

## Nurse Practitioners: A Solution to America's Primary Care Crisis

2019 OAAPN Statewide Conference  
October 25, 2019

Peter I. Buerhaus PhD, RN, FAAN, FAANP(h)

Professor of Nursing, and Director  
Center for Interdisciplinary Health  
Workforce Studies  
College of Nursing, Montana State University  
<http://healthworkforcestudies.com>

## Agenda

1. Overview of physician and NP workforce, and how public and private policy environments are changing
2. Recent research on contributions of NPs providing primary care
3. Looking ahead

## Disclosures

### Past and current funders

- Gordon & Betty Moore Foundation (current)
- Johnson & Johnson Campaign for Nursing's Future (recent)
- Robert Wood Johnson Foundation (recent)
- American Association of Nurse Practitioners (recent)

### Board and related memberships

- Board of directors: AcademyHealth (recent past)
- **Chair, National Health Care Workforce Commission (*still unfunded*)**
- Bozeman Health Delivery System (current)
- Member, National Academy of Medicine Future of Nursing 2020-2030 (current)

## Research Program on Nursing Workforce

Four Interdisciplinary teams

1. Economic issues: Employment, earnings, effects of health reforms, forecasting nurse and physician supply  
Doug Staiger, Dartmouth College & National Bureau Economic Research  
Dave Auerbach, Boston, Massachusetts Health Reform Commission
2. Survey research: perceptions of various populations about healthcare workforce and impact of changes in health care, etc.  
Karen Donelan, Harvard Medical School and Massachusetts General Hospital  
Catherine DesRoches, Harvard and Beth Israel Hospital
3. Assessing contributions of nurse practitioners: Quantities, types, costs, & quality of NP services  
Jennifer Perloff and Monica O'Reilly Jacob, Brandeis University  
Karen Donelan, Harvard Medical School and Massachusetts General Hospital  
Catherine DesRoches, Harvard and Beth Israel Hospital  
Lisa Iezzoni, MD, Harvard Medical School and Morgan Institute of Health Policy  
Sean Clarke, Boston College  
Robert Dittus, MD, Vanderbilt University Medical Center
4. Quality of care: Constructing, testing & refining quality of care measures associated with nurses  
Jack Needleman, UCLA  
Olga Yakusheva, University of Michigan

## Out of Scope

- In this election year, nurses will be called upon to explain health care reform proposals in an objective, cogent, and apolitical manner .. Are you prepared?

## Framework for Assessing Healthcare Reform

Criteria	Medicare for all (or some)	Single payer	Market forces
Improve health care delivery systems (efficient, care coordination, accountable for costs and quality)			
Increase access to care			
Increase emphasis on prevention and education			
Affect on payment systems (FFS, costs, value)			
Implications for nurses			
Other criteria?			

## 1. Overview of physician and NP workforce and how public and private policy environments are changing

### Increasing concern over inadequate access to primary care and shortages of physicians

- By 2032, shortages up to 55,200 primary care physicians and 66,800 non-primary care physicians<sup>1</sup>
- Third time in the past 4 years projections indicate worsening physicians shortages
- 84 million people have inadequate access to primary care, 7,181 health professional shortage areas in the US<sup>2</sup>

<sup>1</sup> Association of American Medical Colleges. IHS Market. 2019 update. April 2019 The complexities of physician supply and demand: Projections from 2017 to 2032. <https://aamc-physician-workforce-projections-update.april.11.2019.pdf> Accessed April 11, 2019.

<sup>2</sup> Designated Health Professional Shortage Areas Statistics, 2018.

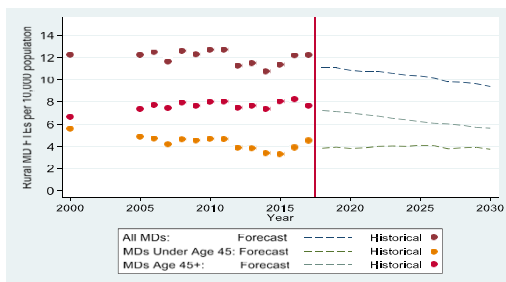
<https://www.hhs.gov/program/medicaid-reports/2018-report-on-hpsa/> Accessed March 1, 2019.

