Regulating Supply in an Era of Increased Demand: Nursing Scope of Practice and Patient Access to Care

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Overview of the Webinar

1. Why scope of practice matters today and what we know about it so far

2. Review a recent paper in collaboration with Daniel Polsky

3. Provide a quick summary of a related working paper with Alice Chen and Charu Gupta

Why Now?

US Health Care is Changing

1. More insured population → more demand for care

2. New payment models and pressures

Short-Run Supply is Inelastic

Conceptualizing Scope of Practice

From Dower, Moore, and Langelier (2013)

Two Forms:

1. Professional scope of practice

2. Legal scope of practice

- State and federal laws affect 3 domains of care
- Level of restrictiveness varies widely across states

What We Know About NPCs

1. More patients are receiving care from NPCs (Kuo et al. 2013)

2. Consumers tend to react favorably, esp. if it reduces delays (Dill et al. 2013)

3. Quality of care is on par with physicians and patients report high levels of satisfaction (Jennings et al. 2015; Kleiner et al. 2011; Laurant et al. 2008; Lenz et al. 2004; Mundinger et al. 2000; Newhouse et al. 2011; Wright et al. 2011)

What We Know About SOP

Lighter regulation is associated with:

1. More NPCs available (Sekscenski et al. 1994; Kuo et al. 2013; Reagan and Salsberry 2013; Xue et al. 2016)
2. More care delivered by NPCs (Adams et al. 2003; Xue et al. 2016; Wing and Marier 2014)
3. Lower costs of care (Kleiner et al. 2014; Spetz et al. 2013; Wing and Marier 2014)

What Is Less Clear About SOP

Does it matter for Medicaid Patient Access?

Main Paper for Today

"Influence of Provider Mix and Regulation on Primary Care Services Supplied to US Patients"

Michael R Richards (Vanderbilt)

Daniel Polsky (U Penn)

Health Economics, Policy and Law (2016), 11(2): 193-213

Our Key Questions

1. Are primary care physician practices with diverse clinical staff more likely to take new Medicaid patients?

2. Does the relationship vary by scope of practice environment?

How We Went About It

Data from a large field experiment conducted in 2012-13

1. Collaboration between U Penn, Urban Institute, U of C Survey Lab

2. Aiming to track primary care new patient appointment availability across 10 states

3. Generously funded by the Robert Wood Johnson Foundation

How We Went About It

Overview of audit ("secret shopper") experiment

1. Sampling frame of all physician offices delivering adult primary care in 10 states

2. Trained callers would contact a randomly drawn practice and be part of one of three insurance types (i.e., private, Medicaid, or self-pay)

3. Callers then recorded if they succeeded in receiving a new patient appointment, and if so, when it was to occur

How We Went About It

Conceptually

1. Want to compare physician practices in the same state that differ by the presence or absence of NPCs and see how that correlates with our measure of access

Analytically

1. Look at 3 outcomes: 1) private to Medicaid overall 2) within-clinic disparity 3) visit price for self-pay callers
2. Stratify the states by SOP status
3. Exclude FQHCs and RHCs

Quick Overview of Results

Table 3. OLS regressions for probability of receiving an appointment for all states and by scope of practice environment

	Overall	Liberal SOP	All others
	(1)	(2)	(3)
Medicaid	−0.293 (0.020)***	−0.362 (0.046)***	−0.278 (0.022)***
Self-pay	−0.065 (0.018)***	−0.047 (0.049)	−0.073 (0.019)***
Physician number			
Two to three	0.056 (0.012)***	0.103 (0.025)***	0.044 (0.013)***
Four or more	0.057 (0.020)***	0.086 (0.039)**	0.058 (0.014)***
Two-three × Medicaid	−0.042 (0.025)*	−0.019 (0.054)	−0.048 (0.026)*
Four-plus × Medicaid	−0.033 (0.028)	0.033 (0.045)	−0.076 (0.035)**
Two-three × self-pay	0.007 (0.025)	0.024 (0.056)	0.001 (0.029)
Four-plus × self-pay	−0.011 (0.032)	0.019 (0.059)	−0.032 (0.039)
Any non-physician clinicians	0.038 (0.012)***	0.081 (0.028)***	0.018 (0.012)
NPCs × Medicaid	0.026 (0.020)	0.104 (0.046)**	−0.0003 (0.022)
NPCs × self-pay	0.002 (0.023)	−0.032 (0.048)	0.014 (0.026)
Caller controls	Yes	Yes	Yes
County controls	Yes	Yes	Yes
State fixed effects	Yes -10-	Yes -3-	Yes -7-
	n = 10,034	n = 1731	n = 8303

Quick Overview of Results

Table 4. Probability of a within clinic access difference for Medicaid callers relative to private callers

	Overall	Liberal SOP	All others
	(1)	(2)	(3)
Physician no.			
Two to three	0.003 (0.022)	−0.037 (0.040)	0.011 (0.025)
Four or more	0.008 (0.032)	−0.065 (0.057)	0.047 (0.029)
Any non-physician clinicians	−0.060 (0.022)***	−0.120 (0.037)***	−0.016 (0.022)
Caller controls	Yes	Yes	Yes
County controls	Yes	Yes	Yes
State fixed effects	Yes -10-	Yes -3-	Yes -7-
	$n = 2473$	$n = 551$	$n = 1922$

Quick Overview of Results

Table 5. Provider mix associations with out-of-pocket costs at time of appointment for self-pay (cash) patients

	Overall	Liberal SOP	All others
	(1)	(2)	(3)
Physician no.			
Two to three	2.237 (6.716)	−3.628 (11.733)	4.268 (7.921)
Four or more	1.165 (8.900)	−10.406 (16.046)	3.963 (9.318)
Any non-physician clinicians	−6.045 (6.063)	−28.976 (11.707)***	1.777 (6.647)
Caller controls	Yes	Yes	Yes
County controls	Yes	Yes	Yes
State fixed effects	Yes -10-	Yes -3-	Yes -7-
	$n = 1045$	$n = 244$	$n = 801$

Summary of Findings

1. Having NPCs on staff is associated with better new patient appointment availability for Medicaid patients

2. Also associated with cheaper visits for self-pay patients

3. But these relationships are **only** found in states granting NPs **full** independence

Policy Implications

1. The US is now a more insured population

2. Much of the growth has been through Medicaid expansions

3. In the near-term, we may need a more productive workforce and greater willingness to take on additional Medicaid business

4. Revising scope of practice laws may be an important step

Recent Working Paper

----- *Work in Progress* -----

(Please do not cite at this time)

“Removing Regulatory Barriers in High-Skilled Nurse Labor Markets”

Alice Chen (USC)

Charu Gupta (U Penn)

Michael R Richards (Vanderbilt)

Brief Summary of Findings (Chen, Gupta, and Richards 2016 WP)

1. NPs are a third less likely to be in a part-time position and have increased job mobility

2. NPs also increase their labor supply and enjoy higher pay

3. CRNAs are more likely to move to work in the state and more likely to be in a full-time job

4. For both nursing groups, the policy effects are typically strongest among women and those new to the field

Key Takeaways (Chen, Gupta, and Richards WP 2016)

1. High-skilled Nurses are sensitive to their SOP environment

2. Labor market seems to reward greater independence

Questions?

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