Filling the Need in Rural Healthcare Requires

Changing Licensing Standards of Advanced Healthcare Professionals

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INTRODUCTION

Access to quality health care is a struggle in rural areas even after many years.\(^1\) The challenge of delivering quality healthcare can be daunting in rural areas with low population density, transportation issues, low public funding levels for services and programs, staff recruiting issues and fragmentation of resources.\(^2\) In 2016 there were 39.8 primary care physicians to 100,000 residents in rural areas compared to 53.3 primary care physicians per 100,000 residents in urban areas.\(^3\) The stats in 2005 were 55 primary care physicians per 100,000 residents in rural areas and 72 primary care physicians per 100,000 residents in urban areas.\(^4\) Comparing the two statistics shows that the number of primary care physicians have decreased in both rural and urban areas over the last 11 years.\(^5\) Rural communities offer a more patient centered approach since physicians are able to offer more comprehensive care, yet the number of physicians continue to decrease.\(^6\) In 2018 a primary care shortage was defined as having only one primary care physician per 2,000 patients in a county.\(^7\) At that time 13 percent of US patients lived in a county with a primary care shortage.

Rural areas are not able to compete with the better financed urban hospitals in medical staff recruitment.\(^8\) Smaller rural hospitals were not prepared for the shift from inpatient to outpatient care leading to declining occupancy making for less revenue.\(^9\) Similarly, small family practices are closing as aging physicians retire with nobody to take over the practice.\(^10\) Other

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2 Phillips, Charles PhD, MPH. McLeroy, Kenneth PhD. *Health in Rural America: Remembering the Importance of Place*. American Journal of Public Health. 94(10) 1661-1663 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1448509/
3 National Rural Health Association. *About Rural Healthcare*. https://www.ruralhealthweb.org/about-nhra/about-rural-health-care#targetThe%20patient-to-%20primary%20care,per%20100%20in%20urban%20areas.&targetText=There%20are%2030%20generalist%20
5 Id.
6 Id.
7 Heath, Sara. Patient Care Access News. *NPs, PAs could Reduce Primary Care Physician Shortage Nearly 70%*. Retrieved from https://patientengagementhit.com/new/nps-pas-could-reduce-primary-care-physician-shortage-nearly70
9 Id.
elements contributing to financial trouble are economic stagnation, underinsured or uninsured residents and many elderly patients.\textsuperscript{11}

Medical education programs have tried to develop methods of filling the need for rural doctors.\textsuperscript{12} One common method many programs use is to actively recruit medical students that have rural backgrounds as these persons are more likely to choose to settle in a rural area as opposed to an urban one after completing their training.\textsuperscript{13} This method started after a study done by the Future of Family Medicine (FMM) project committee found that students from rural areas have a sense of belonging and the need to give back to their communities.\textsuperscript{14} The American Academy of Family Physicians agrees the best way to fill the rural doctor shortage is to increase the number of students from rural areas.\textsuperscript{15} Additionally federal, state and private entities fund rural medical education in hopes of attracting other medical students.\textsuperscript{16} Another method medical schools use to encourage students to settle in rural areas is to include rotations in rural communities and curricular elements pertaining to rural medicine in medical school and residency to encourage students already interested in rural practice to pursue it further.\textsuperscript{17}

The perception that pursuing family medicine is a less “intellectual” avenue has considerably influenced the number of students that choose rural medicine.\textsuperscript{18} With the cost of education growing there is also concern that practicing as a family doctor or rural doctor would not allow for student loans to be paid down quickly.\textsuperscript{19} However there is another way to meet the health care needs of rural communities that does not rely on physicians opening medical practices in rural areas; increasing the number and scope of practice for non-physician providers. To this end, licensing standards and scopes of practice of non-physician advanced healthcare professionals should be changed to provide greater access to care in rural communities.

\textbf{BACKGROUND}

Nearly 119 hospitals have closed in rural areas since 2010.\textsuperscript{20} As mentioned before small rural hospitals were not able to keep pace with changes in healthcare like moving from an inpatient to an outpatient model of care\textsuperscript{21}. Rural hospitals were not designed as outpatient care settings and

\begin{footnotes}
\item[11] Id.
\item[13] Id.
\item[15] Id.
\item[17] Id.
\item[18] Id.
\item[19] Id.
\item[21] Id.
\end{footnotes}
lacked the funds needed to transform into that model of care. The shift to an outpatient setting versus inpatient setting left these hospitals without the necessary revenue stream to keep their doors open. The closing of hospitals contributes to the lack of physicians but is not the only access barrier for rural residents.