### And growing concern over uneven geographic distribution of physician workforce

- Particularly in rural areas
- Persistent problem *despite billions in spending*, decades of policy, doubling of the number of physicians, and numerous private and public sector initiatives

Elbert S. Huang and Kenneth Firegeld, "Seven Million Americans Live in Areas Where Demand for Primary Care May Exceed Supply by More Than 10 Percent," Health Affairs 32, no. 3 (March 2013): 614-21, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3577791/>.  
 2012;29(13). Legittimo et al., "The State's Next Challenge—Securing Primary Care for Expanded Medicaid Populations," New England Journal of Medicine 364, no. 6 (February 2011): 493-95, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3011623/>, and Adam N. Hofer, Jean Marie Abraham, and Ira S. Moscovice, "Expansion of Coverage Under the Patient Protection and Affordable Care Act and Primary Care Utilization," Milbank Quarterly 89, no. 1 (March 2011): 69-89, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3118113/>.

### Number of physicians per 10,000 population in rural areas is projected to decrease through 2030



Skinner, L., Staiger, D., Auerbach, D., Buerhaus, P. Implications of an Aging Rural Physician Workforce. *The New England Journal of Medicine*. (July 25, 2019); 381(4): 299-301

### NPs over the decades

- Steady growth in number of NPs from 1970s to 2000  
Stronger growth in the 2000s  
Explosive growth since 2010
- 248,000 NPs in 2018 ... provide more than 1 billion visits annually<sup>1</sup>  
Primary care NPs: 61% family, 21% adult and geriatric, 3% women's health, 5% pediatrics

<sup>1</sup>American Association of Nurse Practitioners <https://www.aanp.org/all-about-our-top-fact-sheet>

### Total allowed charges by APRNs and PAs grew rapidly from 2010-2017

Practitioner Type	Total Allowed charges billed in millions 2010	Total Allowed charges billed in millions 2017	Average annual growth rates 2010-2017	Total percent growth 2010-2017
NP	\$1,249	\$3,757	17%	201%
PA	916	2,249	14	145
CRNA	869	1,197	5	38
CNS	54	72	4	33
CMW	2	5	19	239
<b>Total</b>	<b>3,090</b>	<b>7,281</b>	<b>13</b>	<b>136</b>

MedPAC June 2019. Report to the Congress: Medicare and the Health Care Delivery System, Chapter 5, page 150

Total number of nurse practitioners and physician assistants who billed Medicare more than doubled from 2010-2017

Practitioner Type	Unique number of practitioners billing FFS Medicare (In thousands) 2010	Unique number of practitioners billing FFS Medicare (In thousands) 2017	Average annual growth rates 2010-2017	Total percent growth 2010-2017
NP	52	130	14%	151%
PA	43	82	10	91
<b>Total</b>	<b>95</b>	<b>212</b>	<b>12</b>	<b>124</b>

MedPAC June 2019. Report to the Congress: Medicare and the Health Care Delivery System, Chapter 5, page 150

Number of E&M office visits billed by APRNs or PAs grew rapidly while the overall number of E&M office visits increased modestly from 2010 to 2017

Practitioner type	Million of visits 2010	Million of visits 2017	Percent change, 2010-2017
APRN or PA	11	31	184%
Primary care physician	97	81	-16
Specialist	133	141	6
<b>Total</b>	<b>241</b>	<b>253</b>	<b>5</b>

MedPAC June 2019. Report to the Congress: Medicare and the Health Care Delivery System, Chapter 5, page 153

