NP and PA Privileging in Acute Care Settings: Do Scope of Practice Laws Matter?

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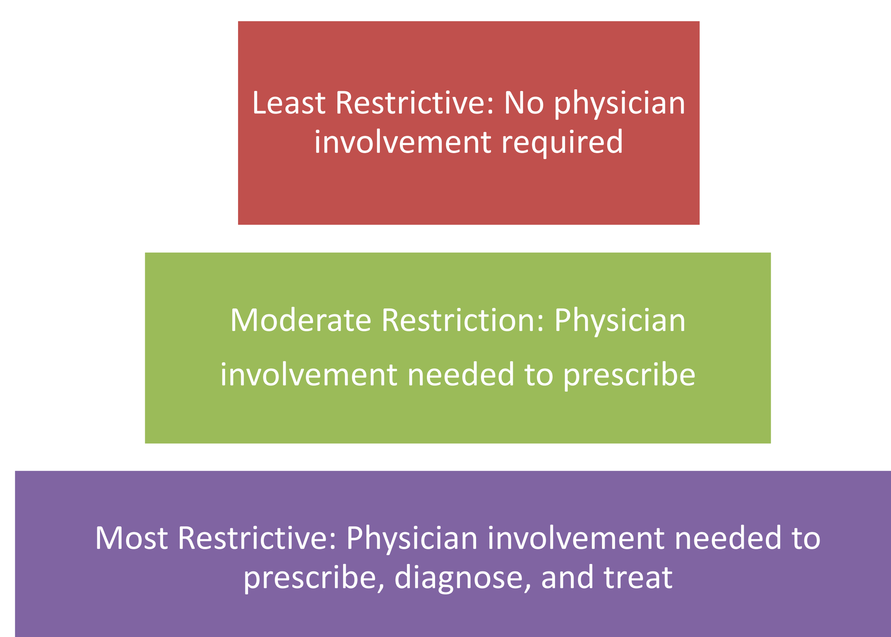
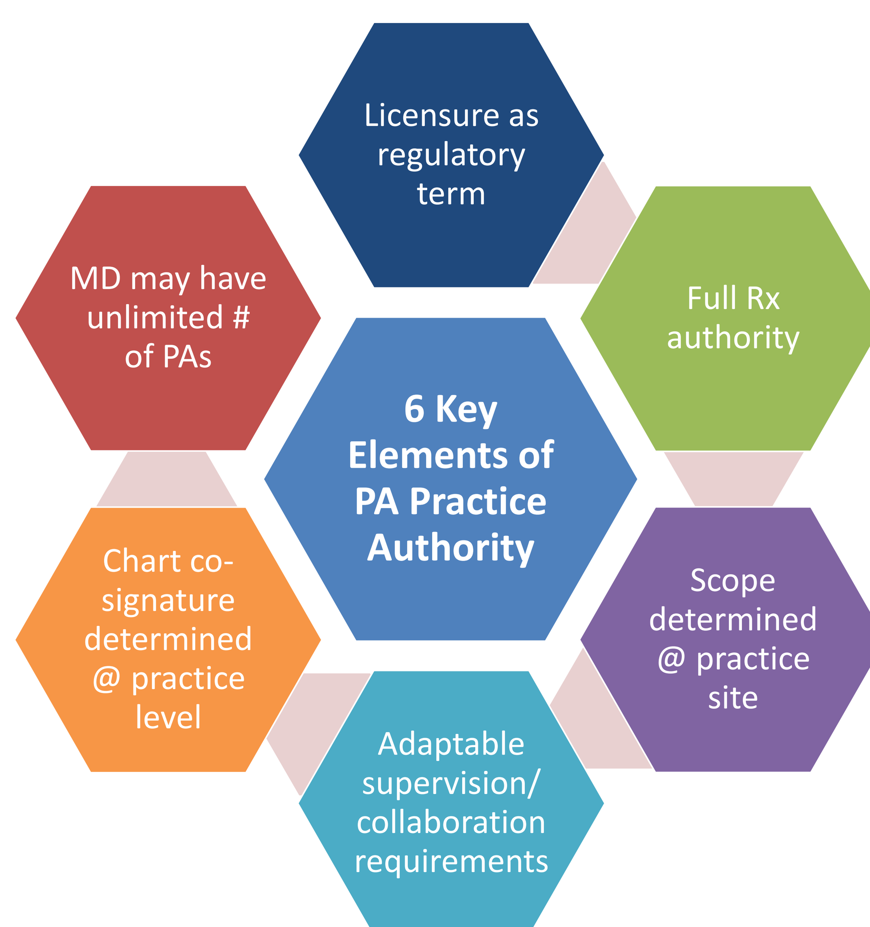
BACKGROUND & OBJECTIVES

