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By

Kimberly R. Ramseur

A Capstone Submitted to the Graduate Faculty of Georgia State University in Partial Fulfillment of the Requirements for the Degree

MASTER OF PUBLIC HEALTH

Atlanta, Georgia August 17, 2015



Abstract

By the year 2025, the United States is predicted to face a shortage of between 46,000 - 90,000 physicians. Of specific concern are primary care physicians. With the rising costs of education, earning potential for those in specialty care, and the lack of interest in rural communities, it is no surprise that many physicians are foregoing the primary care route. As a result, rural areas are suffering, many operating without a healthcare facility or provider nearby. Individuals that reside within these communities often have poor health outcomes and are of lower socioeconomic status. In Georgia, there are several counties that are without do not have access to sufficient healthcare services. Many rural Georgians are forced to travel to neighboring counties to receive care. This poses a serious public health concern for many residents, public health officials, and policymakers throughout the state. The Georgia legislature has attempted to enact legislation that would address the effects of the physician shortage crisis for rural Georgians. Georgia is not the only state dealing with this issue and in response to the crisis many states have sought to expand the scope of practice for nurse practitioners and physician assistants. By providing nurse practitioners and physician assistants with greater autonomy such as prescriptive authority or the ability to diagnose and treat without physician supervision, states are likely to see greater access to care for those in rural communities, where there is a greater likelihood of nurse practitioner and physician assistants being in service.. This paper will assess the effects of physician shortages in Georgia and offer suggestions on how to alleviate some of the burdens associated with this problem.



By Kimberly R. Ramseur

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Acknowledgments

Sylvia Caley

Kim Ramsey-White



Author's Statement Page

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I. Introduction

Crisis is defined as a time when a difficult or important decision must be made. Georgia, like many other states, is facing a physician shortage crisis, and in particular, a primary care physician deficit. Given Congress' inability to pass legislation that would allow for increased

primary care residency slots and the fact that many physicians lack a desire to practice within rural areas, Georgia has few options left to address the problem physician shortages of in rural communities.^{2,3} A decision must be made. According to reports, Georgia, a state with over 10 million people living in it, was ranked 39th in the ratio of doctors per 100,000 population in 2010.4 As Figure 1.1 demonstrates, Georgia's rural population has very limited access to health care.⁵ There are



Figure 1.1

several clusters of counties that are operating without a nearby Critical Access Hospital or Health Clinic. When residents are in need of care, they are left with very few options. Figure 1.2 displays

⁵ Selected Rural Health Care Facilities in Georgia, Rural Assistance Center, https://www.raconline.org/states/georgia.



¹ What are critical access hospitals (CAH)?, Health Resources and Services Administration, Crisis, Oxford Dictionaries, http://www.oxforddictionaries.com/us/definition/american_english/crisis.

² H.R. 2124, 114th Cong. (2015).

³ S. 973, 111th Cong. (2009).

⁴ Andy Miller, Doctor Shortage Remains Acute in Rural Areas, *Georgia Health* News, Jan. 2, 2014, http://www.georgiahealthnews.com/2014/01/doctor-shortage-acute-rural-areas/.

each Georgia county that has been designated as rural.⁶ Together Figures 1.1 and 1.2, indicate a stark difference in the availability of health care services for people living in rural counties versus those who reside in urbanized areas. Unfortunately for Georgia, much of the state is considered rural, which suggests a serious access to health care issue for residents, which leads to poor health

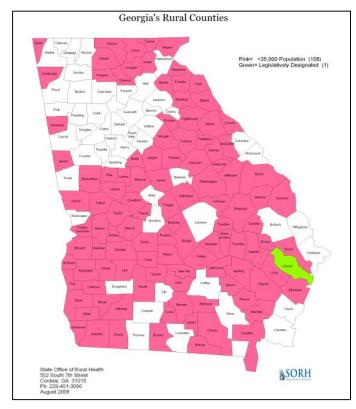


Figure 1.2

outcomes.

While the physician⁷ growth rate has actually surpassed Georgia's overall population growth rate in the last few years such increase does not reflect what is really going on throughout the state.⁸ Over 25% (1,885) of Georgia's primary care physicians practice in urban areas leaving rural counties with too few practicing physicians to meet patient needs.⁹ A 2013 report stated that 31 counties had no internal medicine

physician, 63 counties had no pediatrician, 79 counties did not have an OB/GYN, and 66 counties operated without at least one general surgeon. ¹⁰ Unfortunately for rural Georgians, they also have the poorest health outcomes when compared to their counterparts that live in or around

⁹ APRNs Are Georgia's Answer to its Shortage of Primary Care Providers!, https://uaprn.enpnetwork.com/page/17861-aprns-are-georgia-s-answer-to-its-shortage-of-primary-care-providers-.
¹⁰ Id.



⁶ Georgia's Rural Counties, State Office of Rural Health,

 $[\]underline{https://dch.georgia.gov/sites/dch.georgia.gov/files/imported/vgn/images/portal/cit_1210/19/60/127722716GeorgiaRural counties.}\\ \underline{pdf}.$

⁷ Includes all Georgia physicians, not just those in primary care.

⁸ Andy Miller, Doctor Shortage Remains Acute in Rural Areas, *Georgia Health* News, Jan. 2, 2014, http://www.georgiahealthnews.com/2014/01/doctor-shortage-acute-rural-areas/.

metropolitan areas.¹¹ Their poor health outcomes are generally a result of other factors such as socioeconomic status, level of education, and employment status.¹² Figure 1.3 is a graph that compares the rates associated with the social determinants influencing health in rural Georgia with those that live in the urban/metropolitan areas of the state.¹³ Based on data collected in 2013 by the U.S. Department of Agriculture, more

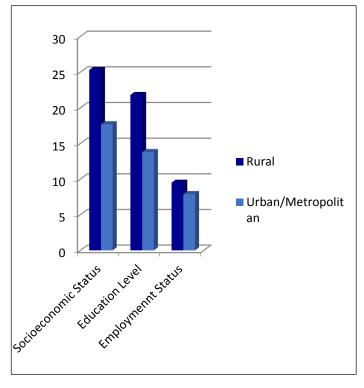


Figure 1. 3

rural residents lived under the Federal Poverty Level than urban residents, graduated from high school at lower rates, and had higher unemployment. As a result of these disparities, rural communities see higher concentrations of people living without health insurance, and experiencing disease, illiteracy, and inadequate access to quality health care services, all of which has led to increased deaths overall. ¹⁴ These factors coupled with physician shortages conspire to impede rural residents in their struggle to lead healthy lives. ¹⁵ Figures 1.1 and 1.3 show that Georgia's rural health care facilities are operating with extremely limited resources, unlike those in the Atlanta metropolitan area. If this pattern of care persists, then these areas are likely to face a more extreme

http://dch.georgia.gov/sites/dch.georgia.gov/files/imported/vgn/images/portal/cit_1210/21/19/970432432007_Rural_Health_Plan.pdf.

15 Id.



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 $^{^{11}\,}Determinants\ of\ Health,\ http://www.healthypeople.gov/2020/about/foundation-health-measures/Determinants-of-Health.$

¹² Id.

¹³ Graph developed based upon data collected from: Selected Social Determinants of Health for Rural Georgia, Rural Assistance Center, https://www.raconline.org/states/georgia.

¹⁴ Georgia Department of Community Health, State of Georgia Rural Health Plan prepared for Georgia State Office of Rural Health, a Division of The Department of Community Health September 2007, available at

decline in health, greater than the one presently going on.

For the last few years, there have been ongoing state legislative battles, not only in Georgia, but throughout the U.S. amongst health care provider groups regarding expanding the scope of practice for various medical professionals. Many rural communities often lack even one physician, but may have a nurse practitioner or physician assistant operating out of a local office. Visiting the local clinic where a nurse practitioner or physician assistant provides medical attention, for many rural residents, is the closest they will ever get to receiving optimum care. By giving nurse practitioners and physician assistants more responsibilities when it comes to treating patients, rural communities may have a greater opportunity to achieve better health outcomes. Therefore, Georgia should expand the scope of practice for both nurse practitioners and physician assistants.

The purpose of this paper is to discuss: (1) the physician shortage, its effects and potential causes; (2) legislative efforts made to remedy the current crisis; and (3) provide a policy recommendation for Georgia, utilizing nurse practitioners and physician assistants.