Percent of physician practices with APCs and percent change 2008-2016

TABLE 1. PERCENT OF PHYSICIAN PRACTICES WITH ADVANCED PRACTICE CLINICIAN AND THE PERCENT CHANGE FROM 2008 TO 2016

Variable	Total Practices, No.		Any Advanced Practice Clinician, %			Any NP, %			Any PA, %		
	2008	2016	2008	2016	Change	2008	2016	Change	2008	2016	Change
Specialty practices <sup>a</sup>	150,682	165,655	23.2	28.3	21.7	14.4	19.2	32.6	11.6	14.0	20.3
Medical specialties <sup>b</sup>	87,178	109,125	20.2	23.3	15.7	13.6	16.3	19.9	8.3	9.9	19.3
Surgical specialties <sup>b</sup>	22,881	22,185	17.8	20.6	15.8	5.8	7.7	32.6	13.6	15.3	12.0
Multispecialty <sup>c</sup>	22,623	34,345	40.5	49.0	20.9	26.3	35.5	34.9	22.4	26.1	16.4
Psychiatry	12,909	16,535	14.7	17.4	18.4	13.1	15.5	20.9	2.2	2.7	19.2
Otolaryngology	12,675	13,140	29.5	29.3	-0.7	25.3	25.3	0.2	6.1	6.5	5.7
Ophthalmology	9,939	10,505	0.8	0.7	-10.8	0.3	0.3	3.7	0.6	0.5	-9.1
Cardiology	6,142	8,483	30.3	31.0	2.4	22.1	24.3	9.6	12.7	12.9	1.8
Orthopedic surgery	6,758	7,293	28.0	29.1	3.9	4.9	7.0	43.0	25.3	25.4	0.6
General surgery	6,211	6,400	11.2	13.8	24.0	5.4	7.6	40.1	6.6	7.5	14.6
Neurology	3,814	5,162	13.8	21.3	54.2	9.5	15.6	64.5	5.4	8.2	52.4
Plastic surgery	6,067	4,177	6.4	9.8	54.2	2.7	3.8	39.8	3.9	6.4	62.9
Dermatology	5,428	6,041	27.4	36.3	32.5	8.4	11.5	36.8	21.7	29.5	35.6
Gastroenterology	3,873	5,496	25.1	28.7	14.2	15.4	19.2	24.7	12.5	14.4	15.1
Primary care practices <sup>c</sup>	68,317	69,755	28.4	35.3	24.3	18.8	26.1	38.8	12.5	14.6	16.6
Family practice	38,322	31,936	36.7	44.8	22.1	22.4	31.6	41.0	18.4	21.0	13.9
Internal medicine	22,514	22,424	18.3	23.9	30.8	12.0	17.6	46.2	7.7	9.3	21.3
Pediatrics	12,164	12,939	27.0	34.3	22.8	23.0	29.3	27.3	7.3	9.0	22.4

Martson G., Barnes, H., Richards, M., Ray, K., Brom, H., & McHugh, M. Employment of advance practice clinicians in physician practices. JAMA Internal Medicine Published online April 30, 2018.

Growing *public* policy support for  
expanding the roles and use of NPs, and  
eliminating SoP restrictions

- ACA-related insurance expansions
- Health Resources and Services Administration
- 2012 National Governors Association Report
- Veterans Administration
- Federal Trade Commission

---

---

---

---

---

---

---

---

And, growing *private* policy support

- 2010 National Academy of Medicine Report on Future of Nursing
- Economic, quality, and policy researchers
- Bipartisan Policy Center
- Numerous "Think Tanks"
- American Association of Retired Persons
- Providers – hospitals, ACOs, retail health
- Even some insurers

---

---

---

---

---

---

---

---

UNITEDHEALTH GROUP®

Addressing the Nation's Primary Care Shortage:  
Advanced Practice Clinicians and Innovative  
Care Delivery Models

September 2018 [https://www.unitedhealthgroup.com/content/dam/USG/PH/2018/USG\\_Pharmacy-Care-Report-2018.pdf?utm\\_source=newletter&utm\\_medium=email&utm\\_campaign=newletter\\_nicovert&utm\\_term=top](https://www.unitedhealthgroup.com/content/dam/USG/PH/2018/USG_Pharmacy-Care-Report-2018.pdf?utm_source=newletter&utm_medium=email&utm_campaign=newletter_nicovert&utm_term=top)

---

---

---

---

---

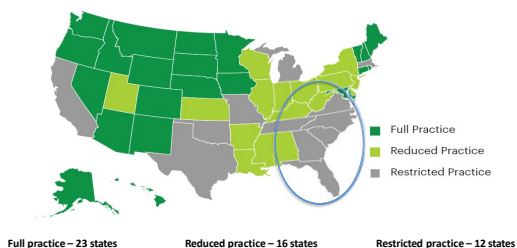
---

---

---

Yet, NPs continue to face state imposed limitations on their practice and autonomy

Nurse Practitioners' Scope of Practice Laws



[https://www.unitedhealthgroup.com/content/dam/UHG/PDF/2018/UHG\\_Primary\\_Care\\_Report\\_2018.pdf?utm\\_source=newsletter&utm\\_medium=email&utm\\_campaign=newsletter\\_nurses&utm\\_content=stream-top](https://www.unitedhealthgroup.com/content/dam/UHG/PDF/2018/UHG_Primary_Care_Report_2018.pdf?utm_source=newsletter&utm_medium=email&utm_campaign=newsletter_nurses&utm_content=stream-top)

### Why do states impose restrictions?

- "SoP laws are determined by state legislatures, who are very often informed and influenced by practitioner advocacy groups. There exists a misperception that the move to fully authorized SoP is a zero-sum game in which physicians lose when APRNs gain"<sup>1</sup>
- "A second misperception is that the restrictions [on the SoP of NPs] are necessary to protect the public's health"<sup>1</sup>
  - Often promoted publicly by interest groups protecting their economic interests<sup>2,3</sup>

<sup>1</sup>Adams, K., Markowitz, S. Improving efficiency in the health-care system: Removing anticompetitive barriers for advanced practice registered nurses and physician assistants. The Hamilton Project. Brookings Institute, June 2018. Policy Proposal 2018-08.

