

# Physician-Owned Hospitals and Self-Referral



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# Outline

- 1. POH business model**
- 2. Effect on expenditures**
- 3. Self-referral**

# 1. POH/specialty business model

- Consumer demand
- Procedural margins
- Clinical efficiencies
- Economies of scale
- Economies of scope
- Competencies & learning

## 2. Effects on expenditures

- Can the government bail out Wall Street by limiting the operations of POHs?
- Conventional wisdom is that POHs engage in “supplier induced demand” (SID) more than their non-POH counterparts.
- The evidence of SID-type effects is mixed

# Expenditure studies

- Studies:

- MedPAC (2006): cardiac; 6% increase in expenditures
- Barro et al. (2006): cardiac; 3% reduction in expenditures
- Nallamothu (2007): cardiac; higher growth rates in markets with cardiac SHs.
- Mitchell, in several studies, found higher growth rates in markets with SHs.
- GAO and CMS found little impact of SHs on GHs

- Limitations:

- Mainly cardiac
- Endogenous market entry
- Imprecise measurements of physician ownership
  - Not all specialty hospitals are physician-owned, and ownership levels vary by hospital
- Theory or mechanism has not been adequately explored
  - Does a 5% ownership stake provide a different volume incentive than intermediate forms of physician-hospital integration, such as medical directorships, call coverage, gainsharing, & joint ventures

# POH Exp. Effect: Panel Data IV model

- Data

- Medicare A&B per capita costs by county and MSA
- POH date and location of market entry
- Covariates from AHA and ARF (CMI, HHI, MDs/pop, Beds/pop)

- Methods

- Panel data (8 yrs) with fixed area effects.
- We assume endogenous market entry, so we use instrumental variables for POH entry (pop density and per capita income performed well)

# Effects on Medicare expenditures

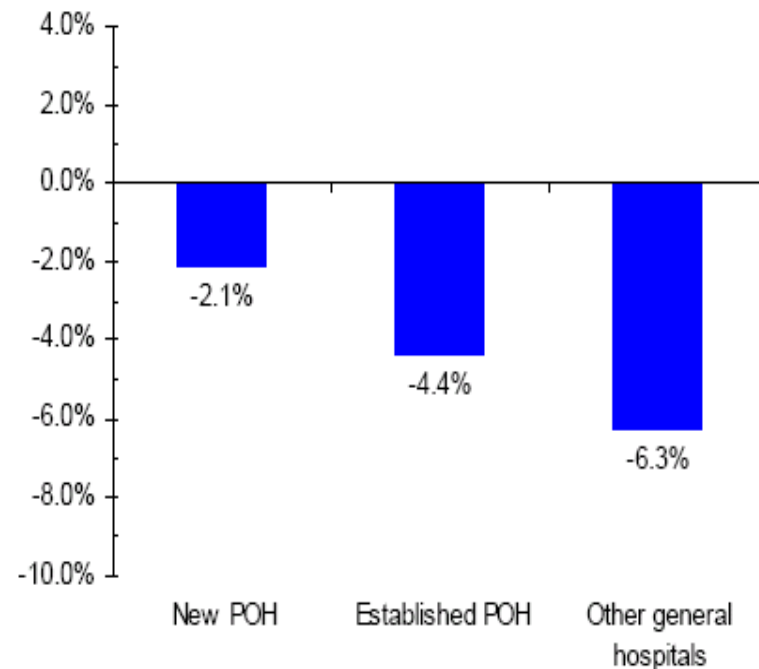
Results of MSA-level Fixed Effects Models on Total Medicare Expenditures Per Enrollee

Variable (a)	(1) (b)	<i>p</i>		(2) (c)	<i>p</i>	
Physician-owned hospital in area	-0.01151	0.118		-0.07840	0.433	
CMS composite risk score	0.32941	0.000	**	0.33686	0.000	**
Physicians/10k population	-0.00532	0.001	**	-0.00529	0.001	**
Surgeons/10k population	0.00103	0.039	**	0.00104	0.038	**
Beds/1k population	0.00201	0.010	**	0.00198	0.012	**
Acute care hospital HHI	0.00149	0.309		0.00142	0.335	
% Medicare managed care	0.00014	0.285		0.00013	0.315	
% 25+ with ≤ 9 years education	0.00738	0.078	*	0.00600	0.200	
% 25+ with ≥ high school	0.06378	0.004	**	0.06250	0.005	**
% 25+ with ≥ 4 years college	-0.00307	0.408		-0.00399	0.316	
% unemployed	0.03543	0.000	**	0.03495	0.000	**
% below poverty	-0.00661	0.536		-0.00533	0.625	
Number of observations	7,504			7,504		
Number of groups	938			938		
R-squared	0.80			0.80		
Overall F	1364.27	0.000	**	1347.20	0.000	**
First stage F				18.02	0.000	**

# Why?

1. POH ownership incentive may not necessarily be stronger than the intermediate forms of linkage
2. Competition may lower costs of established rivals (Schneider et al 2007 *Inquiry*)
3. Shuffling of cases (i.e., number of surgeries remains the same, but some go to POH post entry)
4. POHs typically represent only 5% or so of the total bed capacity in a market area.

