Narrow Provider Networks

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Introduction

- Affordable Care Act (2010) overhauled US health care system
  - Individual and employer mandates, subsidies, exchanges
  - Adult uninsured rate fell from 20% to 13%, 2013-2015
  - 16.4 million formerly uninsured gained coverage
  - Plans' ability to risk-select, exclude benefits highly constrained by regulation
- Issue: insurers also under pressure to control health care costs
  - Experimenting with plan designs that make this possible
  - In employer-sponsored market and on exchanges
- "Narrow network" plans exclude high-priced hospitals
  - Enrollees cannot go out-of-network - or pay much higher prices if they do
  - Effective method to steer enrollees to low-cost providers
- What are the *implications for inequality and welfare*?
- How to assess the *effects of different regulatory approaches*?

Example: Cancer Centers on the Exchanges

- *"Many top cancer centers aren't available to Americans signing up for Obamacare" --- usnews.com, March 2014*
  - AP survey: only 4 of 19 comprehensive cancer centers offered by all insurers on state exchanges in 2014
    - Seattle Cancer Care Alliance dropped by 5 of 8 WA exchange plans
    - Memorial Sloan-Kettering included by 2 of 9 plans in NY
  - February 2015 survey: somewhat better, high variation
    - 25% of centers still excluded by "most of their state's exchange carriers"
  - Memorial Sloan-Kettering excluded by all NY exchange plans in 2016.
- Implications for inequality and welfare
  - Employed consumers enrolled through employer are likely to have access to specialized providers; those on exchange may not
  - Welfare implications *may* be large.

