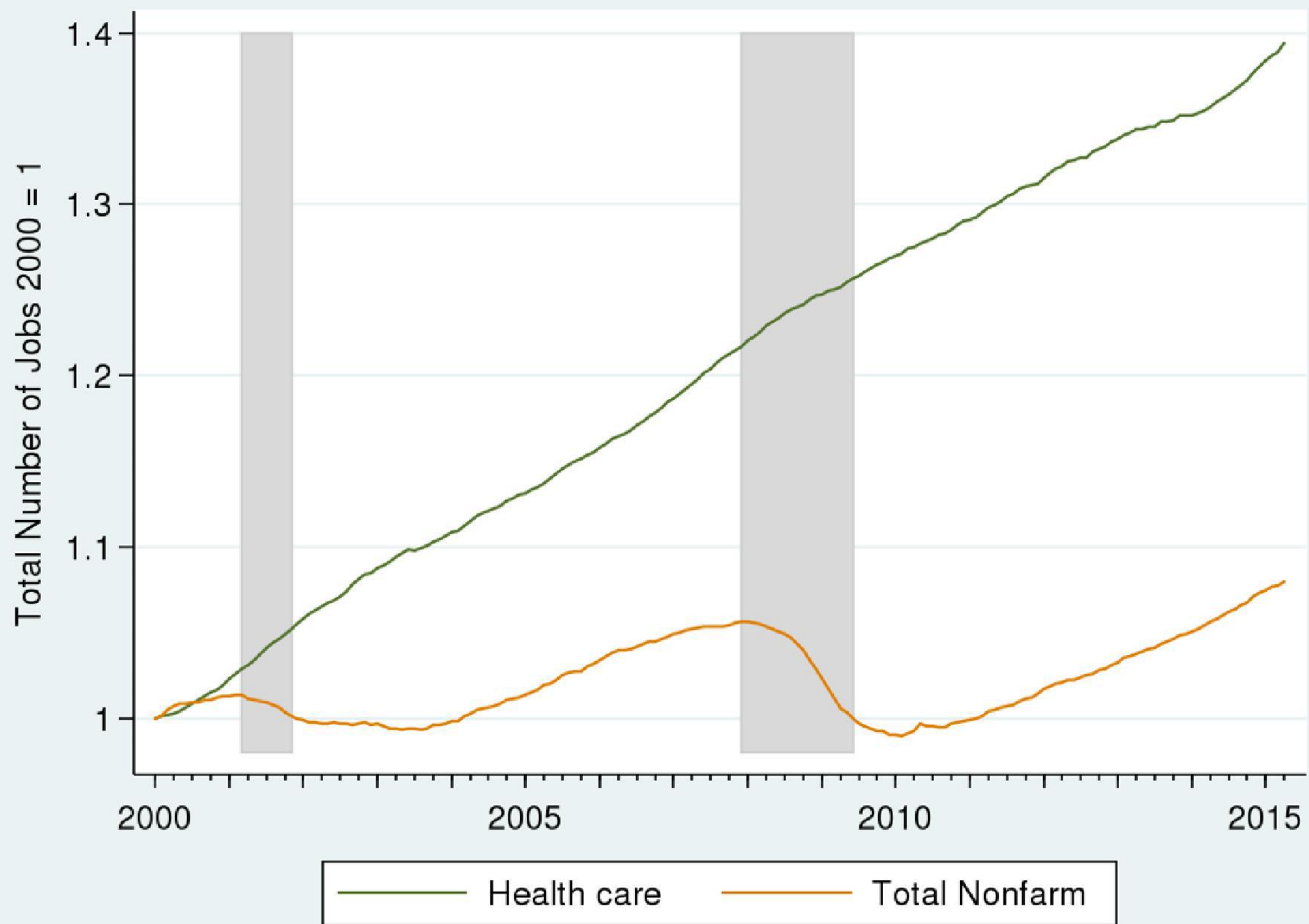


Restrictions for Medicaid Reimbursement of Sofosbuvir for the Treatment of Hepatitis C Virus Infection



Spectrum of provider payment





Healthcare Growth= GDP Growth + 2.4%