II. Physician Shortage in the United States

In 1966, Dean M. Roberts, M.D. authored a report entitled *Health is a Community Affair:*Preview of the Final Report of The National Commission on Community Health Services. The report stated:

Every individual should have a personal physician who is the central point for integration and continuity of all medical services to his patient. Such physician will emphasize the practice of preventive medicine He will be aware of the many and varied social, emotional and environmental factors that influence the health of his patient and his family His concern will be for the patient as a whole, and his relationship with the patient must be a continuity one. ¹⁶

 $[\]underline{http://www.aafpfoundation.org/online/etc/medialib/found/documents/programs/chfm/foundationgutierrezpaper.Par.0001.File.tmp/foundation-gutierrezpaper.pdf.}$



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¹⁶ M. B. Folsom, Chair, National Commission on Community Health Services, Health is a Community Affair, Cambridge Mass: Harvard University Press, 1966:26, available at

Fast-forward to the year 2015 and we hear a different view, even unfortunate reality, that every person does not have access to a personal physician that can provide the quality of care patients had hoped for. According to a report released by the Association of American Medical Colleges, the U.S. will face a shortage of 46,000-90,000 physicians by the year 2025.¹⁷ Perhaps, the aspirations of Dr. Roberts, and so many like him, were just too big or maybe officials did not actually plan to address a shortage of doctors. Regardless of the reason, there remains this truth; the U.S. is facing a major shortage in physician care.

The current U.S. population is progressively aging and this group of older Americans is expected to grow much larger in the next few years. At the same time, medical schools are producing fewer primary care physicians. Primary care physicians are important because they are trained to be generalists, since they provide definitive care to the undifferentiated patient at the point of first contact, and they assume continuing responsibility for providing the patient's care for a multitude of issues. 18 Many parts of the country are already facing a physician shortage, particularly in underserved rural areas. Even in places that do have at least one health care provider, patients are often waitlisted for days. A 2014 survey showed that the average wait time to see a primary care physician across metropolitan areas was 19.5 days, which was less than the estimated 20.3 days in 2009. 19 The longest average wait time was in Boston, with an alarming 66 days, the shortest was in Dallas, at five days. ²⁰ As a result, patients often forgo visits and do not

¹⁸ Primary Care, American Academy of Family Physicians, http://www.aafp.org/about/policies/all/primary-care.html#3. ¹⁹ Chris Mazzolini, Survey shows patients in many cities wait weeks for appointments, Medical Economics, Feb. 24, 2014, http://medicaleconomics.modernmedicine.com/medical-economics/content/tags/aca/survey-shows-patients-many-cities-waitweeks-appointments?page=full.



¹⁷ New Physician Workforce Projections Show the Doctor Shortage Remains Significant, Solution Requires Delivery Innovation, Team-Based Care, Federal Support, Association of American Medical Colleges, Mar. 3, 2015, https://www.aamc.org/newsroom/newsreleases/426166/20150303.html.

seek care until it is nearly too late, forcing them to seek out urgent care facilities or emergency departments.

Over the years, issues within health care delivery have evolved. During the 1700's and for a long time thereafter, physicians would travel to patient's homes to treat some, if not everyone, within the household. When physicians were called they were responsible for ensuring the health and safety of their patients, often doing so without any formal training. The University of Pennsylvania School of Medicine, the first medical school in what would become the U.S., was not established until the mid to late 1700's. It was the only medical school within the thirteen American colonies, which would have posed a problem for those that did not live near. Additionally, the U.S. population at the time was around 3 million compared to our contemporary count of over 300 million with a baby being born every 8 seconds.²¹ Physicians would have had a smaller population to treat and did not have to make too many house calls since most families relied heavily upon home remedies to cure their ailments.²²

With the advancement of medical technologies, drugs, and education, life expectancy is much greater and the overall ability to treat patients has improved. Physicians are now faced with the challenge of delivering quality care to patients that are widely dispersed throughout states with few, if any, health care facilities nearby. Rural residents often find themselves having to travel hours to consult with physicians about their care.²³ One Kentucky mother recalls the countless times she had to drive her son four hours to receive treatment for his type 1 diabetes.²⁴ Distance also poses a problem for emergency services. In most cases, rural areas are less densely-populated,

²³ Fred D. Baldwin, Access to Care: Overcoming the Rural Physician Shortage, Appalachian Regional Commission, http://www.arc.gov/magazine/articles.asp?ARTICLE_ID=98.
²⁴ Id.



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²¹U.S. and World Population Clock, United States Census Bureau, http://www.census.gov/popclock/.

²² Vernellia R. Randall, Managed Care Utilization Review and Financial Risk Shifting: Compensating Patients for Health Care Cost Containment Injuries, *17 U. Puget Sound L. Rev. 1* (1993).

so in emergency cases when 911 is called, dispatchers sometimes have to stay on the phone longer providing instructions because first responders take longer to arrive.²⁵ This, of course, means that the route to hospitals may be increased because there are few, if any, health care facilities within close proximity.²⁶

Having to travel long distances to see a health care professional can also pose a major burden on families in terms of time and money. Compared to their counterparts that live in or near metropolitan areas, rural residents do not have access to reliable mass transport, i.e. buses, trains, cabs or shuttles. Many programs that are offered within city limits to transport patients to health clinics are not always available. Medicaid, a joint federal and state program, helps with medical costs for some people with limited income and resources.²⁷ In some instances, Medicaid will provide transportation to eligible recipients.²⁸ To be eligible Medicaid members must not have any other transportation available, which would be determined at time of contact.²⁹ Rural communities also tend to have a larger population of older individuals with chronic conditions that prevent them from leaving their homes to seek adequate care.³⁰ 20% of elderly individuals, those that are 65 years and above, live in non-metropolitan designated areas.³¹ Managing the care of aging populations within rural areas of the state can pose major problems for health care professionals, as well as patients.³² Without sufficient medical resources, many residents are faced with the harsh reality that access to quality care may not be possible.

³² Id



²⁵Challenges For Rural 911, http://www.911.gov/911-issues/challenges.html.

²⁶ Id.

²⁷ Medicaid, http://www.medicare.gov/your-medicare-costs/help-paying-costs/medicaid/medicaid.html.

²⁸ Non-Emergency Transportation, https://dch.georgia.gov/non-emergency-transportation.

²⁹ Id

³⁰ Policy Brief, Elder Health in Rural America, National Rural Health Association, file:///C:/Users/krram_000/Downloads/ElderHealthinRuralAmericaFeb2013.pdf

³¹ *Id*.

III. **Potential Causes of Physician Shortage**

As the practice of medicine has become more specialized over the years, student interest in primary care practice has waned resulting in significant shortages in primary care physicians overall and specifically in rural areas. More and more students are foregoing the traditional internal medicine or family practice route and are opting for the more lucrative specialties.³³ Key factors that are influencing the primary care physician shortage in rural communities include overall earning potential; amount of education debt; and the quality of life in rural areas. Additional factors such as, increased costs associated with operating a practice, time-consuming regulatory burdens, insurance reimbursement issues, and concerns with liability exposure also play a role when potential medical students contemplate becoming a physician.³⁴

In 2014, the average primary care physician made \$195,000.³⁵ This is not an insignificant income by any means. Most people do not even dream of making half that much, let alone actually amass that amount of wealth in their lifetime.³⁶ However, when compared to someone who is an orthopedic surgeon or cardiologist, that salary can be less appealing. The average salary for an orthopedist in 2014 was \$421,000, while cardiologists made an average of \$376,000.37 Reports have shown that primary care physicians earned a cumulative average lifetime income of approximately \$6.5 million compared to over \$10 million for specialists.³⁸

³⁸ Carol Peckham, Medscape Physician Compensation Report 2015, Medscape, Apr. 21, 2015, http://www.medscape.com/features/slideshow/compensation/2015/public/overview#page=2.



³³ Lusine Poghosyan, Nurse Practitioner Workforce, *Nurs Econ.*, 30(5):268-274 (2012).

³⁴ Ken Terry et al. Top 15 challenges facing physicians in 2015, Medical Economics, Dec. 1, 2014, http://medicaleconomics.modernmedicine.com/medical-economics/news/top-15-challenges-facing-physicians-2015?page=full. ³⁵ Carol Peckham, Medscape Physician Compensation Report 2015, Medscape, Apr. 21, 2015,

http://www.medscape.com/features/slideshow/compensation/2015/public/overview#page=2.

³⁶ Amanda Noss, Household Income: 2013, Sept. 2014, available at https://www.census.gov/content/dam/Census/library/publications/2014/acs/acsbr13-02.pdf.

³⁷ Deborah Brauser, US Cardiologists Near Top in Physician Compensation, but Satisfaction Falls Short, Medscape, Apr. 21, 2015, http://www.medscape.com/features/slideshow/compensation/2015/plastic-surgery#page=2.

Education debt is another factor influencing the minds of medical students as they select areas of practice. The median four year cost to attend medical school for students in 2013 was \$278,455 for private institutions and \$207,868 at public schools.³⁹ It has become increasingly hard, financially, for individuals to attain a medical education. However, it is not the only challenge some may face. Many students have no desire to practice in rural communities.

