



## Provider Scope of Practice: Expanding Non-Physician Providers' Responsibilities Can Benefit Consumers

Scope of practice regulations originated as a means to protect the public from healthcare practitioners administering care they were unqualified to provide, due to differences in training. Emerging emphasis on patient-centered care where nurses, physicians, and other members of the care team practice to the fullest extent of their training has focused attention on the potential advantages of expanded scope of practice in overall care delivery.<sup>1</sup>

Provider scope of practice regulations define the breadth of services a given type of healthcare professional is permitted to provide based on their level of education, training and experience.<sup>2</sup> While physicians have traditionally been considered the 'leaders' of the healthcare delivery team, non-physician providers across

the medical, dental and behavioral health spectrum are trained to perform tasks that can improve healthcare value and lower costs. These providers include physician assistants (PAs), dental therapists, dental hygienists and advanced practice registered nurses (APRNs)—a term that includes certified registered nurse anesthetists (CRNAs), certified nurse midwives, nurse practitioners (NPs) and clinical nurse specialists.

Currently, non-physician providers can face a variety of regulatory barriers that may limit their independent practice authority, prescribing authority and hospital attending/admitting privileges. In some states, scope of practice laws limit the extent to which physicians can delegate tasks and services to non-physician providers.<sup>3</sup>

This brief explores how relaxing regulatory barriers facing non-physician practitioners has the potential to significantly increase access to providers, improve quality and lower the cost of providing care.

### SUMMARY

*If state scope of practice laws are overly restrictive, they can prevent non-physician providers from practicing to the fullest extent of their training. Expanding scope of practice laws can specifically benefit rural populations and other areas with fewer primary care providers and lower access to primary healthcare services. Evidence suggests that non-physician practitioners have the potential to significantly increase provider capacity and reduce the cost of providing healthcare, with few quality concerns. Moreover, studies show that expanding provider scope of practice can benefit consumers in terms of wait times and overall access to services. However, more evidence is needed on if and how savings can be passed onto consumers.*

### Impact on Quality and Access

Medical associations and physician groups have largely objected to expanded scope of practice due to concerns about quality, particularly stemming from the difference in technical and clinical training between physicians and other providers. There is no evidence to suggest these fears are well founded. Recent studies find that there is no statistically significant difference in quality of care between NPs and PAs when compared to physicians in the primary care setting.<sup>4</sup>

Studies exploring the impact on outcomes are closely tied to expanded access to services. A study on the relationship between scope of practice laws granting independent practice authority to nurse practitioners found a 14 percent reduction in acute care sensitive (ACS) condition emergency department admissions in full-

practice authority states two years after practice regulations were relaxed.<sup>5</sup> As high ACS admissions are an indicator of low-quality office-based care, these results would suggest that expanding scope of practice laws had a positive effect on quality.

Other evidence includes a study that compared the impact of receiving care delivered by NPs and PAs versus primary care physicians. Investigators found that, for seven of the nine patient-level outcomes examined, there were no statistically significant differences in NP- or PA-delivered care compared with PCP-delivered care in community health centers.<sup>6</sup> The bottom line is that physician assistants and nurse practitioners do not appear to have a detrimental effect on patient outcomes, and can play a valuable role in optimizing the healthcare team by assuming responsibility for less-complex patients.

**Dental hygienists and therapists.** Dental hygienists provide preventive and non-surgical periodontal treatments alongside dentists.<sup>7</sup> Hygienists are usually the first point of contact for a patient before seeing a dentist. A study examining an expanded role for dental hygienists in Oregon found expanded access to oral health services for patients and improved outcomes, particularly among children. The evaluation focused on the state's Expanded Practice Dental Hygienists, who are permitted to provide care to limited access populations without the permission of a dentist.<sup>8</sup>

Dental therapists are an emerging oral health provider trained to provide preventive and restorative dental care. Dental therapist licensure requires an additional two years of education compared to dental hygienists.<sup>9</sup> Alaska and Minnesota were among the first states to begin licensing dental therapists in the U.S. and examining their impact on access and patient experience.<sup>10</sup> In 2009, Minnesota passed legislation authorizing two types of dental therapists: a traditional dental therapist and an advanced dental therapist with two additional years of training and a year of direct, on-site supervised practice.<sup>11</sup> By 2014, the Minnesota Department of Health observed that patients experienced shorter travel and wait times for dental appointments and expanded capacity at dental clinics serving vulnerable populations.<sup>12</sup> They also found dental therapists appeared to be practicing safely, and