Distance, transportation, health insurance coverage and poor health literacy start the list of barriers for rural patients to access healthcare. Contributing to the problems are economic, social, and racial barriers that creates a complex mix that makes finding solutions difficult. Many rural residents work on farms, ranches or other positions that do not provide paid time off for healthcare appointments. Due to this rural patients often have more advanced disease when they finally seek medical treatment. Expanded access and creative delivery methods of care could help provide

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24 Rural Health Information Hub (RHIHub). Healthcare Access in Rural Communities. https://www.ruralhealthinf.or.org/topic/healthcare-access
25 ClosedRuralHospitals https://public.tableau.com/profile/stroudwater.associates#!/vizhome/ClosedRuralHospitalsSince2010/ClosedRuralHospitals
26 Rural Health Information Hub (RHIHub). Healthcare Access in Rural Communities. https://www.ruralhealthinfo.org/topics/healthcare-access
28 Id.
29 Id.
regular visits, and potentially support to identify disease at an earlier stage. The barriers to access can be hard to overcome when viewed individually but when combined they show the problem in a bigger picture. Greater distance to the nearest emergency room with poor or no transportation with a life threatening injury could mean death in these rural areas. Normally a hospital attracts multiple disciplines to practice in the area; but rural hospitals struggle to attract primary care physicians let alone specialists. Small hospitals expenditures for physician recruiting while trying to maintain fixed costs make for an unstable budget. The economics of the rural hospitals cannot compete with larger urban hospitals to bring specialty physicians like neurologists or orthopedic surgeons which often bring in more revenue than other specialties. Operating a hospital is expensive with the overhead, 24/7 staffing and facility maintenance. A twenty-five bed hospital with only four beds filled is struggling to meet fixed costs let alone paying for recruiting. Payment methods from Medicare differ for rural and urban hospitals under the wage index plan. There are disparities in this payment plan between rural and urban hospitals. Under this payment plan a rural hospital could be paid $2000.00 less than an urban hospital for the same case. The current language of this law does not allow for changes to be made unless they are “budget neutral” on a nation-wide basis. There is a proposal for changes to bring rural hospital payments closer to those made to urban hospitals, letting them to improve patient access, improve quality and attract specialty physicians. These changes are important because recruiting physicians can cost around $27,000.00 for advertising, exhibiting at medical conferences and fees or salaries paid to

30 Id.
33 Id.
34 Id.
36 Id.
39 Id.
40 Id.
41 Id.
recruiters. The onboarding process for a new physician, including training, credentialing and marketing could cost at a minimum $200,000.00.

Primary care access is important for rural residents as it provides an entry into the healthcare system that fulfills overall healthcare needs. These needs include but are not limited to preventive services, care coordination, and improved health behaviors. There are more than 59 million people living in rural areas. They are more likely than urban or suburban dwellers to be in poor health and have higher mortality rates from chronic conditions. This is in large part a result of poor access to care. The Centers for Disease Control and Prevention (CDC) found in a study that rural Americans were more likely to die from preventable diseases than urban dwellers, most likely due to lack of healthcare access. The top five causes of death are heart disease, cancer, unintentional injuries, chronic lower respiratory disease and stroke. The below chart show how the five top causes comparing urban and rural communities.

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43 Id.
45 Id.
47 Id.
48 Id.
Growing Gaps in Death Rates Between Rural and Urban Areas

Source: CDC. Rural Americans at high risk of death from 5 leading causes. https://www.cdc.org
SOLUTIONS FOR ADDRESSING THE ISSUES

A report by National Quality Forum (NQF) identifies access as the most important element to rural residents and it is the number one reason for the lack of healthcare in rural areas. 51 Quality and access go together, access is not the same as quality but access is a strong contributor of quality. 52 Access is a broad term used to describe the intertwined issues of availability, accessibility and affordability of healthcare in rural areas. 53

Availability is more than just having a facility; it is also having appointments the same day or evening hours, care in a timely manner and access to specialty care providers. 54 Bringing in non-physician providers like nurse practitioners and physician assistants and changing their scope of practice so they can practice at the top of their training would increase the number of patients that could be seen. 55 More patients being seen leads to improved healthcare outcomes. 56