The strongest predictors of whether a physician will opt to practice in a rural setting are the level of training they have and familial background. Legislators and health officials have wondered what has led to the lack of interest in rural areas and some have offered suggestions which include: (1) admission of fewer students from rural backgrounds; (2) less school commitment to meeting state or locality needs; (3) negative influence of medical program, or (4) the area does not afford physicians the same or similar amenities that a metropolitan area would, i.e., entertainment, quality education for children. Even if some places are fortunate to acquire a physician, it is often a struggle to retain them. Research has suggested that physicians may have a difficult time adjusting to the culture in rural communities, especially if they have had no previous experience or training. They may also encounter issues with acceptance within the community. In settings where patients are of a lower socioeconomic status, physicians often find a lack of trust. When there is distrust in the doctor-patient relationship, it makes it harder to address any other underlying health issues. As a result of differences in pay, high cost of education, and the reluctance to practice in rural areas, there has been a decrease in the number of primary care

 ⁴³ Katrina Armstrong et al., Racial/Ethnic Differences in Physician Distrust in the United States, Am. J. Public Health, 97(7): 1283–1289 (2007).
 ⁴⁴ Id.



³⁹ Dan Munro, Med Student Gives Sober Assessment Of Future With \$500K In Student Debt, *Forbes*, Jan. 30, 2014, http://www.forbes.com/sites/danmunro/2014/01/30/med-student-gives-sober-assessment-of-future-with-500k-in-student-debt/. http://www.forbes.com/sites/danmunro/2014/01/30/med-student-gives-sober-assessment-of-future-with-500k-in-student-debt/. http://www.assessment-of-future-with-500k-in-student-debt/. http://www.assessment-of-future-with-500k-in-student-debt/. http://www.assessment-debt/. http://www.assessment-debt/. http://www.assessment-debt/. http://www.assessment-debt/. <a href="http://www.assessment-de

⁴¹ *Id*.

 ⁴² Id.
 43 Katrina Armstrong et al., Racial/Ethnic Differences in Physician Distrust in the United

physicians entering the medical workforce, which has led to an overall widespread physician shortage in the U.S. In response to this growing problem, officials at both the state and federal level have made several attempts to mitigate damages by enacting legislation.

IV. Legislative Efforts to Remedy Physician Shortage

A. Federal

On February 14, 2007, Senator Bill Nelson (D-FL) introduced S. 588: Resident Physician Shortage Reduction Act of 2007. 45 The bill was designed to increase the number of government-funded training slots at teaching hospitals throughout the U.S. 46 Specifically, it would order the Secretary of Health and Human Services to increase the Medicare caps on graduate medical education (GME) 47,48 in states identified as having resident shortages. 49 The Secretary would also be directed to consider whether the new programs are in primary care, preventative medicine, or geriatrics. 50 Following its introduction, S. 588 was read twice and then referred to the Committee on Finance where no further action was taken. This bill was reintroduced on May 5, 2009 in the House (H.R. 2251) and Senate (S. 973) and again it was read twice and referred to the Committee on Finance. 51 The bill was reintroduced during the next three sessions. However, during the latest session, it was not referred to the Committee on Finance, but instead to the Subcommittee on Health, where no further action has been taken. 52 It is common for Congress to take no further action on a bill, often for reasons unknown. However, there are times when legislators just do not

⁵² H.R. 2124, 114th Cong. (2015).



⁴⁵ S. 588, 110th Cong. (2007).

⁴⁶ Id.

⁴⁷ What Does Medicare Have to Do With Graduate Medical Education?, Association of American Medical Colleges, https://www.aamc.org/advocacy/campaigns and https://www.aamc.org/advocacy/campaigns and https://www.aamc.org/advocacy/campaigns and https://www.aamc.org/advocacy/campaigns and https://www.aamc.org/advocacy/campaigns and coalitions/gmefunding/factsheets/253372/medicare-gme.html.

⁴⁸ According to the Drug Enforcement Administration website, Prescription Drug Monitoring Programs are statewide electronic databases that collect designated data on substances dispensed within states with operational programs. State Prescription Drug Monitoring Programs, Office Diversion Control—Drug Enforcement Agency, U.S. Department of Justice, http://www.deadiversion.usdoj.gov/faq/rx monitor.htm.

⁴⁹ S. 588, 110th Cong. (2007).

⁵⁰ *Id*.

⁵¹ S. 973, 111th Cong. (2009).

agree on the overall bill or even just a part of it. Specifically, when it comes to policy dealing with an increase in spending, members of Congress are not quick to pass the legislation without taking time to examine the bill and its potential effects. It can take quite some time, days, months, even years, for them to come to consensus and secure enough votes to push through a bill.

B. States

While the federal government has been unsuccessful in alleviating the stress of the physician shortage crisis, several states have made grand strides. Nurse practitioners and physician assistants have seen drastic changes in their ability to practice. Given that much of their training has roots in primary care, it was no surprise that these two professions would prove to be useful in addressing the access to care issue. The number of practicing nurse practitioners and physician assistants is steadily increasing. ^{53,54} Of the licensed nurse practitioners now working in the U.S., more than 80% of them have made primary care their main focus. ⁵⁵ Moreover, 27.7% of certified physician assistants work in primary care. ⁵⁶ This experience, coupled with the growing need for care throughout various parts of the country has led many state legislatures to enact legislation expanding the scope of practice for nurse practitioners and physician assistants.

Currently, 21 states and the District of Columbia give nurse practitioners prescriptive authority, the right to write prescriptions, and the right to diagnose and treat patients free of physician oversight with no limitations.⁵⁷ All other remaining states require them either to

https://www.nccpa.net/Upload/PDFs/2013StatisticalProfileofCertifiedPhysicianAssistants-AnAnnualReportoftheNCCPA.pdf.

57 NP Scope of Practice Laws, Barton Associates, http://www.bartonassociates.com/nurse-practitioners/nurse-practitioner-scope-of-practice-laws.



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⁵³ Nurse Anesthetists, Nurse Midwives, and Nurse Practitioners—Occupational Outlook Handbook, Bureau of Labor Statistics, http://www.bls.gov/ooh/healthcare/nurse-anesthetists-nurse-midwives-and-nurse-practitioners.htm.

⁵⁴ 2013 Statistical Profile of Certified Physician Assistants An Annual Report of the National Commission on Certification of Physician Assistants, National Commission on Certification of Physician Assistants, 2014, available at https://www.nccpa.net/Upload/PDFs/2013StatisticalProfileofCertifiedPhysicianAssistants-AnAnnualReportoftheNCCPA.pdf.

⁵⁵ Ben Amirault, Nurse Practitioners: Meeting the Primary Care Shortage, Barton Associates, Sept. 19, 2012,

http://www.bartonassociates.com/2012/09/19/nurse-practitioners-meeting-the-primary-care-shortage/.

56 2013 Statistical Profile of Certified Physician Assistants An Annual Report of the National Commission on Certification of Physician Assistants, National Commission on Certification of Physician Assistants, 2014, available at

collaborate with or be supervised by a physician.^{58,59} Within these states, nurse practitioners are recognized as primary care providers. This grants them the ability to, without physician involvement, diagnose and treat patients; prescribe medications; make referrals for physical therapy and; sign death certificates, handicap placard forms, and workers' compensation claims.⁶⁰

Conversely, we have also seen what happens when states have inhibited the use of nurse practitioners and physician assistants. Some states have chosen to frame their laws in such a way as to place major restrictions on nurse practitioners' and physicians assistants' ability to practice. However, state legislators have been far more generous towards nurse practitioners than physician assistants since there are more states with laws that are favorable towards nurse practitioners. While all physician assistants are required to practice under physician supervision, each state has different laws regarding prescribing and dispensing drugs and the administration of other services. However, the same as a service of the same and the administration of other services.

Additionally, states located in the southern parts of the U.S. with the most restrictive scopes of practice are also considered some of the unhealthiest states in America.⁶³ There is no data available to confirm the correlation between restrictive scope of practice laws for nurse practitioners and physician assistants and health outcomes, however, a future study may be able to provide significant data to better explain this phenomenon. It would certainly be a useful tool for

⁶³ Kelly Dickerson, These Are the 10 Unhealthiest States in the US, *Business Insider*, Dec. 11, 2013, http://www.businessinsider.com/these-are-the-10-unhealthiest-states-in-the-us-2013-12.



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⁵⁸ Ben Amirault, Nurse Practitioners: Meeting the Primary Care Shortage, Barton Associates, Sept. 19, 2012, http://www.bartonassociates.com/2012/09/19/nurse-practitioners-meeting-the-primary-care-shortage/.

⁵⁹ States that allow nurse practitioners to practice independently Alaska, Arizona, Connecticut, Washington, Hawaii, Idaho, Iowa, Minnesota, Maryland, Montana, Nebraska, Nevada, New Hampshire, New Mexico, New York, North Dakota, Oregon, Rhode Island, Utah, Vermont, Wyoming, and the District of Columbia.

⁶⁰NP Scope of Practice Laws, Barton Associates, http://www.bartonassociates.com/nurse-practitioners/nurse-practitioner-scope-of-practice-laws.