<sup>2</sup>McMichael, B. The demand for healthcare regulation: The effect of political spending on occupational licensing laws. Southern Economic Journal 2017, 84(1), 297–316. DOI: 10.1002/soej.12211

<sup>3</sup>Paul J. Feldstein, *Health Care Economics* (Clifton Park, NY: Delmar, 2005).

## 2. Recent research on the contributions of NPs providing primary care

- Motivation
- Key results: Access, costs, quality of primary care provided by NPs compared to MDs

### Motivation: Congressional concerns and questions

1. Access to primary care
  - Physician shortages – how large, when and where?
  - Can uneven distribution of physicians be improved?
  - Physician willingness to accept Medicaid patients?
  - Do state level regulatory restrictions placed on nurse practitioners limit access to primary care?
2. Quality and cost
  - How does nurse practitioner quality of care compare to physicians?
  - Do nurse practitioners provide care at less cost than physicians?

---

---

---

---

---

---

---

---

### Approach

#### Conduct studies on:

1. Factors affecting access to primary care (economics team)
  - Physician location decisions “Power Couples”
  - Geography of primary care workforce
  - Projections of growth of physician and NP workforces
2. Contributions of nurse practitioner and physicians (NP outcomes analysis and survey research teams)
  - Studies using national Medicare data
  - National surveys of primary care NPs (PCNPs) and physicians (PCMDs)

---

---

---

---

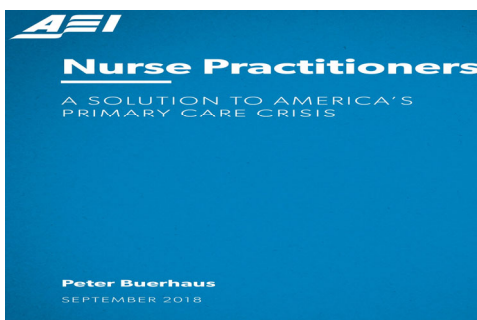
---

---

---

---

### New Evidence on NPs and Primary Care



<http://www.aei.org/events/nurse-practitioners-and-americas-primary-care-shortage/>

---

---

---

---

---

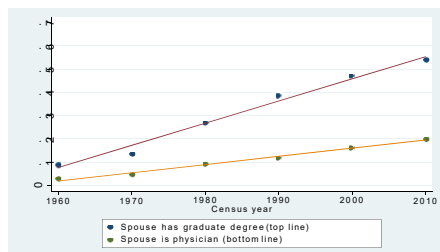
---

---

---

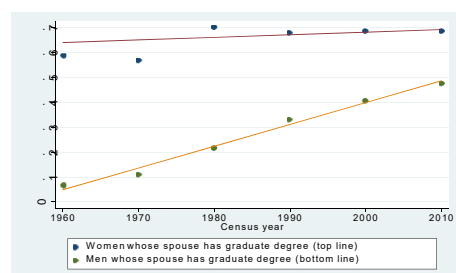


### Trends in proportion of married physicians whose spouse has a graduate degree (top) or whose spouse is a physician (bottom), 1960-2010



Staiger, D., Marshall, S., Goodman, D., Auerbach, D., Buerhaus, P. (March 1, 2016). Association between having a highly educated spouse and physician practice in rural underserved areas. *The Journal of the American Medical Association*. 315(9):939-942.

### Trends in having a highly educated spouse by gender (women grew from 4% to 31% of married physicians)



Staiger, D., Marshall, S., Goodman, D., Auerbach, D., Buerhaus, P. (March 1, 2016). Association between having a highly educated spouse and physician practice in rural underserved areas. *The Journal of the American Medical Association*. 315(9):939-942.

### Are physicians with highly educated spouses less likely to work in rural shortage areas?

Logistic regression models of the likelihood of working in a rural shortage area

Main result: *Compared to other married physicians, physicians that had a spouse with a graduate degree were significantly less likely (40%) to work in a rural shortage area*

Significant demographic headwind

Staiger, D., Marshall, S., Goodman, D., Auerbach, D., Buerhaus, P. (March 1, 2016). Association between having a highly educated spouse and physician practice in rural underserved areas. *The Journal of the American Medical Association*. 315(9):939-942.