Rural patients often delay care because of inability to pay out of pocket expenses. 57 Healthcare plans have shifted to higher deductibles causing higher out of pocket costs for rural resident with insurance. 58 Affordability can be curved by healthcare providers helping rural patients understand their insurance choices so that they are not paying as much out of pocket. 59 Providers can help with special payment plans which benefit both patient and providers. 60

Accessibility is the need for language interpretation, health literacy (general health and insurance), transportation and physical accommodation. 61 Patients and providers need to be educated on how to communicate with one another. 62 Better communication between patient and

53 Id.
56 Id.
57 Id.
58 Id.
60 Id.
62 Id.
care giver would improve health literacy.\textsuperscript{63} Health information is more than understanding what is going on with their own health but understanding information about the provider and insurance coverage including what in network and out of network mean.\textsuperscript{64} Language barriers can be addressed in a couple of different ways; asking if the patient has a family member or friend who can come with them to interpret, or seeking a volunteer to help.\textsuperscript{65} Rural residents are having to travel farther to see a doctor due to hospital closures in their areas.\textsuperscript{66} Attempts have been made to solve the transportation issues.\textsuperscript{67} A few ideas to help with transportation are publicly funded buses, dial-a-ride transit and ridesharing programs.\textsuperscript{68} Transportation services have made partnerships with taxis, nursing homes and hiring drivers.\textsuperscript{69}

Some providers are using Telehealth or Telemedicine to increase access to care for some specialty modalities such as radiology, pathology, cardiac monitoring and dermatology among others.\textsuperscript{70} Telehealth allows patients to see specialty physicians without traveling great distances or delaying care for a long period of time.\textsuperscript{71} This can save time for the physician also as they do not have to travel either.\textsuperscript{72} The small hospitals benefit as well by boosting volumes and revenue without the traditional cost of a doctor on staff.\textsuperscript{73} Telehealth is not without its problems however, and issues do occur in some of the more remote locations due to lack of broadband internet connection.\textsuperscript{74} To address this federal loan and grant programs have been created to provide funding to install the needed technology.\textsuperscript{75} Even in areas where on demand Telehealth is being utilized patients are being treated by a physician who is not familiar with them or their history.\textsuperscript{76} The continuity of care is lost since these Telehealth physicians do not know the patient’s history.

\begin{thebibliography}{99}
\bibitem{63} Id.
\bibitem{64} Id.
\bibitem{70} RHIhub Rural Health Information Hub. \textit{Telehealth in Rural Healthcare}. https://www.ruralhealthinfo.org/topics/telehealth#improve-access
\bibitem{71} Id.
\bibitem{72} Id.
\bibitem{73} Id.
\bibitem{74} Id.
\bibitem{75} RHIhub Rural Health Information Hub. \textit{Telehealth in Rural Healthcare}. https://www.ruralhealthinfo.org/topics/telehealth#improve-access
\bibitem{76} Id.
\end{thebibliography}
or have access to their health records. The solution to access using telehealth or telemedicine does not always yield the best results as in the case of Allen v. Shawney, No. 11-10942, 2014 U.S. Dist. LEXIS 34881 (E.D. Mich. Mar. 18, 2014). Charmel Allen an inmate in Michigan State prison system had hepatitis C, hepatitis B and hepatitis D, which is a very rare and complicated condition. On November 18, 2008 she was seen by telemedicine for treatment of her hepatitis. Her second visit was on January 2, 2009 to evaluate the effectiveness of her treatment program. At this visit the doctor recommended that the patient be seen by a specialist since her disease was unique and he wanted to be sure the treatment plan would address all three types of hepatitis equally. She was seen by a doctor from the University of Michigan Liver Outpatient Clinic on March 19, 2009. He noted his recommendations in her records including the treatment plan and consideration of seeking another expert opinion. Follow up with her regular doctor to evaluate her response to treatment was to be on July 14, 2009 but the telemedicine system was unavailable. The next appointment was made for October 8, 2009 but it was canceled due to mobilization of prisoners. February 9, 2010 was to be her next telemedicine appointment which was canceled due to problems with the electronic medical records. She did have a telemedicine appointment on April 21, 2010 that yielded a discussion about pain management to go with her treatment plan. Subsequent appointments on June 16 and August 12, 2010 for telemedicine were canceled due to a power outage and issues with the telemedicine system in that order.

The patient in this case was able to keep her future telemedicine appointments over the next year. She believed that the long periods with no oversight of her treatment plan had allowed her disease to progress. The plaintiff’s (Allen) case was filed for a violation of her eighth amendment rights- that the defendants held deliberate indifference to her medical needs.

