REVIEW

Scope of Practice Legislation Across the US: Current Trends in Evidence, Advocacy, and Action

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Scope of practice (SoP) for nonphysician providers (NPPs) has long been the subject of controversy in the medical community. This includes radiology, as evidenced by the attention focused on the topic at the 2023 Centennial Meeting of the American College of Radiology (ACR).

An understanding of the issues and legislative challenges surrounding SoP is relevant to practicing radiologists and radiologists-in-training. This article aims to provide a foundational review of legislative challenges, relevant research, and other important considerations pertinent to SoP as it relates to radiology.

COVID-19 Puts a Spotlight on Scope of Practice

The severity and breadth of the COVID-19 pandemic created a sustained requirement for more care than could be achieved by the existing physician workforce. The responsibilities of many physicians moved beyond their areas of specialization to help address the needs of the most severely ill patients.

These extraordinary circumstances left many physician duties uncovered or put on pause; as a result, many NPPs assumed some of these responsibilities, in effect expanding their scope of practice, albeit temporarily.

But as the pandemic receded and most physicians returned to their "normal" practice, debate around permanent practice independence for advanced practice registered nurses (APRNs), physician assistants (PAs), and other NPPs gained momentum. For NPPs, the temporary adaptations to the global pandemic added fuel to their drive for greater practice autonomy, and legislative proposals for full practice authority increased.

According to the US Department of Health and Human Services, "nurse practitioners (NPs), clinical nurse specialists, and PAs are health care providers who practice either in collaboration with or under the supervision of a physician" and designates them as NPPs.[1]

The Balanced Budget Act of 1997 expanded reimbursement for NPP services from rural areas to all geographic and healthcare settings. As a result, nurse practitioners and clinical nurse specialists are allowed to bill Medicare directly, while PAs must continue to be billed by an employer.

With respect to education, PAs train in an accelerated format based on the traditional medical school curriculum. In contrast, APRNs receive a bachelor of science in nursing and a master's or doctorate degree in nursing practice in addition to specific clinical licensure in an area of practice such as anesthesia (eg, certified registered nurse anesthetist). These curricula focus on care delivery and patient-centered management as opposed to the basic and clinical science coursework covered in the medical school model.

The ACR defines non-physician radiology providers (NPRPs), which includes NPPs, and registered radiology assistants (RAs), and develops policies and guidelines regarding their scope of practice.[2] Radiology assistants are critical to many imaging practices and, by definition, work under the supervision of radiologists.[3] The two professions have historically worked hand-in-hand; it's worth noting that RAs are not seeking scope expansion.[4]

In the first half of 2023, the ACR identified 41 bills in 21 states related to increasing scope or full practice authority for PAs and 40 bills in 18 states for APRNs. Bills expanding SoP for PAs have been passed in four states: Arkansas, Arizona,

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Colorado, and Montana. To date, 26 states and the District of Columbia have assigned full practice authority rights to APRNs.

Legislative proposals addressing radiology, meanwhile, range from allowing NPRPs to order radiologic examinations to certifying PAs in fluoroscopy with 40 hours each of didactic and clinical training.

In addition, some state legislative proposals go beyond SoP issues to focus on shifting their entire oversight structure of radiology. In Tennessee, for example, SB 1191 and HB 1388 would eliminate the state Radiologic Imaging and Radiation Therapy Board of Examiners. In its place, the Tennessee Department of Health Division of Health-Related Boards would license all persons performing radiologic imaging, radiography, or radiation therapy procedures in any healthcare setting.

The original language of California's assembly bill 890 would have allowed NPPs to order, perform, and interpret diagnostic imaging scans. Fortunately, the ACR and the California Radiological Society joined forces to successfully get imaging interpretation excluded from the final bill. This effort highlights the power of advocacy to prevent SoP proposals harmful to radiology from getting passed into law. It also points up the vital importance for radiology practices to stay abreast of SoP legislation in their own state.

SoP Research is Mixed

Proponents of expanding NPP scope of practice argue that NPPs can improve access to healthcare in rural and underserved areas, while also saving the healthcare system in dollars and cents.

However, many medical organizations have raised concerns regarding the limited experience of NPPs, educational oversight, and potential unforeseen cost escalation of expanding NPP scope of practice. The ACR, for example, signed onto an American Medical Association letter opposing HR 2713, known as the "Improving Care and Access to Nurses Act."[5] This law would continue the trend of reducing or eliminating physician supervision of NPPs.