## Geography of people newly eligible for health insurance, the primary care workforce, and impact of SoP

### Objectives

1. Construct a detailed portrait of the geographic location of primary care workforce on the eve of the ACA's insurance expansions in 2014
2. Determine whether geographic accessibility to primary care clinicians differed across urban and rural areas, and across states w more or less restrictive SoP laws

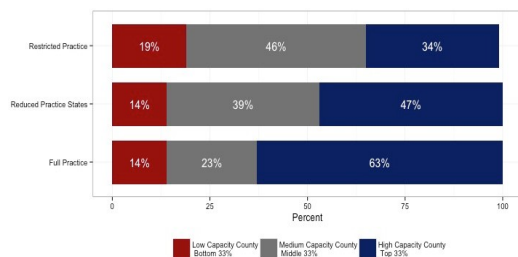
Graves, J., Mishra, P., Dittus, R., Parish, R., Perloff, J., Buerhaus, P. (2015). Role of geography and nurse practitioner scope of practice in efforts to expand primary care system capacity. *Medical Care*. 54(1): 81-89.

### Key results

- Rural areas had 3-4 times the number of uninsured people per primary care clinician than urban areas (357 rural vs 131 urban areas)
- PCMDs were more accessible in urban areas whereas *PCNPs were more accessible in rural areas*
- State SoP restrictions associated with up to 40% fewer PCNPs
- People living in restrictive and reduced SoP states had significantly less access to primary care

Graves, J., Mishra, P., Dittus, R., Parish, R., Perloff, J., Buerhaus, P. (2015). Role of geography and nurse practitioner scope of practice in efforts to expand primary care system capacity. *Medical Care*. 54(1): 81-89.

### People living in restrictive and reduced practice states have significantly less access to primary care



Graves, J., Mishra, P., Dittus, R., Parish, R., Perloff, J., Buerhaus, P. Role of geography and nurse practitioner scope of practice in efforts to expand primary care system capacity. *Medical Care*. 54(1): 81-89. 2015.

### Other recent evidence showing NPs more likely to work in rural areas than physicians

- Barnes, H, Richards, M, McHugh, M., & Martsolf, G. Rural and Nonrural Primary Care Physician Practices Increasingly Rely on Nurse Practitioners, *Health Affairs* 37, no. 6 (June 2018): 908–14, <https://www.ncbi.nlm.nih.gov/pubmed/29863933>.
- Ying, X, Smith, J, & Spetz, J. Primary Care Nurse Practitioners and Physicians in Low-Income and Rural Areas, 2010-2016. *The Journal of the American Medical Association* January 1/8, 2019 Volume 321, Number 1, pp 102-105

### Projections of the physician and NP workforces through 2030

### Number of full time physicians, NPs, and PAs historical and projected

	2001	2010	2016	2030 (Proj)	Ave growth rate 2016 to 2030 (Proj)
Physicians	711,357	862,698	920,397	1,076,360	1.1%
NPs	64,800	91,697	157,025	396,546	6.8%
PAs	44,282	88,097	102,084	183,991	4.3%
NPs & PAs per 100 MDs	15.3	20.8	28.2	53.9	

Auerbach, D, Stalger, D., Buerhaus, P. Growing ranks of advanced practice clinicians – Implications for the physician workforce. *The New England Journal of Medicine*. June 21, 2018. 378:25:2358-2360.

### Summary

- The proportion of physicians married to highly educated spouses has grown dramatically, and continues
- These "Power Couples" are significantly less likely to practice in rural shortage areas
- NPs are more likely than physicians to practice in rural areas  
Rural areas have highest uninsured, particularly in non Medicaid expanding states
- Projections indicate slow growth in physician supply, and declines of physicians in rural areas
- SoP restrictions decrease access to care

---

---

---

---

---

---

---

---

### Recent Studies Assessing the Contributions of Primary Care Nurse Practitioners

Overall goal: Provide updated and more generalizable evidence on contributions of NPs

#### Two-part strategy

1. Analyze national samples of Medicare beneficiaries using claims data (growing population of complex patients)
2. Conduct national surveys of NPs and MDs (both primary care and specialty care) to provide a more comprehensive understanding of contributions and issues/obstacles

---

---

---

---

---

---

---

---

### Studies Using Medicare Claims Data (2008-2013)

- Medicare beneficiaries
  - Growing numbers, chronic and complicated conditions
- Large samples of NPs and MDs
- Constructed 16 measures of quality in 4 PC domains
- Advanced statistical methods to control for socio-demographic characteristics and severity of illness .. Compare apples to apples
- Tested quality of care over a 12 month period
- Compared NP and MDs
- Greater generalizability of results

---

---

---

---

---

---

---

---

### Who receives care from PCNPs?

Across studies and different data, PCNPs significantly more likely than PCMDs to care for

- Non-whites, American Indians
- Younger
- Female
- Disabled
- Dually eligible for M&M
- Living in rural areas

DesRoches, C, Gaudet, J, Perloff, J, Donelan, K, Iezzoni, L, Buerhaus, P. (2013). Using Medicare Data to Assess Nurse Practitioner Provided Care. *Nursing Outlook*. 61(6):400-407.