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79 Id.

80 Id.

81 Id.

82 Id.

83 Id.


86 Id.

87 Id.


89 Id.

90 Id.


92 Id.
not win this case due to not sufficiently showing that the defendants had a subjectively sufficiently culpable state of mind. This case shows that there can be failures in telemedicine technology.

Another means by which rural hospitals can improve access in their area is to join or affiliate with a larger healthcare system.93 Joining a larger healthcare system improves financial stability for the rural provider, provides additional resources and allows the rural hospital to serve more patients.94 Affiliation with a larger health system may also help with technology, group purchasing and access to operational services.95 However, local control may decrease with the affiliation of a larger health care system.96 Joining a large healthcare system does not guarantee improvement to access for patients who are seeking to see sub-specialty physicians.97

NURSE PRACTITIONERS TRAINING

Nurse Practitioners start as a registered nurse then they continue their education in the form of a master’s degree.98 The educational programs for nurse practitioners builds on their nursing knowledge.99 These programs include coursework in health promotion, disease prevention, physiology, pathophysiology, health assessment, pharmacology, research, professional ethics, policy, finance, organization health care delivery, diversity training, and social issues.100 They are also required to complete professional clinical training in direct patient care.101 After completion of the degree program a nurse practitioner must pass a certification exam and then can apply for a state license.102 Requirements for licensure varies from state to state.103 Nurse Practitioners are required to obtain 100 hours of continuing education every two years with recertification every 3-7 years depending upon their original initial certification type.104

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94 Id.
95 Id.
97 Id.
99 Id.
100 Id.
101 Id.
102 Id.
103 Id.
PHYSICIAN ASSISTANTS TRAINING

Physician Assistants must have a bachelor’s degree before getting accepted into a Physician Assistant program. They complete on average 27 continuous months in their programs, starting in 2020 all programs will award a master’s degree. The programs are based on medical school curriculum. Similar to medical school the physician assistant program starts in the classroom followed by a rotations in medical disciplines family medicine and psychiatry and a surgical discipline. The clinical rotations provide at least 2,000 hours of clinical practice under supervision. After graduation the PAs take the national Physician Assistant certifying examination and then can apply for a license from the state. They are required to obtain 100 hours of continuing medical education every two years and must complete a recertification exam every 10 years.

SCOPE OF PRACTICE

Advanced healthcare professionals first started practicing in the 1960s to help primary care physicians meet the healthcare needs of the rural and the underserved residents. Even then it was believed that primary care physicians and their teams were the first contact for patients to enter the healthcare system. Healthcare teams knew the importance of that first contact to provide care and continuity of care to meet the patients’ needs.

NPs and PAs are regulated differently by each state. The scope of practice for NPs differs from state to state and sometimes facility to facility. Non-independent practice is the main issue limiting NPs to provide a full range of care to consumers. Independent practice or full practice

107 Id.
108 Id.
109 Id.
110 American Academy of PAs (AAPA). PA Scope of Practice. Retrieved from https://www.AAPA.org
113 Id.
114 Id.
115 American Medical Association (AMA). Physician Assistant Scope of Practice. PDF. Retrieved from https://www.ama-assn.org>meida> download
116 Id.
for NPs would mean providing care without supervision of a physician in all settings whether that be hospital, office, nursing home or clinic. This type of practice would allow nurse practitioners to evaluate, diagnose, order diagnostic exams and manage treatment plans, including prescribing medications. Independent practice by NPs is not allowed in twenty-four states for nurse practitioners. Twenty of these states require a written formal supervision agreement between the NP and a supervising physician. The other four states require an agreement or relationship between NPs and physicians, but it is not required to be documented in writing. The agreements differ from state to state but generally require obligations such as supervision, delegation from the physician, authorization and collaboration. Out of the 22 states that allow NPs to diagnose and treat without a supervising relationship with a physician only 13 states allow them to prescribe medication without a physician being involved.