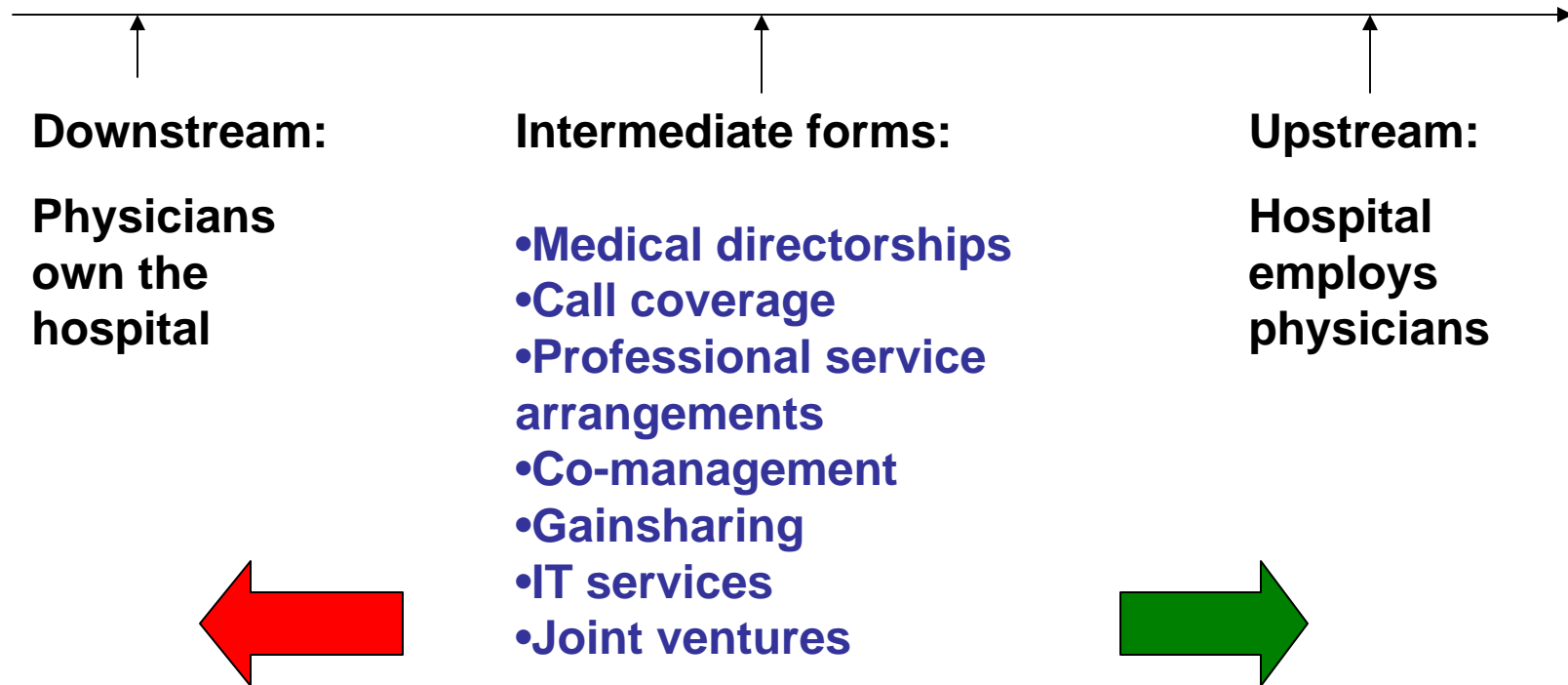
SH Effect on GH Operating Costs



# 3. Self-Referral

- The physician-hospital relationship is rife with hazards, most of which stem from bilateral dependence combined with monetary limits on hazard mitigation
  - Physician ownership of hospitals is an example of forward (downstream) integration, and is a response to those hazards
  - Hospitals employing physicians is an example of backward (upstream) integration
- Many other forms lie in between

# Hospital-Physician Continuum



# Policy Issues

- Evidence on physician ownership of hospitals is mixed— more research is needed
- POHs appear to provide high quality, mainly through higher service volume.
- Overall assessments should examine net effects of quality (+), market-level competition effects (+), volume changes (+/-), and access changes.