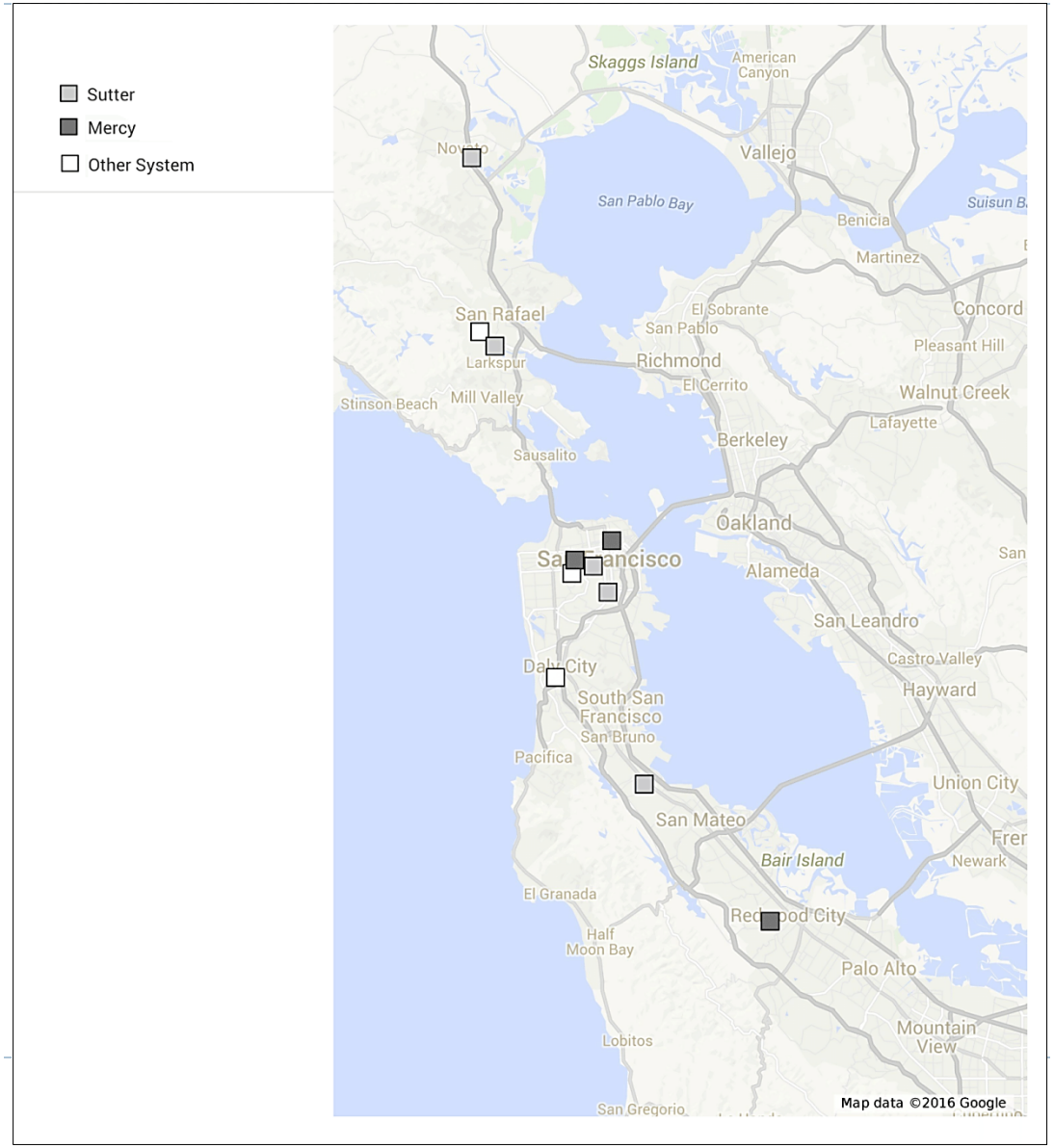
Example: Employer-Sponsored Insurance

- California Public Employees' Retirement System (CalPERS)
  - Manages health benefits for CA state and public employees
  - Offers PPO plan from BC; BS HMO; Kaiser Permanente HMO
  - 2005: BS excluded 28 hospitals including several major providers
    - Large effect on networks in Sacramento, Greater Bay Area

- Implications for inequality and access?
  - *Feasible* to switch to broader plans, access dropped providers

- Issue: heterogeneous willingness-to-pay for broad network
  - Based on severity, past hospital experience (Shepard 2015)
  - Lower-income consumers most premium-sensitive (Ho & Lee 2016)
  - ⟹ Low-income, sick consumers likely most harmed.

CalPERS' Blue Shield Network, West Bay Area



Approaches to Regulation

- Exchange plan networks constrained by federal regulations
  - Qualitative standards
  - Reasonable and timely access to a broad range of providers
  - Services accessible without unreasonable delay

- States have flexibility re: exact standards, implementation
  - 23 states: quantitative standards based on travel time (NJ, NY, CA)
  - Some include wait times, provider to enrollee ratios (CA, IL)
  - Others have qualitative standards only (MD, KS)

- Some states actively regulate *employer*-sponsored plans:
  - CA Dept of Managed Health Care vetted CalPERS' proposal
  - Several hospitals required to be re-instated
  - Largely small community hospitals, relatively isolated counties.

Approaches to Regulation, cntd.

- Existing approaches are based on *access* not *preferences*
  - Ignore potential loss to consumers from losing access to particular hospitals, provided they can still be served by others

- Related issue on exchanges: "must-carry providers"
  - Seattle Children's Hospital claimed Essential Community Provider status
  - Health insurers excluding it failed to meet network adequacy standards
  - Case dropped for technical reasons
  - Should we measure and account for patient preferences over hospitals? (Ho 2006)

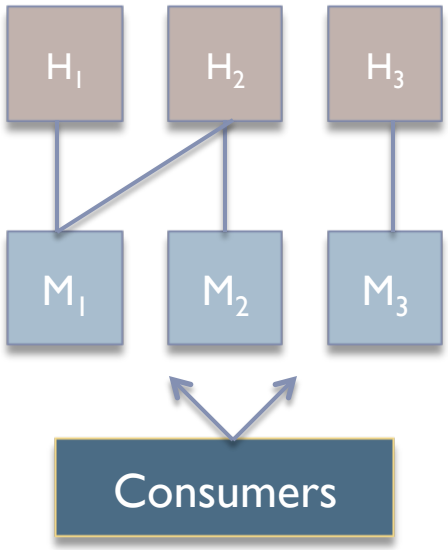
- Potential implications for insurer-hospital price negotiations
  - "Must carry" status ⇒ reduced insurer bargaining leverage, higher prices.

An Agenda for Market Design

How to assess ideal market design for network adequacy?