Source: Improving Access to Care in Rural and Underserved Communities: State Workforce Strategies

118 Id.
122 Id.
123 Id.
124 Id.
A case in Iowa sets a precedent for other states to follow for who sets the rules for advanced practice healthcare providers and what the scope of practice includes.\textsuperscript{125} Iowa Med. Soc’y V. Iowa Bd. of Nursing. 831 N. W. 2d 826 (Iowa2013) was brought by a couple of physician organizations who believed that the Iowa Board of Nursing and Iowa Board of Health had overstepped their authority by granting nurse practitioners the right to supervise fluoroscopy exams.\textsuperscript{126} This case was not about if a nurse practitioner was capable of supervising a radiology technologist during a fluoroscopy exam even though the organizations did site safety and education as concerns.\textsuperscript{127} It was to define the powers of the Iowa Board of Nursing and Iowa Board of Health in reference to scope of practice for advanced healthcare professionals.\textsuperscript{128} The case hinged on the interpretation of “licensed practitioner of the health arts” in Iowa’s Administrative Code Rules 655-7.2(2).\textsuperscript{129} The Iowa Nursing Board and Iowa Board of Health felt that a nurse practitioner qualified as a licensed practitioner who practiced the healing arts.\textsuperscript{130} The court agreed that they had not overstepped their authority finding “that the board could apply Iowa Code § 152.1(6)(d) (2009) to determine that ARNP supervision of fluoroscopy was recognized by the medical and nursing professions despite the opposition of the board of medicine and physician organizations; [2] It was not irrational, illogical, or wholly unjustifiable for the Board to determine that ARNP supervision of fluoroscopy was recognized by the medical and nursing professions. Qualified ARNP could directly supervise fluoroscopy without acting as an operator of the radiation machine.” \textsuperscript{131} Giving advanced healthcare professionals privileges like the ones in this case help to improve access especially in rural areas and lower costs for exams.\textsuperscript{132}

Medical boards regulate the licensing of PAs in forty-three states while the remaining 8 states have separate and independent regulatory boards.\textsuperscript{133} Unlike an advanced practicing nurse, only 1 state, New Mexico, allows PAs to practice without a physician agreement. \textsuperscript{134} Physician agreements are collaborative or supervisory, but their definitions differ from state to state.\textsuperscript{135} The physician assistant’s scope of practice is decided with the collaborating/supervising physician at the site level.\textsuperscript{136}

\textsuperscript{125} Iowa Med. Soc’y v. Iowa Bd. of Nursing, 831 N.W.2d 826 (Iowa 2013)
\textsuperscript{126} Id.
\textsuperscript{127} Id.
\textsuperscript{128} Id.
\textsuperscript{129} Id.
\textsuperscript{130} Id.
\textsuperscript{131} Iowa Med. Soc’y v. Iowa Bd. of Nursing, 831 N.W.2d 826 (Iowa 2013)
\textsuperscript{132} Iowa Med. Soc’y v. Iowa Bd. of Nursing, 831 N.W.2d 826 (Iowa 2013)
\textsuperscript{133} American Medical Association (AMA). Physician Assistant Scope of Practice. PDF. Retrieved from https://www.ama-assn.org>meida> download
\textsuperscript{134} Id.
\textsuperscript{135} Id.
\textsuperscript{136} Id.
These advanced healthcare professionals could fill the need for primary care physicians if allowed to practice to the full extent of their education and training. The number of nurse practitioners and physician assistants far exceeds the number of medical residents who are choosing to be matched in primary care.


2014–18 US Primary Care Residency Match and US Nurse Practitioner Primary Care Graduates

As society ages that means so do practicing providers, by 2025 one third of practicing providers will be over the age of 65 and preparing for retirement. The nation will only have 306,000 primary care physicians in 2030. The Association of American Medical Colleges (AAMC) published data stating there will be a shortage of 122,000 physicians by 2032. Between 21,100 and 55,200 of these physicians being in primary care. The American Medical College also predicts that demand for care will grow due to a growing and aging population and American living longer lives. There is expected to be an overall 8 percent


143 Id.

144 Id.
increase in the demand for primary care by 2030.\textsuperscript{145} The greatest demand for healthcare will come from the over seventy-five year old population with a 55 percent demand growth by 2030.\textsuperscript{146} The over sixty-five-year-old population will see a 38 percent demand growth for healthcare by 2030.\textsuperscript{147} The number of NPs and PAs are projected to continue to increase; making their role in healthcare more important.\textsuperscript{148}

\begin{table}[h]
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\begin{tabular}{|c|c|c|c|c|c|c|}
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Physicians & 711,357 & 862,698 & 920,397 & 1,076,360 & 2.2 & 1.1 & 1.1 \\
Nurse practitioners & 64,800 & 91,697 & 157,025 & 396,546 & 3.9 & 9.4 & 6.8 \\
Physician assistants & 44,282 & 88,047 & 102,084 & 183,991 & 7.9 & 2.5 & 4.3 \\
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\end{tabular}
\caption{Historical and Projected Numbers of Physicians, Nurse Practitioners, and Physician Assistants.\textsuperscript{149}}
\end{table}