37

---

---

---

---

---

---

---

---

### Are there differences in the types of primary care services provided by PCNPs and PCMDs?

	Percent of PCNP billed payments	Percent of PCMD billed payments <sup>b</sup>
Evaluation and management <sup>a</sup>	80.1%	82.5%
Procedures	9.1%	4.6%
Imaging studies	1.3%	3.9%
Tests	4.8%	5.8%
Durable medical equipment	.02%	0.0%
Other	4.6%	2.2%
Unclassified	0.2%	0.9%

<sup>a</sup>E&M categories include: 1) Office visits (new and established patients) 2) Hospital visit (initial, subsequent, critical care), 3) Emergency department visit, 4) Home visit, 5) Nursing home visit

<sup>b</sup>Distribution of BETOS Categories differ significantly between the two groups of clinicians at the p .05 level.

DesRoches, C, Gaudet, J, Perloff, J, Donelan, K, Iezzoni, L, Buerhaus, P. (2013). Using Medicare Data to Assess Nurse Practitioner Provided Care. *Nursing Outlook*. 61(6):400-407.

38

---

---

---

---

---

---

---

---

### How do costs of services provided by PCNPs to Medicare beneficiaries compare to PCMDs?

Perloff, J., DesRoches, C., Buerhaus, P. (2016). Comparing the Cost of Care Provided to Medicare Beneficiaries Assigned to Primary Care Nurse Practitioners and Physicians. *Health Services Research*. Article first published online: 27 DEC 2015 | DOI: 10.1111/1475-6775.12425

---

---

---

---

---

---

---

---

No matter how costs were measured, PCNPs consistently cost Medicare less than PCMDs\*

Cost Measures	Dollar Amount Less than PCMD	Percent Reduction
Total E&M payments	-\$207	29%
Inpatient stays	-\$2,474	11%
Office visits	-\$522	18%
<i>Dollar adjusted work component of Resource Value Units (RVUs)</i>	-\$282	15%
<i>E&amp;M RVUs</i>	-\$128	18%

\*Fully adjusted models, including propensity score weighted regression to help adjust for clinical and socio-economic differences between beneficiaries attributed to an NP versus a primary care physician.  
Perloff, J., Desforges, C., Buerhaus, P. (2016). Comparing the Cost of Care Provided to Medicare Beneficiaries Assigned to Primary Care Nurse Practitioners and Physicians. Health Services Research. Article first published online: 27 DEC 2015 | DOI: 10.1111/1475-6773.1242

#### Reasons for Cost Difference - Preliminary

- PCNPs submitted fewer claims for payment to Medicare (quantity) and billed for lower cost procedures and tests (prices) compared to PCMDs

41

How does quality of services provided to Medicare beneficiaries by PCNPs compare to PCMDs?

### 16 quality measures in 4 domains

1. PCMDs billed Medicare marginally more than PCNPs for chronic disease management: spirometry for COPD, lipid screening, HEDIS comprehensive diabetes care measure set (Hemoglobin A1c testing, annual LDL screening, medical attention for nephropathy, annual eye exam) (PCMD+)
2. Preventable hospitalizations (PCNP++)
3. Adverse Outcomes: MRI for low back pain, all-cause 30 readmission, inappropriate ED visits (PCNP++)
4. Cancer screening – breast and colorectal (PCMD+)

Buerhaus, P., Perloff, J., Clarke, S., O'Reilly, M., Zollitsky, G., DesRoches, C. Comparing the quality of primary care provided to Medicare beneficiaries by nurse practitioners and physicians. *Medical Care* 2018; 56(6):484 – 490.