- Examples: question re accounting for consumer preferences
  - Trade-off between *access* to hospitals and negotiated prices
- To correctly account for these trade-offs we need a model
  - Predict how insurers, providers and consumers would respond
  - Obtain measures of consumer surplus and firm profits
- Tools from Industrial Organization are valuable here
  - Insurance product characteristics are equilibrium objects
  - Determined through insurer-provider and insurer-employer negotiations, conditional on consumer preferences
  - Model in Ho and Lee (2016) accounts for these issues.

Model: (Simplified) Timing & Setup



1. (a) Hospitals and insurers **bargain** over prices
   (b) Insurers **bargain** with employer over **premiums**
2. Households **choose insurer**
3. Individuals become sick with some probability; **choose an in-network hospital**

- Insurers differentiated by networks, premium and "quality"
- Hospitals differ by distance, quality, fit of services to diagnosis

Model: Network Determination

- Objective Functions
  - Insurer and hospital: profits
  - Employer: employee surplus; cost of subsidizing premiums
- Insurer-employer negotiation ⇒ trade-off between higher plan "quality" and lower premiums
  - Broader network means higher employee welfare, higher premiums
  - Constrained by employer bargaining leverage
- When will the insurer add a high-quality hospital?
  - If it makes the plan more attractive to employers and consumers, implying higher revenues (higher premiums or enrollees)
  - Provided increased revenues sufficient to outweigh the costs.

Incentives for Narrow Networks

- Market characterized by limited patient cost-sharing
  - Co-insurance rates often low
  - Few other levers to steer consumers to particular providers
- High-priced hospital is costly to insurer for 2 reasons
  - May attract sicker enrollees into the plan
  - Increase costs of existing enrollees (Shepard 2016)
- Both factors may cause insurers to exclude hospitals.

Is Network Regulation Needed?

- Narrow networks not always inappropriate
  - Differentially impact consumers, implications for inequality, ***but***
  - Incremental costs of care for a particular hospital may outweigh the benefit to consumers from adding it
- CalPERS' Blue Shield network may be an example
  - 44% of 33,500 affected enrollees in Sacramento switched plans
  - But only half paid (~$350) extra premiums for broad PPO
- Network regulation may be unnecessary in this case

Is Network Regulation Needed? Cntd.

- But equilibrium networks may be inefficiently narrow
- Simple example: pediatric hospital.
  - Families with young children willing to pay high premium for access
  - Those with older children may not.
- Absent ability to set higher premium to some families, insurer may exclude the hospital
  - Even though every patient who might use it would receive a benefit greater than its cost.
- Issue: insurer caters to the marginal consumer; social benefits correspond to the average consumer (Spence 1975)
  - Consumer preference heterogeneity and inability to price discriminate
  - Equilibrium differs from social optimum
  - Network regulation may be appropriate in this case.

A Research Agenda

- Regulation may be appropriate in some cases, not others
  - Depends on consumer preference heterogeneity
  - Characteristic distribution of hospitals in the market
  - Insurer ability to price discriminate
  - Nature of price and premium negotiations…
- A careful model is needed to assess benefits and risks of potential regulatory schemes
  - Effects on **networks, prices/premiums** and on **consumer choices**
- Obvious initial market design to assess:
  - Flexible scheme like existing time/distance standards
  - Allow insurers to trade off consumer utility and costs, account for consumer preferences, negotiate prices
  - Transparency requirements very important.

A Research Agenda, cntd.

- Other possible approaches:
  - Must-carry providers potentially very problematic
    - Ensures access to centers of excellence
    - BUT removes credible threat of exclusion, expect **high prices**
  - Other ways to provide incentives to offer centers of excellence?
  - Possibilities: tiered plans; multiple plans with different networks
    - Reduce exclusion incentives by allowing price discrimination
    - Likely to imply broader networks; welfare and inequality unclear.
- We are working to develop a framework to evaluate these approaches...

Other Market Design Issues in US Health Care

- Price-linked subsidies on exchanges generate incentives for higher prices (Jaffe and Shepard 2016, Tebaldi 2016)
- Age-varying subsidies would make consumers better off and reduce public spending per person (Tebaldi 2016)
- Medicare Part D: consumer inertia, and lack of defaults, provides incentives for plan premium increases (Ericson 2012, Ho, Hogan and Scott Morton 2016)
- Medicare Advantage: method to determine premium benchmark generates incentives for plans to increase premium bids (Curto et al 2016)
- Work is ongoing – and more needed – on all these issues.