⁶¹ Barbara J. Safriet, H, Federal Options for Maximizing the Value of Advanced Practice Nurses in Providing Quality, Cost-Effective Health Care, *The Future of Nursing: Leading Change, Advancing Health*, Washington (DC): National Academies Press (US); 2011, Institute of Medicine (US) Committee on the Robert Wood Johnson Foundation Initiative on the Future of Nursing, at the Institute of Medicine, available at http://www.ncbi.nlm.nih.gov/books/NBK209876/.

⁶² Mid-Level Practitioners Authorization by State, U.S. Department of Justice Drug Enforcement Administration, Office of Diversion Control, http://www.deadiversion.usdoj.gov/drugreg/practioners/index.html.

nurse practitioners and physician assistants as more states consider expanding their scope of practice.

V. A Time For Change: A Policy Recommendation for Georgia

To identify the needs of the rural hospital community and provide potential solutions, Governor Nathan Deal established the Rural Hospital Stabilization Committee in 2014.⁶⁴ The committee was designed to bring awareness of the challenges faced by hospitals in these areas and to develop a stronger connection between rural hospitals and policymakers.⁶⁵ The overall goal was to improve Georgian's access to health care.⁶⁶ In the Committee's latest report, members found that a total of eight rural hospitals have closed their doors or have made attempts to reconfigure within the last 3 years.⁶⁷ In addition, fifteen other rural hospitals were deemed to be financially fragile.⁶⁸

The main focus of the report was on the challenges faced by rural area Emergency Departments. A proposition was made to create a stand-alone Emergency Department, but officials quickly realized this was not financially feasible. Members of the Committee found that to run a successful Emergency Department, approximately 15,000 visits annually would be needed to break even, which equates to a needed population of about 35,000. Furthermore, members discovered issues with insurance reimbursements along with the high costs associated with labor and capital investments. Overall, there was just not enough money to support stand-alone

⁷¹ Id



⁶⁴ Rural Hospital Stabilization Committee Final Report to the Governor, State of Georgia (2014), available at https://gov.georgia.gov/sites/gov.georgia.gov/files/related_files/document/Rural%20Hospital%20Stabilization%20Committee%2 OReport%20022315%20FINAL.pdf.

⁶⁵ *Id*.

⁶⁶ *Id*.

⁶⁷ *Id*.

⁶⁸ *Id*.

⁶⁹ *Id*. ⁷⁰ *Id*.

Emergency Departments in rural communities without the help of other subsidies.⁷²

The Georgia General Assembly has made several attempts to enact legislation that would potentially alleviate some of the stressors caused by the physician shortage. This past 2015 legislative session, House Resolution (H.R.) 302 and Senate Resolution (S.R.) 84 along with House Bill (H.B.) 349 were introduced. H.R. 302 and S.R., 84 sponsored by Representative Butch Parrish (R-Swainsboro) and Senator Dean Burke (R-Bainbridge), respectively, urged Congress to reform the nation's federally financed graduate medical education programs and to provide states with additional monies to meet the health workforce needs of the future. ^{73,74} Resolutions are useful for making significant statements that recommend the legislative body to take action, for example amending the State Constitution, creating a study committee, or urging another legislative body to take action. The language of each resolution provides directions on how it should be treated upon being passed in each chamber. H.R. 302 and S.R. 84 were passed and adopted in the House and Senate, respectively. Subsequently, the Clerk of the House of Representatives and the Secretary of the Senate were "authorized and directed to make appropriate copies of th[e] resolution available for distribution to each member of the Georgia congressional delegation, Governor Nathan Deal, the Clerk of the U.S. House of Representatives, and the Secretary of the U.S. Senate."⁷⁵ This act by the Georgia legislature does not have the ability to force Congress to act, it merely manifest its support of legislation that would provide states with financial assistance to rescue their failing health care systems.

H.B. 349, sponsored by Representative Jason Spencer (R-Woodbine), was also introduced

⁷⁴ S.R. 84, 157th Gen. Assem., Reg. Sess. (Ga. 2015).





⁷² *Id*.

⁷³ H.R. 302, 157th Gen. Assem., Reg. Sess. (Ga. 2015).

during the 2015 legislative session.⁷⁶ The bill would authorize a physician to delegate to a physician assistant the authority to prescribe Schedule II controlled substances under certain conditions.⁷⁷ It was read twice on the House floor and referred to the House Health and Human Services Committee where no further action was taken.⁷⁸ Representative Rusty Kidd (I-Milledgeville) and Senator Chuck Hufsteler (R-Rome) introduced similar legislation in 2014, but were unsuccessful in their attempts to pass their bills as well.^{79,80} That same year; Senator Fran Millar (R-Atlanta) introduced S.B. 94.⁸¹ This bill would remove restrictions on nurse practitioner's ability to order diagnostic imaging exams.⁸² It passed in the Senate, but failed to go any further in the House after being referred to the Health and Human Services Committee.⁸³

In 2005, the General Assembly passed H.B. 166, the Health Share Volunteers in Medicine Act, it created the Georgia Volunteer Health Care Program. Additionally, the law authorizes the state through the Department of Community Health to provide state-sponsored sovereign immunity to uncompensated, licensed health care professionals who provide donated care to eligible patients. The Georgia Volunteers in Health Care Specialties Act and Georgia Volunteers in Dentistry and Dental Hygiene Act were established to allow certain retired health care professionals or those with licenses in other states the ability to obtain the appropriate license to volunteer in free clinics. In 2009, the General Assembly passed an amendment giving sovereign

⁸⁷ Id.



⁷⁶ H.B. 349, 157th Gen. Assem., Reg. Sess. (Ga. 2015).

⁷⁷ Id.

⁷⁸ Id.

⁷⁹ H.B. 676, 156th Gen. Assem., Reg. Sess. (Ga. 2014).

⁸⁰ S.B. 268, 156th Gen. Assem., Reg. Sess. (Ga. 2014).

⁸¹ S.B. 94, 156th Gen. Assem., Reg. Sess. (Ga. 2014).

⁸² Id.

⁸³ Id

⁸⁴ H.B. 166, 147th Gen. Assem., Reg. Sess. (Ga. 2005).

⁸⁵ Georgia Volunteer Health Care Program, Georgia Department of Community Health, available at https://dch.georgia.gov/sites/dch.georgia.gov/files/imported/vgn/images/portal/cit_1210/10/55/152142626GVHCPProgramUpdateOct2009.pdf.

⁸⁶ *Id*.

immunity to all licensed practical nurses, registered professional nurses, certified nurse midwives, and advanced practical nurses contracted to work within free clinics. 88 Volunteers in Medicine is a nonprofit organization made up of physicians, nurses, and other health care professionals that voluntarily assist underserved communities. 89 Currently, there are 10 clinics throughout Georgia that provide free medical services to eligible men, women, and children. 90

Georgia has also implemented telemedicine services to assist patients through the implementation of the Georgia Telemedicine Act in 2005. According to the Georgia Telehealth website, they deliver health-related services utilizing telecommunications and related technologies to support patient care, health education, and administrative activities. Pelemedicine is a subset of Telehealth that focuses on clinical services, both clinician-to-clinician and clinician-to-patient. The program has proven to be quite successful, as it has been reported to have served over 136,000 patients since its incorporation in 2005. The Georgia Partnership for TeleHealth has over 350 locations with over 200 specialists, 600 health care partners and providers, representing over 40 specialties participating in the network.

Despite all the efforts made to alleviate the stressors of the physician shortage, rural Georgians are still suffering. Cost-effectiveness, quality of care, and the worry that more providers will have the ability to prescribe Schedule II drugs have been touted as some of the reasons for delaying much needed reform. The most viable state-based solution available right now is to expand the scope of practice for nurse practitioners and physician assistants.

⁹⁵ Georgia Partnership for TeleHealth, http://www.gatelehealth.org/.



⁸⁸ S.B. 133, 151st Gen. Assem., (Ga. 2009).

⁸⁹ http://volunteersinmedicine.org/about-us/history-and-mission-health-care-clinics/.

⁹⁰ History and Mission, Volunteers in Medicine, http://volunteersinmedicine.org/volunteers-in-medicine-clinic-directory/#ga.

⁹¹ Telemedicine in Georgia, Morris, Manning & Martin, LLP, Apr. 16, 2012, http://www.mmmlaw.com/media-room/publications/articles/telemedicine-in-georgia.

⁹² Georgia Partnership for TeleHealth, http://www.gatelehealth.org/.

⁹³ Id.

⁹⁴ Georgia Partnership for TeleHealth, http://www.gatelehealth.org/index.php/about/about-gpt/.

A. Modifying the System: Using More Nurse Practitioners and Physician Assistants to Provide Quality Care to Rural Georgians

i. Nurse Practitioners

Both nurse practitioners and physician assistants have made great contributions to the field of medicine throughout history. In the mid to late 1950's, physicians established an informal collaboration with nurses that had clinical experience. During the same time, increasing specialization in medicine drove many physicians away from primary care, thus initiating a shortage. Eventually Medicare and Medicaid started to provide health care coverage to low-income women, children, elderly, and people with disabilities. With coverage now being offered, demand for primary care providers increased. Primary care physicians were in such short supply, so nurses began to step in to fill the gaps. In 1965, Loretta Ford and Henry Silver, a nurse and a physician, developed the first training program for nurse practitioners. The program was designed to educate students about health promotion, disease prevention, and child and family health. Ford believed that the demand for primary care providers and the potential for nurses to meet that need led to the development of nurse practitioners.