### Non-Physician Providers

### Acronym

Advance Practice Registered Nurses	APRN
Nurse Practitioners	NP
Certified Registered Nurse Anesthetists	CRNA
Clinical Nurse Specialists	CNS
Certified Nurse Midwives	CNM
Physician Assistants	PA

clinics where they worked reported improved quality and high patient satisfaction. A similar study using data from Alaska's Yukon Kuskokwim Delta community found that increased use of dental therapists were significantly associated with higher child and adult preventive care utilization rates and lower rates of extraction procedures—patterns consistent with improved outcomes.<sup>13</sup>

**Clinical nurse specialists.** Clinical nurse specialists (CNSs) work primarily in inpatient hospital settings, although some also practice in nursing homes, clinics and other community-based settings like home care.<sup>14</sup> They can provide value by assisting with the development of facility quality controls, serving as case managers and delivering primary care. Unfortunately, few studies have focused specifically on the quality of care provided by clinical nurse specialists or clinical nurse midwives (CNMs).

### Evaluation Limitations

Restrictive scope of practice rules can impede evaluations of quality for non-physician providers. When APRNs and PAs cannot practice independently, they bill their services under 'incident to' provisions, indicating physician supervision or collaboration. Payers then reimburse at 100 percent of the physician fee schedule and the quality of patient care is attributed to that physician.<sup>15</sup> Essentially, non-physician providers cannot be adequately evaluated on care quality metrics when not all services they provide are billed under their name. Increasing instances of *independent* non-physician billing will yield more informative quality metrics.

## Impact on Costs

The available evidence on non-physician providers suggest that expanding scope of practice will lower healthcare costs. For example, Medicare and most private insurers reimburse nurse practitioners (which comprise 60% of the U.S. APRN workforce<sup>16</sup>) and physician assistants at 85 percent of the physician fee schedule when they bill independently and not under physician supervision.<sup>17,18</sup> Lower reimbursement suggests that hospitals and medical groups can increase cost-effectiveness by employing these non-physician providers independently. However, evidence that these savings are passed on to consumers is weak.

**Certified registered nurse anesthetists.** While nurse practitioners and physician assistants practice within multiple settings and serve different populations, certified registered nurse anesthetists (CRNAs) are primarily trained to provide anesthesia services. In fact, they provide the majority of these services in rural and underserved urban communities where physician anesthesiologists are rare.<sup>19</sup> A 2016 study analyzed the cost effectiveness of independently practicing CRNAs versus anesthesiologists and found that, within inpatient settings, CRNAs acting independently were less costly and produced more net revenue for hospital facilities.<sup>20</sup>

**Clinical nurse midwives.** Obstetric and maternal care services are an expensive service line for hospitals, as more than half of all births are funded by Medicaid, which reimburses providers at much lower rates than private health insurance plans.<sup>21</sup> Furthermore, physicians and hospitals pay higher malpractice premiums for obstetrics than for other services. These challenges are exacerbated in rural areas due to higher patient risk levels and small patient populations. Clinical nurse midwives (CNMs) serve as providers of primary, obstetric and gynecologic care, in addition to family planning services.<sup>22</sup> While they often have *attending* privileges (i.e., the ability to care for a patient once they have been admitted by a physician in most institutions), some states restrict *admitting* privileges.<sup>23</sup> This results in CNMs being used mainly as a “physician extender,”

a role that does not necessarily cut costs since their services would be charged as an additional physician visit.<sup>24</sup> Studies have shown that midwifery care can result in lower charges to patients due to their tendencies to order fewer tests; their patients also are less likely to have costly Caesarean deliveries.<sup>25</sup>

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**Dental hygienists and therapists.** Dental hygienists’ prescriptive authority and ability to initiate treatment without requiring the specific consent of a dentist comprise the central issues pertaining to their scope of practice.<sup>26</sup> Because reimbursement for dental procedures varies across government and private insurance programs, dentists seldom accept Medicaid patients, resulting in 36,000 emergency department visits in 2014 for Massachusetts alone from “preventable oral health issues.”<sup>27</sup> Allowing hygienists to perform routine dental procedures can enable safety-net clinics and other providers to cut costs while expanding the availability of oral health services in their communities.<sup>28</sup>