43

### Care provided to vulnerable Medicare beneficiaries

*Disabled are 15% of Medicare beneficiaries and dual enrolled in Medicare and Medicaid are 20% Medicare spending. Together, they account for nearly half of Medicare*

- In measures where PCMD beneficiaries had marginally higher quality of care than PCNP beneficiaries (chronic disease management and cancer screening), the gap *diminished substantially or disappeared*
- Suggests PCNPs' strengths as providers may be more pronounced with vulnerable subgroups of Medicare beneficiaries

DesRoches, CM, Clarke, S., Perloff, J., O'Reilly-Jacob, M., Buerhaus P. (2017). The quality of primary care provided by nurse practitioners to vulnerable Medicare beneficiaries. *Nursing Outlook* (2017), doi:10.1016/j.outlook.2017.06.007

### Do scope of practice restrictions placed on NPs protect the public?

- Tested 6 alternative state-level SoP classifications
- No evidence restrictions placed on NPs' SoP protects public from "low quality providers" – the quality argument
- But limits access to primary care

Perloff, J., Clarke, S., DesRoches, C., O'Reilly-Jacob, M., Buerhaus, P. (Published On-line September 14, 2017). Association of State-Level Restrictions in Nurse Practitioner Scope of Practice with the Quality of Primary Care Provided to Medicare Beneficiaries. *Medical Care Research and Review*. Published On-line September 14, 2017. DOI: 10.1177/1077558717319402

45

## Since the AEI report

ORIGINAL ARTICLE

### The Association of Nurse Practitioner Scope-of-Practice Laws With Emergency Department Use *Evidence From Medicaid Expansion*

Benjamin J. McMichael, JD, PhD,\* Joanne Spetz, PhD,†  
and Peter I. Buerhaus, PhD, RN, FAAN, FAANP(h)‡

McMichael, B., Spetz, J., Buerhaus, P. The association of nurse practitioner scope of practice laws with emergency department use: Evidence from Medicaid expansion. *Medical Care*. 57(5):362-368, May 2019.

## Key Results

1. Medicaid expansion increased ED use among Medicaid beneficiaries (consistent with prior studies)
2. The size of this increase was significantly smaller in states that did not require physician oversight NPs practice
  - 7% increase in non-oversight states vs 28% increase in ED visits in oversight states
  - Eight clinical conditions: All conditions, abdominal, back and neck pain, headache, dental, injury, mental health and **skin infection**

McMichael, B., Spetz, J., Buerhaus, P. The association of nurse practitioner scope of practice laws with emergency department use: Evidence from Medicaid expansion. *Medical Care*. 57(5):362-368, May 2019.

## Studies on Low Value care

- Measures: low-value back imaging from Choosing Wisely recommendations
- Data: Medicare claims
- Key findings
  - <sup>1</sup>No significant difference in the rates of low-value back images ordered by PCNPs and PCMDs
  - <sup>2</sup>NPs were significantly less likely to order low-value back imaging than PAs

<sup>1</sup>O'Reilly-Jacob, M., Perloff, J., Buerhaus, P. Low-Value Back Imaging in the Care of Medicare Beneficiaries: Comparing Physicians and Nurse Practitioners in Primary Care. *Nursing Outlook* (2019) in press.

<sup>2</sup>O'Reilly-Jacob, M., Perloff, J., Buerhaus, P. Low-value back imaging in the care of Medicare beneficiaries: A comparison of nurse practitioners and physician assistants. *Medical Care Research and Review* (conditional acceptance, August 2019)



## HealthAffairs

### The Integrity Of MACRA May Be Undermined By “Incident To Billing” Coding

[Peter Buerhaus](#) [Jonathan Skinner](#) [Benjamin McMichael](#) [David Auerbach](#)  
[Jennifer Perloff](#) [Douglas Staiger](#) [Lucy Skinner](#)

JANUARY 8, 2018

[10.1377/hblog20180103.135358](https://doi.org/10.1377/hblog20180103.135358)

### Eliminating incident to billing coding

- As described in chapter 5 in the June 2019 Medicare Payment Advisory Commission (MedPAC) report, MedPAC unanimously recommended eliminating incident to billing coding in Medicare<sup>1</sup>
  - Congress must approve
- Research matters
- Dissemination of results matters<sup>2</sup>

<sup>1</sup> Medicare Payment Advisory Commission (June 2016). Report to the Congress. Medicare and the health care delivery system. Chapter 5: Issues in Medicare Beneficiaries' access to primary care

<sup>2</sup> Peter Buerhaus, Jonathan Skinner, Benjamin McMichael, Dave Auerbach, Jennifer Perloff, Douglas Staiger, & Lucy Skinner. The Integrity of MACRA May Be Undermined by “Incident to Billing” Coding. *Health Affairs* January 8/2018

### Reforming America’s Healthcare System Through Choice and Competition (November 2018)

Sent to the President by...