By definition, nurse practitioners are nurses with a graduate degree in advanced practice nursing. ¹⁰⁵ Depending on state law, they are allowed to offer a broad range of services, which

¹⁰⁵ Nurse Practitioner, MedlinePlus, http://www.nlm.nih.gov/medlineplus/ency/article/001934.htm.



⁹⁶ John Michael O'Brien, How Nurse Practitioners Obtained Provider Status: Lessons for Pharmacists, *Am. J. Health Syst. Pharm.* 2003, 60(22), available at http://www.medscape.com/viewarticle/464663_2.

⁹⁷ *Id*.

⁹⁸ Id

⁹⁹ "Medicare is the federal health insurance program for people who are 65 or older, certain younger people with disabilities, and people with End-Stage Renal Disease (permanent kidney failure requiring dialysis or a transplant, sometimes called ESRD)." Definition from https://www.medicare.gov/glossary/m.html.

¹⁰⁰ John Michael O'Brien, How Nurse Practitioners Obtained Provider Status: Lessons for Pharmacists, *Am. J. Health Syst. Pharm.* 2003, 60(22), available at http://www.medscape.com/viewarticle/464663 2.

¹⁰¹ *Id*.

¹⁰² *Id*. ¹⁰³ *Id*.

¹⁰⁴ *Id*.

include, but are not limited to: (1) taking patient history, performing physical exams, and ordering laboratory tests and procedures; (2) diagnosing, treating, and managing diseases; (3) writing prescriptions and coordinating referrals; (4) sharing handouts on that educate people on disease prevention and that promote healthy lifestyles; (5) performing other procedures such as bone marrow biopsies and lumbar punctures. 106 Nurse practitioners work in various settings and can often work in clinics without physician supervision, if state laws allow them to do so. ¹⁰⁷ To become a licensed nurse practitioner, individuals must complete a Master's or Doctoral degree program and acquire advanced clinical training beyond that of a professional registered nurse program. ¹⁰⁸ Nurse practitioners endure rigorous training to obtain national certification, undergo periodic peer review and clinical outcome evaluations, complete 75 hours of continuing education every five years, and must adhere to a code for ethical practices. 109 While there are many other health care professionals for patients to visit, nurse practitioners are different in that they place a unique focus on the health and wellbeing of the whole person. ¹¹⁰ They have a strong interest in health promotion, disease prevention, and health education and counseling. 111 Collectively, this information is used to guide patients to make better health choices, which could lead to lower out-of-pocket costs for patients. 112

ii. Physician Assistants

In 1961, Charles Hudson, M.D. was one of the first physicians to propose the Physician Assistant profession to the American Medical Association to alleviate the increasing disparity

¹¹² *Id*.



¹⁰⁶ *Id*.

¹⁰⁷ Id.

¹⁰⁸ What's an NP?, American Association of Nurse Practitioners, http://www.aanp.org/all-about-nps/what-is-an-np.

¹⁰⁹ *Id*.

¹¹⁰ *Id*.

¹¹¹ *Id*.

between supply and demand for health care providers.¹¹³ Hudson suggested that individuals with no prior medical education be trained to perform routine clinical activities.¹¹⁴ Having trained assistants nearby would allow physicians the ability to better handle complex procedures or see more patients.¹¹⁵ However, it was not until 1965 that the first class of physician assistants, composed of former U.S. Navy Hospital Corpsmen, began formal training at the Duke University Medical Center under the guidance of Eugene A. Stead, Jr., M.D.¹¹⁶ The program's curriculum was based on Sead's first-hand knowledge of the fast-track training of doctors during World War II.¹¹⁷

Physician assistants are now nationally certified and state licensed medical professionals. They practice medicine on teams with physicians and other providers in all 50 states, the District of Columbia, and all U.S. territories, except Puerto Rico. Physician assistants can provide a host services ranging from diagnosing and treating illnesses to making rounds in hospitals and nursing homes. Pheir specific duties often depend upon workplace setting, level of experience, specialty, and state laws. Physician assistant programs are three years in duration and require the same prerequisite classes as those needed to attend medical school. Physician assistants must also complete more than 2,000 hours of clinical rotations. Physician Assistant program, physician assistants must also complete more than 2,000 hours of clinical rotations.

¹²⁴ Clinical rotations are in: Family medicine, Internal medicine, Obstetrics and gynecology, Pediatrics, General surgery, Emergency medicine, and Psychiatry. About Pas, Wisconsin Academy of Physician Assistants, http://www.wapa.org/?page=about_pa.



¹¹³ Reginald Carter, *Physician Assistant History*, Perspective on Physician Assistant Education, Vol. 12, No. 2, (2001), available at http://www.pahx.org/pdf/Military%20Ranks.pdf.

¹¹⁴ Charles L. Hudson, Physician Assistant History Society, Inc., http://www.pahx.org/hudson-charles-l.

¹¹⁵ *Id*.

¹¹⁶ *Id*.

¹¹⁷ *Id*.

¹¹⁸What Is a PA?, American Academy of Physician Assistants, https://www.aapa.org/what-is-a-pa/.

¹¹⁹ Id.

¹²⁰ *Id*.

¹²¹ *Id*.

¹²² *Id*. ¹²³ *Id*.

National Certifying Exam and get licensed in the state in which they wish to provide services. 125 To maintain certification, they must take a recertification exam every 10 years and complete 100 hours of continuing medical education every two years. 126

While both nurse practitioners and physician assistants generally work under the supervision of licensed physicians, they do not always perform the same duties, there are different specialties available within each profession, and the laws that govern them vary in each state. However, these providers complement physicians and their practices as it can be more cost-efficient to employ them and when permitted to practice to the full extent of their training, nurse practitioners and physician assistants can perform many of the tasks historically reserved for physicians. 128

iii. Nurse Practitioners and Physician Assistants: Making the Case

Title 43 Chapters 26 and 34 of the Official Code of Georgia Annotated governs the laws regulating the practices of nurse practitioners and physician assistants, respectively. Georgia's Nurse Practice Act describes the practice of nursing as:

. . . perform[ing] for compensation or the performance for compensation of any act in the care and counsel of the ill, injured, or infirm, and in the promotion and maintenance of health with individuals, groups, or both throughout the life span. It requires substantial specialized knowledge of the humanities, natural sciences, social sciences, and nursing theory as a basis for assessment, nursing diagnosis, planning, intervention, and evaluation. It includes, but is not limited to, provision of nursing care; administration, supervision, evaluation, or any combination thereof, of nursing practice; teaching; counseling; the administration of medications and treatments as prescribed by a physician

126 Id.

http://study.com/articles/Nurse Practitioner vs Physician Assistant Whats the Difference.html.

¹²⁸ Victoria Garment, Nurse Practitioners and Physician Assistants: Why You Should Hire One (or the Other), The Profitable Practice, May 31, 2013, http://profitable-practice.softwareadvice.com/nurse-practitioners-and-physician-assistants-why-you-should-hire-one-or-the-other-0513/.



¹²⁵ *Id*.

¹²⁷ Nurse Practitioner Vs. Physician Assistant: What's the Difference?.

> practicing medicine in accordance with Article 2 of Chapter 34 of this title, or a dentist practicing dentistry in accordance with Chapter 11 of this title, or a podiatrist practicing podiatry in accordance with Chapter 35 of this title. 129

Nurse practitioners are required to practice under a nurse protocol. The Code defines a nurse protocol as a:

> . . . written document mutually agreed upon and signed by an advanced practice registered nurse and a physician, by which document the physician delegates to that advanced practice registered nurse the authority to perform certain medical acts pursuant to this Code section, and which acts may include, without being limited to, the ordering of drugs, medical devices, medical treatments, diagnostic studies, or in life-threatening situations radiographic imaging tests. Such agreements shall conform to the provisions set forth in subsection (c) of this Code section. 130

Physician assistants dispense services according to their job description, which the Code has defined as:

> ... a document, signed by the primary supervising physician and the physician assistant, in which the primary supervising physician delegates to that physician assistant authority to perform certain medical acts and which describes the professional background and specialty of the primary supervising physician and the qualifications including related experience of the physician assistant; and includes a general description of how the physician assistant will be utilized in the practice. A job description shall not be required to contain every activity the physician deems the physician assistant qualified to perform but shall confine the activities of the physician assistant to those in the scope of practice of the primary supervising physician. 131

The Code also addresses prescriptive rights of both nurse practitioners and physician assistants, it provides that:

> A physician may delegate to a nurse or physician assistant the authority to order dangerous drugs, medical treatments, or

¹³¹O.C.G.A. § 43-34-102 (2015).