Since becoming one of the first states to permit dental therapist licensure in 2009, the Minnesota Department of Health has observed increased access and cost effectiveness in dental clinics, particularly for vulnerable populations.<sup>29</sup> For example, while dentists make \$75 an hour for a filling, dental therapists make approximately half that amount. The resulting savings could fund a second dental therapist for these Minnesota clinics. Most importantly, employing dental therapists to address follow-up and restorative care allows clinics to utilize their dentists to focus on more complex patients.

**Clinical nurse specialists.** There are comparatively few analyses showing the impact of clinical nurse specialists on healthcare costs.

## Barriers to Expanded Scope of Practice

Depending on the state, there are significant barriers that may prevent non-physician providers from practicing to the full extent of their license. These challenges include:

- Restrictive supervisory regulations:** Though scope of practice regulations do not necessarily limit the types of primary care services patients can receive from non-physician providers, requirements for documented supervision impact where and how these providers can practice.<sup>30</sup> Restrictive regulations can require providers to obtain physician supervision to administer a range of services, from seeing patients to prescribing medicine (including controlled substances) and will limit efficiencies these providers may bring to care delivery.
- Current payment policies make it difficult to attract non-physician providers into practice:** Non-physician providers are not reimbursed by insurers and other payers at the same rate as physicians for the services they provide. Nurse associations have argued against this practice, claiming that reimbursement should be based on the service, not the provider.<sup>31</sup> Research is needed to understand the impact of alternative payment models to ensure that non-physician providers are not shortchanged for their work, while providing the best value to consumers.
- Incentives for practicing in healthcare provider shortage areas:** Like other types of providers, rural areas and some inner-city areas suffer from a shortage of both physician and non-physician providers. These shortages are exacerbated by the maldistribution of providers in favor of more urban and high-income communities. While dental therapists and hygienists' licensure and expanded scope of practice may depend on their employment in shortage areas, other non-physician providers don't face this requirement. Additional measures may be needed to attract non-physician practitioners to areas most in need of providers.<sup>32</sup>
- Tensions between healthcare professional roles:** The strongest opposition to the expansion of the services provided by non-physicians comes from medical associations and physician groups, which often have significant impact on health policies in states.<sup>33</sup> Some argue that physicians should be the only fully independently practicing healthcare provider due to the amount of training required compared to other healthcare professionals. Yet, permitting advanced practice nurses and physician assistants to assume more responsibilities may, in fact, enable physicians to focus more on clinical practice and less on supervision and other administrative tasks. Finding a middle ground that leaves the most complex patients and conditions to physicians, while allowing other providers to treat more routine patients will be essential.

## Conclusions

Strong evidence suggests that expanded use of non-physician providers, particularly for routine care, has the potential to improve access to care and reduce costs with few discernable quality concerns. There is considerable evidence showing that APRNs and PAs provide high-quality care with comparable patient outcomes to primary care physicians. Similarly, in states where dental hygienists and therapists are allowed by law to practice at higher levels of professional competence and skill, the population's oral health notably improves.<sup>34</sup> Other studies show that expanding these providers' scope of practice can benefit consumers by reducing wait times and increasing access to care.

To most effectively use our healthcare workforce and maximize healthcare value, the evidence strongly supports:

- Continued expansion of scope of practice laws:** The American Association of Nurse Practitioners, American Association of Physician Assistants and the National Council of State Legislators maintain a legislation tracking site on the status of state scope of practice regulations.<sup>35</sup> Advocating for continued

evaluation of expanded scope of practice laws will be essential to ensuring improved quality of care across the country.