Allowing NPPs to practice to the top of their license arguably also does not universally achieve desired results; eg, expanding access to and improving the quality of healthcare in rural and underserved areas. A study of rural and nonrural primary care practices examining the utilization of NPs from 2008 to 2016 demonstrated only a modest difference between the two, with NPs constituting 25.2% and 23.0% of providers in rural and nonrural practices, respectively.[6]

At least two other studies, Barnes et al and Hughes et al, have shown that NPPs order more imaging than physicians following office-based evaluation and management (E&M) visits and in emergency department (ED) settings.[7,8] The authors of the Hughes study suggest that giving NPPs greater autonomy in radiology "may have ramifications on care and overall costs at the population level."

These cost control concerns are seemingly confirmed in a study comparing NP and physician productivity and outcomes in EDs in the Veterans Health Administration (VHA) system. The counterfactual analysis by the National Bureau of Economic Research comparing the current VHA environment of approximately 25% of patients being seen by NPs to the counterfactual of physician-only staffing found that VHA spending increased by an estimated $160 million due to higher resource utilization and adverse outcomes among patients.[9]

These trends are also reflected in other medical specialties where increasing NPP-led care has been

associated with increased opioid[10] and antibiotic[11] prescribing, lower-quality referrals,[12] and overutilization of biopsies.[13]

However, other studies comparing NPP care with physician-led care report improved outcomes with no difference in safety and costs.[14-16] These conflicting lines of evidence represent a scientific controversy and significant issue for radiology, especially considering that most state-level policymakers do not have a healthcare background, nor do they have the expertise to assess either the rigor of published literature or the impact of any given proposal on the healthcare system. This potential cognitive gap underscores the need for radiologists to educate and engage themselves on issues related to SoP legislation in their own state and beyond.

NPP utilization is increasing within radiology, as demonstrated by an increase of 16.3% in radiologist-employed NPP claims between 2017 and 2019. Most radiologist-employed NPPs are limited to performing interventional procedures, clinical E&M, and non-invasive imaging; only 3.6% perform imaging interpretation.[17] Despite this small percentage, a recent study demonstrated an association between less restrictive SoP regulations and higher levels of image interpretation by NPPs.[18] This shows that SoP legislation can have unintended consequences for radiology and our patients; professional advocacy is needed to shape legislation that brings about useful change without placing patients at risk.

Indeed, practices may realize significant cost savings by delegating common procedures, such as central venous access, thoracentesis, paracentesis, and percutaneous liver and kidney biopsies, to NPRPs so that interventional radiologists can handle more complex cases.[19] In addition, streamlining reimbursement for these procedures when performed by NPRPs would be one helpful direction for a legislative change instead of seeking a broader relaxation of SoP restrictions on NPRPs.

Exploring all avenues to increase patient access to and maintain the highest quality of care in radiology is essential. Recent research presents potential alternative solutions to the challenges of providing rural and other populations with greater access to healthcare and medical imaging. For example, a comparison of osteopathic and allopathic radiologist practice settings showed that osteopathic radiologists are more likely to practice in rural and disadvantaged communities compared to their allopathic colleagues.[20] Therefore, recruiting more osteopathic graduates to radiology may represent a viable strategy to improve access in areas of critical need, particularly given that DOs are a rapidly growing proportion of medical school graduates in the US.[21]

Technologies such as artificial intelligence are also streamlining radiology workflow and should continue to improve productivity and accuracy.[22] Bottom line: many options aside from expanding scope of access for NPPs are available to address costs, volume, access, and other current and future challenges.

Get Involved

The scope-of-practice legislative landscape is constantly changing. Individual radiologists and practices, national organizations like the ACR Radiology Advocacy Network, and state societies are all vital to making the profession's voice heard at the state and federal levels. The ACR has established a scope-of-practice fund that can supply state societies with financial support to lobby for (or against) scope-of-practice legislation.[23] The ACR also publishes a monthly e-newsletter, Advocacy in Action, that regularly updates on scope-of-practice legislation.[24]

Ultimately, safety is and should be the top priority for everyone in radiology. We owe it to ourselves and to our patients to be our own best advocates.

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