21

¹²⁹ O.C.G.A. § 43-26-3 (2015).

¹³⁰ O.C.G.A. § 43-34-25 (2015).

diagnostic studies and a nurse or physician assistant is authorized to dispense dangerous drugs, in accordance with a dispensing procedure and under the authority of an order issued in conformity with a nurse protocol or job description, if that nurse or physician assistant orders or dispenses those dangerous drugs, medical treatments, or diagnostic studies 132

Moreover, Georgia law allows nurse practitioners to be recognized as primary care providers, order physical therapy and sign handicap parking permits. 133

Operating within a system that requires constant supervision can be very demanding and it can send the message that nurse practitioners and physician assistants are beneath physicians or less qualified to administer care.¹³⁴ Additionally, having to obtain physician written approval on orders or prescriptions can place unnecessary restraints on the delivery of care as sometimes physicians are difficult to find and often do not even see the patient or make detailed inquiries before providing their signature.¹³⁵

Granting nurse practitioners and physician assistants the right to practice to their full potential would benefit Georgians in a multitude of ways. Research has shown that expanding the scope of practice for nurse practitioners and physician assistants can be cost-effective and produces health outcomes that are comparable to those of physician-treated patients. Additionally, with the implementation of Georgia's new prescription drug monitoring program, nurse practitioners and physician assistants will be closely monitored, like all other providers, to ensure that they do not abuse their prescriptive rights.

¹³⁷ Julie Stanik-Hutt et al., The Quality and Effectiveness of Care Provided by Nurse Practitioners, *Journal for Nurse Practitioners*, 2013, 9(8):492-500.e13, available at http://www.medscape.com/viewarticle/810692.



¹³² O.C.G.A. § 43-34-23 (2015).

¹³³ NP Scope of Practice Laws, Barton Associates, http://www.bartonassociates.com/nurse-practitioners/nurse-practitioner-scope-of-practice-laws.

¹³⁴ Beth Stephens, Perspectives on Advanced Practice Registered Nursing in Georgia, Georgia Watch, Jan. 2015, available at http://www.georgiawatch.org/wp-content/uploads/2015/01/APRN01072015WEB.pdf.

¹³⁶ Nurse Practitioner Cost-Effectiveness, American Association of Nurse Practitioners, available at http://www.aanp.org/aanpqa2/images/documents/publications/costeffectiveness.pdf.

B. Cost-Effectiveness

Studies dating back to the early 1980's have shown that nurse practitioners in physician practices decreased the cost of patient visits by as much as one third, especially when patients were seen independently, rather than complementary. ¹³⁸ In 1981, the Office of Technology Assessment conducted an analysis to assess the cost-effectiveness of nurse practitioners working with physician practices. 139 Researchers observed several factors, such as reimbursement rates, quality of care, and health outcomes for people treated independently by a nurse practitioner and those who were treated by a physician and nurse practitioner jointly. 140 Researchers found that independently practicing nurse practitioners reduced patients care costs by up to 1/3 of what physicians would normally charge. 141 Figure 1.7 shows the difference in rates amongst nurse practitioners, physician assistants, and physicians in 1975. 142 When the study was conducted again years later, the results confirmed the findings of the original study that utilizing the services of nurse practitioners was quite cost-effective. 143 Recent research has shown evidence that nurse practitioners and physician assistants can save states and patients money. 144,145 Roblin et al. (2004) examined the savings in labor costs per primary care visit that could be realized from increased use of nurse practitioners and physician assistants in primary care practices operated by Kaiser Permanente Georgia. 146 The study population was made up of 26 primary care practices, all

¹⁴⁵ D. W. Roblin, D. H. Howard, E. R. Becker, E. Kathleen Adams, & M. H. Roberts, Use of Midlevel Practitioners to Achieve Labor Cost Savings in the Primary Care Practice of an MCO, *Health Services Research*, 39(3), 607-626 (2004).



¹³⁸ United States, Congress, Office of Technology Assessment, The Implications of Cost-Effectiveness Analysis of Medical Technology: Background Paper 2: Case Study 16: The Costs and Effectiveness of Nurse Practitioners, available at http://digital.library.unt.edu/ark:/67531/metadc39465/m1/11/.

¹³⁹ *Id*.

¹⁴⁰ *Id*. ¹⁴¹ *Id*.

¹⁴² *Id*.

¹⁴³ U.S. Congress, Office of Technology Assessment, Nurse Practitioners, Physician Assistants, and Certified Nurse-Midwives: A Policy Analysis (Health Technology Case Study 37), OTA-HCS-37 (Washington, DC: U.S. Government Printing Office, December 1986), available at http://www.fas.org/ota/reports/8615.pdf.

utilizing the group model framework for delivery of service from 1997 to 2000. 147 The prototype practice consisted of a practitioner group (two or three MD's, one to two nurse practitioners or physician assistants) and a support staff. 148 Throughout the study period, physicians, nurse practitioners, and physician assistants in adult medicine attended 1,445,420 visits, while those that were in pediatric medicine attended 694,571 visits. 149 Computerized payroll ledgers itemized annual compensation by role played in each practice. 150 Wages and benefits of permanent staff and costs of temporary or contract employees were included in compensation. ¹⁵¹ The total practitioner labor cost for a practice in a year divided by the total physician and nurse practitioner or physician assistant visits in the practice for the year defined the average annual practitioner labor cost per visit. 152 Researchers used the following three step approach to approximate the savings in labor costs per primary care visit: (1) estimate the likelihood that nurse practitioners or physician assistants would attend the pediatric or adult care visit using logistic regression; (2) estimate models separately, by year, to ensure data reflected the varied use of nurse practitioners and physician assistants; and (3) use results from logistic regression calculations to predict the proportion of visits attended by nurse practitioners or physician assistants within a year for a standard population.¹⁵³ They found that nurse practitioners or physician assistants attended an average of 1 in 3 adult medicine visits and 1 in 5 pediatric medicine visits. 154 Researchers also found that practitioner labor costs per visit and total labor costs per visit were lower (p<.01 and p=.08), respectively in offices that utilized more nurse practitioners or physician assistants



¹⁴⁷ *Id*.

¹⁵² *Id*. ¹⁵³ *Id*.

standardized for case mix. 155

In another study performed in 2012 by the Perryman Group, an economic research analysis firm based in Texas, researchers assessed the potential economic benefits associated with fully utilizing nurse practitioners within the Texas health care delivery system. To measure economic impacts, researchers used a model called the U.S. Multi-Regional Impact Assessment System (USMRIAS). This model incorporates various types of data to provide detail on different goods and services required to produce other goods and services. Specifically, in this study researchers observed how money saved, via the use of a nurse practitioner, contributes to financial gains in a variety of firms across a spectrum of industries. The estimated savings was reduced to show the potential lack of efficiency in implementing a broad spectrum program; the process suggested a net savings of approximately 6.2%. Researchers then divided the previous amount between employers (more than 500 industrial categories) and individuals based upon typical co-payment patterns. Results showed that the total impact of utilizing more nurse practitioners in health care delivery was \$16.1 billion in total expenditures and \$8 billion in output (gross product) each year and 97.205 added jobs.

In Hooker et al. (2015), researchers undertook a cost analysis to see what would happen if more physician assistants and nurse practitioners were employed over a 10 year period in Alabama. Alabama currently does not allow their nurse practitioners or physician assistants to

¹⁶³ R. S. Hooker, & A. N. Muchow, Modifying State Laws for Nurse Practitioners and Physician Assistants Can Reduce Cost of Medical Services. *Nursing Economic*\$, 33(2), 88-94 (2015).



¹⁵⁵ Id

¹⁵⁶ The Perryman Group, *The Economic Benefits of More Fully Utilizing Advanced Practice Registered Nurses in the Provision of Health Care in Texas: An Analysis of Local and Statewide Effects on Business Activity*, May, 2012, available at http://c.ymcdn.com/sites/flanp.site-ym.com/resource/resmgr/articles and research/Perryman-APRN-Ultilization-E.pdf.

¹⁵⁷ Id.

¹⁵⁸ *Id*.

¹⁵⁹ *Id*.

¹⁶⁰ *Id*. ¹⁶¹ *Id*.

¹⁶² I.d

practice autonomously. 164 Researchers first assumed that given the ability to practice without physician supervision, more physician assistants and nurse practitioners would enter the Alabama medical workforce over the 10 year period, from 34 out of 100 primary care providers in 2012 to 53 out of 100 in 2022. 165 The data was obtained from utilizing growth rates from the Lewin Group/National Center for Health Workforce Analysis Study conducted in 2011. 166 To evaluate what effects new legislation expanding the scope of practice for nurse practitioners and physician assistants would have on the state financially, researchers then assumed the demand for primary care was equal to the number of visits patients made to their primary care provider. ¹⁶⁷ Data from the Medical Group Management Association, Physician Compensation and Productivity Survey was used to calculate ambulatory and hospital visits provided by primary care practitioners. 168 Annual compensation figures for primary care providers in the southern caucus region were used as a baseline to estimate total primary care provider demand and costs associated with each visit. 169 Researchers concluded the study by finding that changes in scope of practice legislation would result in a net savings of \$729 million over 10 years. 170



Figure 1.4

¹⁶⁴ *Id*.