- Health care organizations in the United States are responding to growing demand for hospital services with the expanded use of nurse practitioners (NPs) and physician assistants (PAs).
- For hospitals, the evidence supporting privileging of NPs and PAs as a medically safe policy is robust.
- Policy debates on integrating NPs and PAs into the hospital setting have focused on reforming state scope of practice (SOP) laws to allow NPs and PAs to practice at the top of their education, and many states have expanded their SOP laws for NPs and PAs in recent years.
- As more states reform their SOP laws, the question becomes whether healthcare organizations are actually changing the way they use PAs and NPs.

OBJECTIVES & RESEARCH QUESTIONS

- To assesses the extent of variation within hospital medical staffing privileging policies for NPs and PAs in four clinical areas (core clinical privileges, emergency department, cardiology, and orthopedics).
- Are differences associated with state SOP laws for NPs and PAs?
- Are NP and PA privileging policies related to each other?





STUDY DESIGN

SETTING & SAMPLE

Comparison of 213 hospitals in 34 US states

DATA SOURCE

The Center for Advancing Provider Practices (CAP2) 2014 survey of member hospitals on privileging by clinical area.

MAIN OUTCOME MEASURES

For each hospital, we calculated the total number of privileges included on the privilege list for PAs and NPs for each profession in each of four clinical areas. The total possible number of privileges were:

1. Core (general privileges that may apply to all providers)=13
2. Emergency Department=28
3. Cardiology=11
4. Orthopedics=10

MAIN EXPLANATORY MEASURE

Categorical variable measuring SOP Laws by State by Profession

	NP	PA
Least Restrictive (=1)	No physician involvement	5-6 key elements of PA Practice Authority
Moderate Restriction (=2)	Physician needed to prescribe	3-4 key elements of PA Practice Authority
Most Restriction (=3)	Physician needed to prescribe, diagnose and treat	0-2 key elements of PA Practice Authority

ANALYTIC APPROACH

- **ANOVA** to examine difference in mean scores among different levels of the SOP variable in each clinical area for NPs and PAs.
- **Multilevel regression models**, to asses if mean number of privileges for NPs and PAs varies significantly across and within states. Control variables: hospital bed size, ownership type, if teaching hospital, if have magnet recognition status.
- **Multivariate linear regression** to model NP mean privileges in each clinical area as a function of PA mean privileges. Control variables NP/PA SOP, magnet status, teaching status, and ownership type.

RESULTS

Descriptive Analysis of Hospital Privileging and SOP Status, by Profession and Clinical Areas, 2014

	Nurse practitioners					Physician assistants				
State Scope of Practice	N	Mean privileging	SD	% of maximum	p-value	N	Mean privileging	SD	% of maximum	p-value
Core Clinical Area (max.=13)										
Least Restrictive	37	9.08	5.09	70%		117	7.39	5.00	57%	
Moderate Restrictive	119	8.34	4.44	64%	0.522	36	8.08	4.86	62%	0.244
Most Restrictive	47	9.09	4.33	70%		50	8.76	4.63	67%	
Cardiology (max.=28)										
Least Restrictive	37	7.89	9.00	28%		117	7.27	8.26	26%	
Moderate Restrictive	119	7.41	8.53	26%	0.956	36	6.14	7.63	22%	0.584
Most Restrictive	47	7.62	9.01	27%		50	8.04	9.13	29%	
Emergency Department (max.=11)										
Least Restrictive	37	2.24	3.49	20%		117	1.02	2.47	9%	
Moderate Restrictive	119	2.20	3.26	20%	0.891	36	1.83	3.17	17%	0.041
Most Restrictive	47	1.96	2.84	18%		50	2.14	3.22	19%	
Orthopedics (max.=10)										
Least Restrictive	37	1.30	2.38	13%		117	3.34	3.85	33%	
Moderate Restrictive	118	2.13	3.41	21%	0.384	36	3.64	3.57	36%	0.484
Most Restrictive	47	2.11	3.48	21%		49	4.14	4.27	41%	

Multilevel Regression Analysis of Within- and Across-State Variations in Hospital Privileging Scores by Professionals, 2014.