Research done by George Mason University, Montana State University, the University of California San Francisco and the University of Texas Medical Branch at Galveston supports nurse practitioners expanding their scope of practice.\textsuperscript{149} The study by Montana State University found that nurse practitioners were more likely to practice in rural areas than urban, noting that the scope of practice laws impacted patients’ access to primary care.\textsuperscript{150} Research done by the University of Michigan confirmed that NPs practiced in lower-income areas with a 50 percent higher presence in the least healthy counties as compared to physicians.\textsuperscript{151} They broke it down farther and found that in 17 of the states that do not restrict scope of practice for NPs had a 62 percent of the state’s population had better access to primary care.\textsuperscript{152} The 21 states in the study that have full restrictions...

\textsuperscript{145} Heath, Sara. \textit{NPs, PAs Could Reduce Primary Care Physician Shortage Nearly 70%}. \textit{Patient Engagement}. Retrieved from https://patientengagementhit.com/new/nps-pas-could-reduce-primary-care-physician-shortage-nearly-70

\textsuperscript{146} Id.

\textsuperscript{147} Id.


\textsuperscript{150} Id.


of scope of practice for NPs had a markedly decrease in access to primary care. The University of California’s study agreed that the states with independent scope of practice for NPs had patients that had increased routine check-ups and a lower rate of Emergency room admissions for conditions that can be addressed in a doctor’s office. George Mason University research showed that the quality of care was not effected when delivered by the NPs and PAs in states with broader scope of practices. Quality of care improved with access and access improved with NPs and PAs allowed to practice more autonomously.

In order to improve access to healthcare states need to standardize their scope of practice laws to fit professional competence. States that do not recognize the need to change their policies for NPs and PAs to practice to the full extent of their knowledge and skills limit access to primary care. The growing demand of primary care shows the urgency for nurse practitioners and physician assistants to be able to practice to the full extent of their training. Variations from state to state in healthcare regulations is another issue for healthcare providers. It is well documented that nurse practitioners can safely provide the full array of services including diagnose, treatment plans, and prescribing but yet only one-third of the states allows them full authority. The difference in regulations from state to state can become problematic for healthcare systems that are multi-state practices. The challenge is trying to fit today’s healthcare system into an outdated regulatory system. The healthcare workforce must be able to meet the responsibility of improving access and the healthcare system as a whole; limiting scopes of practice for NPs and PAs does not allow them to help in these efforts.

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154 Id.
155 Id.
157 Id.
159 Id.
160 Id.
162 Id.
163 Id.
Concerns with regulations of health professions in the United States is not new, there have been calls for reform in the past.\textsuperscript{165} To allow nurse practitioners and physician assistants to practice to their full scope is how regulations need to be changed.\textsuperscript{166} Independent practice for nurse practitioners and physician assistants would be the ideal practice mode for these health professionals.\textsuperscript{167} Independent practice also known as full practice would be the most extreme for the states to lift all restrictions and allow NPs and PAs to diagnose, order and interpret tests, initiate and manage treatment plans and prescribe medications including controlled substances.\textsuperscript{168} The National Academy of Medicine and National Council of State Boards of Nursing recommends the independent/full practice model.\textsuperscript{169} The IOM states: “Collaborative modes of practice, in which all health professionals practice to the full extent of their education and training, optimize the efficiency and quality of care for patients and enhance the satisfaction of healthcare providers.”\textsuperscript{170} Between 2015-2017 there were 136 bills introduced, 15 enacted to change nurse practitioners’ scope of practice.\textsuperscript{171} During those same years 69 bills were introduced and 15 enacted changing

\textsuperscript{165} Dower, Catherine, Moore, Jean and Langelier, Margaret. Health Affairs. \textit{It is Time to Restructure Health Professions Scope-of-Practice Regulations To Remove Barriers to Care.} Retrieved from https://www.healthaffairs.org/doi/full/10.1377/hlthaff.2013.0537  
\textsuperscript{166} Id.  
\textsuperscript{168} Id.  
\textsuperscript{170} Id.  
COST EFFECTIVENESS OF NPs AND PAS