¹⁶⁵ *Id*.

¹⁶⁶ *Id*.

¹⁶⁷ *Id*.

¹⁶⁸ *Id*.

¹⁶⁹ *Id*.



States must also consider the fact that it costs significantly less to employ a nurse practitioner or physician assistant, than a physician. According to the Bureau of Labor Statistics the annual mean wage for nurse practitioners in Georgia in 2014 was \$90,490.¹⁷¹ The average salary for physician assistants practicing in Georgia in 2014 was \$94,910.¹⁷² However, the average salary for primary care physicians Georgia is \$207,160.¹⁷³ Figure 1.4 is a graph comparing the average salaries for Georgia nurse practitioners, physician assistants, and physicians.¹⁷⁴

C. Quality of Care

Quality of care has also been an issue when contemplating the utilization of nurse practitioners and physician assistants. Some believe that quality will be sacrificed if nurse practitioners and physician assistants are allowed to practice independently without consulting a physician. However, there is evidence to refute those accusations as these providers have been offering quality care that has been indistinguishable from physicians since their incorporation into the medical workforce.¹⁷⁵

Results from a study performed in 2013 indicated that levels of care provided by nurse practitioners were comparable to that of physicians.¹⁷⁶ Specifically, researchers answered the question, "How do nurse practitioners affect patient outcomes on measures of care quality, safety, and effectiveness?"¹⁷⁷ To answer this question, they reviewed relevant studies, rating them and synthesizing findings on patient outcomes and graded the aggregated results.¹⁷⁸ Study selection

¹⁷⁸ *Id*.



¹⁷¹ May 2014 State Occupational Employment and Wage Estimates

Georgia, Occupational Employment Statistics, Bureau of Labor Statistics, U.S. Department of Labor, http://www.bls.gov/oes/current/oes_ga.htm.

¹⁷² *Id*.

¹⁷³ *Id*.

¹⁷⁴ Id.

¹⁷⁵ Julie Stanik-Hutt et al., The Quality and Effectiveness of Care Provided by Nurse Practitioners, *Journal for Nurse Practitioners*, 2013, 9(8):492-500.e13, available at http://www.medscape.com/viewarticle/810692.

¹⁷⁶ *Id*. ¹⁷⁷ *Id*.

included looking for studies that were: randomized controlled trial or observational studies of at least 2 groups of providers (e.g., nurse practitioners that worked alone or on a team compared to other single providers that worked alone or in partnerships without nurse practitioners), carried out in the U.S. between 1990 and 2009 with patient outcomes for quality, safety, or effectiveness reported. Patient satisfaction with their provider/care, patient self-assessment of perceived health status, functional status, number of unexpected emergency department visits, hospitalization, duration of ventilation, and hospital length of stay were included as measures for quality of care. Results showed that patient outcomes on the above selected measures were similar to those produced by physicians. 181

In primary care practice, it is neither necessary nor particularly efficient for each patient to be seen by a physician. Since nurse practitioners and physician assistants possess the knowledge, skill, and training required to perform at a level comparable to physicians. As previously discussed, physicians are becoming more overwhelmed with an influx of patients, which has led to increased wait times and expedited consultations. Expanding the scope of practice for nurse practitioners and physician assistants would better facilitate the delivery of health care services. Physicians would have more time to devote to patients with more medically complex conditions. In a 2007 randomized trial, clinicians evaluated the impact made by a physician assistant case manager responsible for screening within the Department of Veteran Affairs in Los Angeles,

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¹⁸⁴ Shannon Brownlee, Why Your Doctor Has No Time to See You, Newsweek, Apr. 16, 2012, http://www.newsweek.com/why-your-doctor-has-no-time-see-you-63949.



¹⁷⁹ *Id*.

¹⁸⁰ *Id*.

¹⁸¹ Id.

¹⁸² R. S. Hooker & C. M. Everett, The Contributions of Physician Assistants in Primary Care Systems. *Health & Social Care in the Community*, 20(1), 20–31, (2012).

¹⁸³ *Id*.

California. 185 Using participants in two study groups, patients (n=792) were 65 year old men and women who had at least one clinic visit at Sepulveda Ambulatory Care Center within the previous 18 months. 186 Intervention consisted of two methods: (1) structuralized telephonic geriatric assessments conducted by physicians; and (2) individualized referrals and recommended, selected referrals to outpatient geriatric assessment, and continuous telephone case management. 187 Researchers were mainly concerned with specific outcomes: depression, cognitive impairment, urinary incontinence, falls and functional impairment. 188 They found that the target conditions were more likely to be identified by physician assistants than other health care professionals. 189 This evidence suggest that incorporating physician assistants into supplemental roles for certain populations has the potential to increase case findings, assessments, and referrals for previously under-diagnosed and untreated conditions. 190

Several policy implications can be concluded from the presented evidence above. The data supports the argument that when the issue of comparability arises, nurse practitioners and physician assistants deliver as much effective care to their patients as physicians do.

D. Prescriptive Authority

Georgia Code provides that:

(b) (1) (A) A physician may delegate the authority contained in subparagraph (B) of this paragraph to: (i) A physician assistant in accordance with a job description; or (ii) A nurse recognized by the Georgia Board of Nursing as a certified nurse midwife, certified registered nurse anesthetist, certified nurse practitioner, or clinical nurse specialist, psychiatric/mental health in accordance with a

¹⁸⁹ *Id*.



¹⁸⁵ Laurence Rubenstein et al., A Randomized Trial of a Screening, Case Finding, and Referral System for Older Veterans in Primary Care, *J. Am. Geriatr. Soc.*, 55(2):166-74 (Feb. 2007).

¹⁸⁶ *Id*.

¹⁸⁷ *Id*.

¹⁸⁸ *Id*.

nurse protocol. (B) A physician may delegate to those health care professionals identified in subparagraph (A) of this paragraph: (i) The authority to order controlled substances selected from a formulary of such drugs established by the board and the authority to order dangerous drugs, medical treatments, and diagnostic studies; (4) Delegation of authority to a physician assistant pursuant to this subsection shall be authorized only if that delegation is contained in the job description approved for that physician assistant by the board. (5) Delegation of authority to a nurse pursuant to this subsection shall be authorized only if that delegation is contained in a nurse protocol for that nurse. ¹⁹¹

Georgia is one of few states left that does not allow its nurse practitioners or physician assistants to have full prescriptive authority. Specifically, these two primary care providers do not have the right to prescribe Schedule II controlled substances. Given the current war on prescription drug abuse, it is no wonder that policymakers and other key officials are worried that granting another set of health care professionals the ability to prescribe drugs that would contribute to the epidemic of those misusing controlled substances. In response, Prescription Drug Monitoring Programs Programs In the been created nationally to combat this issue. Georgia established its own Prescription Drug Monitoring Program in 2012 and it just recently became fully operational. According to the Georgia Drugs & Narcotics Agency:

The purpose of the PDMP shall be to assist in the reduction of the abuse of controlled substances; to improve, enhance, and encourage a better quality of health care by promoting the proper use of medications to treat pain and terminal illness; and to reduce

¹⁹⁷ Press Release, Georgia Prescription Drug Monitoring Program (PDMP) begins allowing access to Rx, (2015), available at http://medicalboard.georgia.gov/sites/medicalboard.georgia.gov/sites/medicalboard.georgia.gov/files/imported/GCMB/Files/GCMB-PDMP0713v2.pdf.



¹⁹¹ Ga. Code Ann. § 43-34-23 (2015).

¹⁹² NP Scope of Practice Laws, Barton Associates, http://www.bartonassociates.com/nurse-practitioners/nurse-practitioner-scope-of-practice-laws.

¹⁹³ The Prescription Drug Abuse Epidemic, Prescription Drug Monitoring Program Center of Excellence, http://www.pdmpexcellence.org/drug-abuse-epidemic.

¹⁹⁴ According to the Drug Enforcement Administration website, Prescription Drug Monitoring Programs are statewide electronic databases that collect designated data on substances dispensed within states with operational programs. State Prescription Drug Monitoring Programs, Office Diversion Control—Drug Enforcement Agency, U.S. Department of Justice, http://www.deadiversion.usdoj.gov/faq/rx_monitor.htm.

¹⁹⁶ O.C.G.A. § 16-13-21 (2015).