- **Increased health sector education funding:** Non-physician provider roles often require less time and cost-intensive degree programs, which expedites their entry into the healthcare workforce. However, shortages in clinical training opportunities limit the number of non-physician providers that enter the workforce.<sup>36</sup> Colleges and universities can help address these shortages through partnerships with teaching hospitals and other facilities. For example, the majority of graduates of health profession programs at the University of Rochester Medical Center and its affiliate hospitals found employment there due to their schools' academic-practice partnerships.<sup>37</sup> This model can be replicated to increase workforce supply as well as redistribute resources to provider shortage areas.
- **Pilot programs to test expanded use of non-physician providers where currently restricted to practice in shortage areas:** If these providers can safely and cost-effectively practice outside of shortage areas, perhaps we should cease to restrict their geography, subject to an understanding of impact on rural access.
- **Defining and further utilizing new types of practitioners:** Clinical psychologists, pharmacists and assistant physicians are professions that legislators are considering for expanded scope of practice.
  - **Pharmacists:** Pharmacists have a valuable role in improving access to care, as 86 percent of Americans live within 5 miles of a community pharmacy.<sup>38</sup> While they are permitted to administer vaccinations in approximately 40 states and Puerto Rico,<sup>39</sup> the ability to provide direct patient care, which includes counseling patients and families about their medications and monitoring their drug therapy, has been controversial within the physician community.<sup>40</sup> Continuing to advocate for pharmacist-physician collaborations where pharmacists assume greater responsibilities in monitoring and even adjusting patients' drug therapy for improved health outcomes will positively impact patient outcomes and safety. Further studies on the impact of drug adherence on healthcare costs and quality of care should be conducted to bolster the evidence base.
- **Clinical psychologists:** States have considered legislation to grant these providers the ability to prescribe certain medications for the treatment of mental health disorders, in efforts to increase access to mental healthcare services. Most recently, Idaho became the fifth state to allow psychologists to do so, citing psychiatrist shortages, long wait times and high suicide rates as the primary factors.<sup>41</sup>
- **Assistant Physicians:** A 2014 Missouri law eased the qualification requirements for medical school graduates who were not placed in a residency program, creating an Assistant Physician license.<sup>42</sup> Assistant Physicians are permitted to engage in clinical practice alongside licensed physicians in designated healthcare shortage areas in the state. Because Missouri began accepting applications in January 2017, these practitioners have not yet begun practice and there is no evidence on their impact on cost and quality of care.<sup>43</sup> It is possible that this new provider role can optimize the existing workforce to drive healthcare value.

## Notes

1. *Assessing Progress on the Institute of Medicine Report: The Future of Nursing*, National Academies Press. <https://www.ncbi.nlm.nih.gov/books/NBK350160/>
2. National Conference of State Legislatures, "Scope of Practice Archive Database," (Feb. 2, 2017). <http://www.ncsl.org/research/health/scope-of-practice-overview.aspx#Database>
3. Benesch, Katherine, and David Hyman, "Nonphysician Practitioners: A Bridge to the Future in Healthcare," *Health Lawyers Weekly*, Vol 8, Issue 11 (March 2010).