Cost effectiveness of healthcare provided by NPs and PAs is hard to analyze in civilian healthcare due to the billing process. Many use “incident to” billing which lists the charges under the collaborating physician, there is no way to differentiate who provided the care. The Veterans Affairs (VA) healthcare system model of care is more like states with independent practice with physician, NPs and PAs all in lead roles with their own patient base. This model

172 Id.

204 Id.
of care allowed for data to be pulled for a study to analyze if the use of NPs and PAs in the lead primary care role are cost efficient. 176 The study showed that patients seen by physicians incurred greater outpatient, including pharmacy and total expenditures compared to the NPs or PAs patients. 177 Expenditures of patients under the care of the NPs and PAs were very similar in total cost. 178 This study showed that the use of NPs and PAs in the primary care role could contribute to cost savings for patients and insurers. 179

REIMBURSEMENT

The Affordable Care Act brought the health insurance marketplace to consumers to help the uninsured find affordable healthcare coverage. 180 There are fewer choices of healthcare plans for rural residents than urban residents on the health insurance Marketplace. 181 A contributor to the lack of choices is the disparity of building a provider network. 182 Residents who have private insurance many times travel to hospital systems outside their communities to stay in their insurance’s network. 183 The lack of primary care in these areas makes it difficult to build the provider networks needed to attract insurers which would keep rural residents from traveling outside of their community for care. 184 As noted earlier the report by the NQF states that access is the most important element for rural residents to improve the healthcare outcomes. 185


176 Id.
177 Id.
178 Id.
179 Id
182 Id.
184 Id.
Reimbursement methods are moving toward a value base payment plan in place of volume base (fee for services) payment plan.\textsuperscript{186} These payment plans are based on quality of care instead of quantity of care.\textsuperscript{187} A majority of NPs and PAs bill under their collaborating physician which is called “incident to” billing.\textsuperscript{188} Billing in this manner is reimbursed at 100\% of the physician fee schedule or fee for service payment plan.\textsuperscript{189} Currently nurse practitioners and physician assistants who bill under themselves and not under a collaborating physician; are reimbursed at the rate of 85\% of the physician fee schedule or fee for service payment plan.\textsuperscript{190} The Medicare Advisory Payment Commission has recommended to eliminate “incident to” bill since there is no way to track who provided the service.\textsuperscript{191} This type of billing does not allow to accurately evaluate the cost and quality of the care provided.\textsuperscript{192} Being able to evaluate the care being provided by NPS and PAs would allow policymakers to set rates for physician fee schedules in line with care provided moving NPs and PAs to a value base payment.\textsuperscript{193}

Rural healthcare organizations have not yielded good results using value based payment plans.\textsuperscript{194} In order for rural healthcare providers and facilities to adjust to this type of payment there

\textsuperscript{186} Centers for Medicare & Medicaid (CMS). \textit{CMS’ Value Based Programs}. Retrieved from https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment--Instruments/Value-Based-Programs/Value-Based-Programs
\textsuperscript{187} Centers for Medicare & Medicaid (CMS). \textit{CMS’ Value Based Programs}. Retrieved from https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment--Instruments/Value-Based-Programs/Value-Based-Programs
\textsuperscript{189} Id.
\textsuperscript{191} Id.
\textsuperscript{193} Id.
needs to be better access to care.\textsuperscript{195} NPs and PAs can provide more access to quality healthcare when allowed to practice to the full scope of their education and training.\textsuperscript{196}

CONCLUSION

CMS is continuing to make changes in reimbursement payments with the goal to enhance patient access to care, improve the quality of care while promoting value-based payment methods.\textsuperscript{197} These programs show an increased stewardship of the healthcare dollar.\textsuperscript{198} Expanding access to healthcare will require a larger workforce that is able to handle the demands efficiently and effectively.\textsuperscript{199} This will require a change in legal scope of practice for NPs and PAs across all states with regulatory flexibility to support the changes.\textsuperscript{200}

\textsuperscript{195} CMS. Putting our Rethinking Rural Health Strategy into Action. Retrieved from https://www.cms.gov/blog/putting-our-rethinking-rural-health-strategy-action
\textsuperscript{196} Dower, Catherine, Moore, Jean and Langelier, Margaret. Health Affairs. It is Time to Restructure Health Professions Scope-of-Practice Regulations To Remove Barriers to Care. Retrieved from https://www.healthaffairs.org/doi/full/10.1377/hlthaff.2013.0537
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