- U.S. Department of Health and Human Services
- U.S. Department of Labor
- U.S. Department of Treasury

Pages devoted to Scope of Practice

### Pulling it all together

- Unrealistic to rely on physician workforce alone to provide adequate access to primary care (power couples, uneven distribution, shortages now and future)
- PCNPs more likely to practice in rural areas – precisely where there are more uninsured and newly insured, and increasingly fewer physicians
- PCNPs more likely to take care of vulnerable populations – women, non-whites, American Indians, poor, disabled, and dual eligibles
- PCNPs cost Medicare less, yet quality of care is comparable or better, particularly for vulnerable populations
- State-level SoP unrelated to quality of PCNP practice, but decreases access

---

---

---

---

---

---

---

---

### 3. Looking ahead: Changing minds, changing policy, and leadership in states that restrict NP SoP

---

---

---

---

---

---

---

---

For change to occur, NPs must develop strategies that change opponents' *knowledge, attitudes, and behaviors*

- On the whole, physicians are not reading the NP literature ... disbelief, "Fake News", brace mentally
- Professional organizations (in contrast to individuals)
  - Preoccupied over control, protecting their members, physician as experts, avoiding further loss
  - Perpetuate unfounded/exaggerated beliefs and fears, and an attitude of resistance
  - Leading the team ... a way to control and protect

---

---

---

---

---

---

---

---

### If we are going to make change

- Need opportunities for physicians and NPs to validate/understand respective wants, fears, feelings, behaviors
- Need a sustained process to allow for talking, listening, understanding, and providing factual information (e.g.):
  - Majority of PCNPs (82%) work w physicians, only 13% work independently – physicians' economic fears are misguided

---

---

---

---

---

---

---

---

### Through sustained engagement, NP and physician leaders can reach the point where

- Rather than viewing the expansion of NPs as a struggle between NPs and physicians over autonomy and who is the team leader, etc., NPs and physicians can work together to better understand each other as a first step toward envisioning a different future built on relationship that allow
  - For the *evolution* of roles and practices that make sense to both clinicians
  - *Respects* each other's strengths, and ultimately
  - Leads to a *reconfiguration of the workforce* that is more responsive to the health needs of the population/community served, particularly in rural areas and among vulnerable populations

---

---

---

---

---

---

---

---

### Legislators and regulators

- Focus on increasing access, especially to vulnerable populations (Dems) without blowing up costs (Rep)
  - Population in Ohio with inadequate access?
- Establish why physicians alone won't adequately address access and cost problems
  - Data on numbers of physicians and their distribution
  - Distinguish between a medical focus on disease versus NP's holistic perspective and focus on prevention, education and social determinants

---

---

---

---

---

---

---

---

### And, for Democrats



Improving Efficiency in the Health-Care System:  
Removing Anticompetitive Barriers for Advanced Practice  
Registered Nurses and Physician Assistants

E. Kathleen Adams and Sara Markowitz

Brookings, Washington, DC

---

---

---

---

---

---

---

---

### Con't

- Review the history of NPs – established by medicine and nursing at a time of physician shortage in the 1960s
  - legislature turnover
- PCNPs, alone and working w PCMDs, more likely to treat vulnerable populations, including Medicaid population, and accept new patients
  - PCNPs work in a greater variety of settings than PCMDs
  - PCNP workforce is growing rapidly -- show the numbers compared to MDs, particularly in rural areas
- Point out increasing public and private support for the nursing profession and for NPs
- Media and NPs in the district

58

---

---

---

---

---

---

---

---

### Describe the alternative

Continuing to organize and deliver primary care controlled/driven by physicians is to knowingly choose a more expensive provider (MD), whose supply is shrinking (and hence will cost more in the future), and who typically provides medical/disease oriented rather than wholistic healthcare

---

---

---

---

---

---

---

---

### Or, we can

Choose to organize and deliver primary care around the populations' needs where care can be provided by both physicians and by lower cost, high(er) quality health care provider (NPs) who practice in the areas of highest needs and treats the most vulnerable and sickest people

---

---

---

---

---

---

---

---

### One final thought

- Growing concern about the numbers of NPs being produced

---

---

---

---

---

---

---

---

Can we be proactive ... turn increasing production of APNs into a positive outcome? How?

- Ensure all APNs are well prepared in geriatrics, primary care, community and home based care, rural healthcare, and behavioral health ... which would respond to the needs of society

---

---

---

---

---

---

---

---

Thank you

---

---

---

---

---

---

---