4. Kurtzman, Ellen T., and Burt S. Barnow, "A Comparison of Nurse Practitioners, Physician Assistants, and Primary Care Physicians' Patterns of Practice and Quality of Care in Health Centers," *Medical Care* (June 2017).
5. Martsof, Grant R., Auerbach, David I., and Arifkhanova, Aziza, *The Impact of Full Practice Authority for Nurse Practitioners and Other Advanced Practice Registered Nurses in Ohio*, RAND Corporation, Santa Monica, CA (2015).
6. Santye, Lauren, "Quality of Care by Physicians, Nurse Practitioners, Physician Assistants Equal in Health Centers," *Contemporary Clinic Journal* (March 2017).
7. National Conference of State Legislatures, "Oral Health Providers Overview." <http://scopeofpracticepolicy.org/practitioners/oral-health-providers/> (accessed Aug. 31, 2017).
8. Bell, Kathryn P., and Amy E. Coplen, "Evaluating the Impact of expanded Practice Dental Hygienists in Oregon: An Outcomes Assessment," *Journal of Dental Hygiene* (February 2015).
9. Friedman, Jay W., and Kavita R. Mathu-Muju, "Dental Therapists: Improving Access to Oral Health Care for Underserved Children," *American Journal of Public Health* (June 2014).
10. Ibid.
11. Ibid.
12. Minnesota Department of Health, Minnesota Board of Dentistry, *Early Impacts of Dental Therapists in Minnesota, Report to the Minnesota Legislature 2014* (February 2014).
13. Chi, Donald L., *Dental Utilization for Communities Served by Dental Therapists in Alaska's Yukon Kuskokwim Delta: Findings from an Observational Quantitative Study*, The Heartland Institute (Aug. 11, 2017).
14. American Nursing Association, *Advanced Practice Nursing: A New Age in Health Care* (Sept. 1, 2017).
15. American Academy of Physician Assistants, *Third-Party Reimbursement for PAs* (January 2017).
16. Martsof (2015).
17. Coldiron, Brett, and Mondhipa Ratnarathorn, "Scope of Physician Procedures Independently Billed by Mid-Level Providers in the Office Setting," *Journal of the American Medical Association Dermatology* (November 2014).
18. Stange, Kevin, "How Does Provider Supply and Regulation Influence Health Care Markets? Evidence from Nurse Practitioners and Physician Assistants," *Journal of Health Economics* (2014).
19. Rechteris, Mary, "American Association of Nurse Anesthetists: 4 Key Thoughts on Expanding CRNAs' Scope of Practice," *Becker's ASC Review* (Dec. 7, 2016).
20. The Lewin Group. *Update of Cost Effectiveness of Anesthesia Providers: Final Report*, Falls Church, VA. (May 2016).
21. Pearson, Catherine, and Frank Taylor, "Rural Maternity Wards are Closing, and Women's Lives Are on the Line," *Huffington Post* (Sept. 25, 2017).
22. Walker, D., Lannen, B., Rossie, D., "Midwifery Practice and Education: Current Challenges and Opportunities" *OJIN: The Online Journal of Issues in Nursing*, Vol. 19, No. 2, Manuscript 4 (May 31, 2014).
23. Benesch, Katherine, and David Hyman (March 2010).
24. Rosenthal, Elisabeth, "Getting Insurance to Pay for Midwives," *New York Times* (July 3, 2013).
25. Ibid.
26. Ibid.
27. Salsberg, Bob, "Dental Therapists Fill the Gap with Oral Care," *Burlington Free Press* (Feb. 17, 2017).
28. Olmstead, Jodi L., et al., "Public Health Dental Hygiene: An Option for Improved Quality of Care and Quality of Life," *Journal of Dental Hygiene* (October 2013).
29. Dickrell, Stephanie, "6 years In, Dental Therapist Experiment is Working, Experts Say," *SC Times* (April 9, 2017).
30. Yee, Tracy, et al., *Primary Workforce Shortages: Nurse Practitioner Scope-of-Practice Laws and Payment Policies*, National Institute for Health Care Reform (February 2013).

31. Wood, Debra, "MedPAC Discusses Reimbursement Equality for NPs and PAs," *AMN Healthcare News* (April 12, 2013).
32. Hunt, Amanda, "Improving Healthcare Value in Rural America," Research Brief No. 19, Healthcare Value Hub (October 2017).
33. Selvam, Ashok, et al., "Stiff Resistance: Docs Fight Encroachment in Turf War with Nurses," *Modern Healthcare* (April 19, 2013).
34. Bell (February 2015).
35. National Conference of State Legislatures, "Scope of Practice Archive Database," <http://www.ncsl.org/research/health/scope-of-practice-overview.aspx#Database> (accessed Feb. 2, 2017).
36. Goodman, James, "Hot Jobs: Local Colleges Feed Health Care Sector," *Democrat & Chronicle* (Aug. 23, 2017).
37. Ibid.
38. Centers for Disease Control and Prevention, *Creating Community-Clinical Linkages Between Community Pharmacists and Physicians* (2017).
39. American Pharmacists Association, *Types of Vaccines That Pharmacists are Authorized to Administer* (Oct. 11, 2013).
40. Citizen Advocacy Center, *Scope of Practice FAQs for Consumers: Pharmacists*, <http://www.cacenter.org/files/SOPpharm.pdf> (accessed Sept. 1, 2017).
41. American Psychological Association, *Idaho Becomes Fifth State to Allow Psychologists to Prescribe Medications*, Press Release (April 5, 2017).
42. Giaritelli, Anna, "Missouri Looks to Ease Doctor Shortage with 'Assistant Physicians,'" *Washington Examiner* (June 5, 2017).
43. Ibid.

Shyloe Jones, Hub research assistant, and Lynn Quincy, Hub director, authored this report. Thanks to Altarum colleagues Corwin Ryhan and Ani Turner for their review.



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