	Core		ED		Card		Ortho	
	PA	NP	PA	NP	PA	NP	PA	NP
	b(se)	b(se)	b(se)	b(se)	b(se)	b(se)	b(se)	b(se)
NP SCOPE OF PRACTICE (reference=most restrictive)								
Least Restrictive	1.58	0.52	4.56*	2.71	0.72	0.76	1.3	0.35
	(1.455)	(0.961)	(1.942)	(2.188)	(0.786)	(0.623)	(1.066)	(0.643)
Moderate Restrictive	1.03	-0.36	4.76	2.31	0.82	0.59	1.75	1.37
	(1.319)	(0.719)	(2.644)	(1.988)	(0.810)	(0.537)	(1.090)	(0.727)
PA SCOPE OF PRACTICE (reference=most restrictive)								
Least Restrictive	0.66	-1.16	2.98	-0.47	-0.11	-0.38	0.19	0.75
	(1.396)	(0.853)	(3.020)	(1.787)	(0.822)	(0.474)	(1.003)	(0.793)
Moderate Restrictive	-0.25	-0.81	-2.87	-1.65	-0.59	0.2	-0.48	-0.19
	(1.487)	(1.287)	(2.031)	(1.973)	(0.736)	(0.720)	(0.914)	(0.748)
WITHIN AND CROSS STATE VARIATION								
Across state variations	4.24*	0.00	12.18***	2.81	0.86	0.00	1.06	0.62
	(2.896)	0.000	(6.383)	(3.229)	(0.832)	0.000	(0.599)	(0.520)
Within state variations	18.09***	18.52***	53.02***	64.32***	7.12***	8.97***	11.99***	8.01***
	(1.730)	(1.623)	(7.383)	(9.187)	(1.634)	(1.147)	(1.310)	(0.998)
N	186	186	186	186	186	186	186	186

Note: Standard errors used robust function. * p<0.05 ** p<0.01 *** p<0.001
Control variables included in the model but not shown due to space limitations: hospital size (small, medium, large), if have magnet recognition status, if a teaching hospital, if for-profit hospital, if non-profit hospital, if government owned hospital.

Multivariate Regression Results of the Association Between NP and PA Privileging by Clinical Areas, 2014

	NP Privileging			
	Core	ED	Card	Ortho
	b(se)	b(se)	b(se)	b(se)
PA Privileging	0.70***	0.55***	0.75***	0.51***
	(0.086)	(0.113)	(0.055)	(0.081)
NP SCOPE OF PRACTICE (reference=most restrictive)				
Least Restrictive	0.63	1.15	0.19	-1.92*
	(0.516)	(1.978)	(0.794)	(0.788)
Moderate Restrictive	-0.11	1.46	0.74	-0.03
	(0.611)	(1.564)	(0.506)	(0.699)
PA SCOPE OF PRACTICE (reference=most restrictive)				
Least Restrictive	0.17	-2.65	0.2	-0.4
	(0.621)	(1.454)	(0.616)	(0.719)
Moderate Restrictive	0.45	-0.38	0.9	-0.36
	(0.594)	(1.591)	(0.885)	(0.801)
N	185	185	185	185
r2_a	0.612	0.401	0.469	0.383

Note: All models were weighted by hospital size as measured by number of beds. Standard errors were clustered by hospital. * p<0.05 ** p<0.01 *** p<0.001
Control variables included in the model but not shown due to space limitations: if have magnet recognition status, if a teaching hospital, if for-profit hospital, if non-profit hospital, if government owned hospital.

DICSUSSION & POLICY IMPLICATIONS

- **There is no evidence that SOP laws are associated with privileging policies.**
- There is wide variation in hospital privileging policies for NPs and PAs across hospitals.
- Within hospitals, NPs and PAs are treated similarly.
- Efforts to expand NP and PA privileging practices should addressed jointly, given their close linkage.
- Efforts to better utilize NPs and PAs within hospitals should focus on technical assistance that educates hospital boards, credentialing committees, and medical staffs about the practice of NPs and PAs, and encourages them to involve more NPs and PAs on hospital and medical staff committees.