> duplicative prescribing and overprescribing of controlled substances practices. The data collected will be used to enhance patient care by providing prescription drug monitoring information that will ensure legitimate use of controlled substances in health care, including palliative care, research, and other medical pharmacological uses. 198

The law requires that dispensers¹⁹⁹ of a Schedule II, III, IV or V controlled substance must, every week, or no later than 10 days after delivery of the drug, compile and electronically submit their controlled substance dispensing information to the program.²⁰⁰ By implementing this program within Georgia, officials have a greater means of monitoring the actions of patients and their providers in efforts to combat the misuse of prescription drugs. Georgia's Prescription Drug Monitoring Program would also be a useful resource for monitoring the number of prescriptions written by nurse practitioners and physician assistants as well as the behavior of their patients. In recent years, Georgia has seen rapid growth of pop-up pain clinics, better known as pill mills.²⁰¹ As Georgia has taken measures such as enacting legislation to combat the sale and misuse of certain controlled substances, it will be much more difficult for certain health care providers to prescribe medications without good reason.²⁰² Therefore, if nurse practitioners and physician assistants are given full prescriptive authority and are required to utilize the same prescription drug monitoring program as other physicians and pharmacists, then there would be an added layer of protection subjecting to the same penalties and regulations as other health care providers.

¹⁹⁸ Press Release, Prescription Drug Monitoring Program (PDMP) law and implementation guide, (2013), available at http://gdna.georgia.gov/press-releases/2013-03-18/prescription-drug-monitoring-program-pdmp-law-and-implementation-guide.

²⁰¹ Timothy W. Martin, New Georgia Law Aims to Control 'Pill Mills', The Wall Street Journal, May 2, 2013, http://www.wsj.com/articles/SB10001424127887324582004578459072216867816. ²⁰²Id.



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¹⁹⁹ Dispensers have been defined as a pharmacy that delivers a Schedule II, III, IV or V controlled substance to the ultimate user. Dispenser's Implementation Guide, Georgia Drugs and Narcotics Agency Prescription Drug Monitoring Program (Mar. 2013), available at

http://gdna.georgia.gov/sites/gdna.georgia.gov/files/related_files/press_release/GA%20PDMP_Dispensers%20Implementation% 20Guide%5B1%5D.pdf.
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i. A Successful Act to Follow: Arizona

If the Georgia General Assembly decides to restructure its current policies governing nurse practitioners and physician assistants it could utilize the language contained in Arizona's Nurse Practice Act. In part, the Act defines a Registered Nurse Practitioner as someone who is:

- (v) Diagnosing, performing diagnostic and therapeutic procedures, and prescribing, administering and dispensing therapeutic measures, including legend drugs, medical devices and controlled substances within the scope of registered nurse practitioner practice on meeting the requirements established by the board.
- (vi) Recognizing the limits of the nurse's knowledge and experience and planning for situations beyond the nurse's knowledge, educational preparation and expertise by consulting with or referring clients to other health care providers when appropriate.²⁰³

Drafters of the law were clear to require nurse practitioners to refer patients that fall outside their purview either to a physician or other health care provider or consult with another medical expert. The language of the law places a lot of weight on nurse practitioners to be honest and cognizant of their own professional capabilities and to not attempt to practice in an unknown area without prior knowledge or assistance.

The Arizona Administrative Code provides guidance on obtaining prescribing authority for nurse practitioners. It states that:

(A) The Board shall authorize an RNP to prescribe and dispense (P&D) drugs and devices within the RNP's population focus only if the RNP does all of the following: (1) Obtains authorization by the Board to practice as a registered nurse practitioner; (2) Applies for prescribing and dispensing privileges on the application for registered nurse practitioner certification...(4) Submits evidence of a minimum of 45 contact hours of education within the three years immediately preceding the application, covering one or both of the following topics consistent with the population focus of education



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and certification: (a) Pharmacology, or (b) Clinical management of drug therapy.²⁰⁴

Another section of the code further provides that nurse practitioners' authority to prescribe does not include refills on prescriptions for Schedule II controlled substances.²⁰⁵ As for Schedule III or IV drugs, they may only prescribe a maximum of five refills in six months.²⁰⁶ Additionally, nurse practitioners may prescribe refills for Schedule V medications for up to one year.²⁰⁷

Arizona's law may give nurse practitioners the ability to practice independently, but it still provides an added layer of protection. This piece of legislation would serve as a useful template for lawmakers when it is time to make the necessary adjustments to the laws governing the scope of practice for nurse practitioners and physician assistants. By incorporating Arizona's prescriptive authority rules into Georgia's scope of practice laws coupled with the effectiveness of the state drug monitoring program, Georgia will have the ability to maintain a high level of control over prescription drug use and provide better care to its rural citizens.

VI. Conclusion: Saving Lives, Saving Dollars, Nurse Practitioners and Physician Assistants

Research has shown that nurse practitioners and physician assistants provide care that is comparable to physicians, but at a reduced cost. It is unlikely that policymakers would be apt to expand the scope of practice for both medical practitioners simultaneously. Both nurse practitioners and physician assistants offer a unique set of abilities and have the potential to offer competent care. However, it should be noted that training for nurse practitioners is often a bit more

²⁰⁶ Id.





²⁰⁴ Ariz. Admin. Code § R4-19-511 (2013).

²⁰⁵ Ariz. Admin. Code § R4-19-512 (2013).

strenuous, in that they on average have over 10 years of training prior to going into practice.²⁰⁸ There are also more states that allow nurse practitioners to practice independently, which could imply that more states favor them over physician assistants.^{209,210}

Regardless of which provider has their scope of practice expanded first, the fact that something must be done to address the current physician shortage is of great importance. The problem does not appear to be getting any better. To prevent nurse practitioners and physician assistants from practicing at their full potential without physician oversight, constrains Georgia's ability to make better use of its health care workforce and financial resources.²¹¹ Georgia nurse practitioner and physician assistant training programs produce highly qualified individuals. Unfortunately, many of them leave to work in other states that allow them to practice at the highest level for which they have been trained. Tending to the health care needs of Georgians should be a shared responsibility amongst health care professionals where they are all allowed to offer the care for which they have so diligently trained. There are over 2 million Georgians living in rural counties in desperate need of services provided by primary care practitioners. They would be better served if they had the ability to receive care from more than one source. Research has proven time and time again that nurse practitioners and physician assistants offer quality primary care that is comparable to that of physicians. Research has also shown that in states that expanded the scope of practice for nurse practitioners and physician assistants there was an increase in the number of practitioners for both professions. If an inference can be made from this piece of evidence, it would

²¹¹ Beth Stephens, Perspectives on Advanced Practice Registered Nursing in Georgia, Georgia Watch, Jan. 2015, available at http://www.georgiawatch.org/wp-content/uploads/2015/01/APRN01072015WEB.pdf.



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 $^{^{208}}$ Nurse Practitioner vs. Physician Assistant, The Washington Post, Jan. 9, 2011, $\underline{\text{http://www.washingtonpost.com/wp-dyn/content/article/2011/01/07/AR2011010704936.html}}.$

²⁰⁹ NP Scope of Practice Laws, Barton Associates, http://www.bartonassociates.com/nurse-practitioners/nurse-practitioner-scope-of-practice-laws.

²¹⁰ PA Scope of Practice Law Guide, Barton Associates, http://www.bartonassociates.com/nurse-practitioners/physician-assistant-scope-of-practice-laws/.

be that more nurse practitioners and physician assistants were drawn to working in these states as a result of the less restrictive practicing laws, thus leading to the cultivation of a stronger health care system.

The ability to practice independently without physician supervision is a great incentive to attract more nurse practitioners and physician assistants. At a time when rural areas are struggling to obtain or even retain physicians, nurse practitioners and physician assistants, this is an innovative way to get the help these communities need. To simply keep overlooking viable solutions to the physician shortage crisis sends the message that officials have no legitimate interest in the health care needs of Georgians, especially those in rural areas. Therefore, while the decision may be difficult for some, the evidence is compelling that the scope of practice for nurse practitioners and physician assistants is a viable solution to addressing the problem.²¹²

²¹² See Appendix A for legislative talking points in support of expanding scope of practice for nurse practitioners and physician assistants.



Redefining the Scope of Practice for Nurse Practitioners and Physician Assistants



Committed to Helping those in Need

Over 10 million people call Georgia home however, 2 million Georgians go every day without basic health care services. In the last few years, Georgia's rural communities have undergone numerous drastic health care changes. Many counties are operating without primary care or emergency services. Moreover, Georgians have witnessed the closing of several major rural hospitals, which served as the main source of health care for area residents. As the effects of physician care shortages continues to wreak havoc on various parts of the state, rural Georgians are left with little or no hope. Fortunately, nurse practitioners and physician assistants have proven to be a vital resource when residents are in need of medical care.

The odds are stacked against Georgia's rural communities as they also face additional risk factors. Rural Georgians, have some of the poorest health outcomes when compared to their counterparts living in or near metropolitan areas. In the midst of this physician shortage crisis, nurse practitioners and physician assistants have become true assets to rural communities throughout the state. Expanding the scope of practice would not only address rural health concerns, but would allow Georgia to retain its own Georgia-trained providers, and offer potential savings to patients and state health benefit programs.

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Benefits to Expanding Scope of Practice for Nurse Practitioners and Physician Assistants

- Keeps Georgia-trained providers in Georgia.
- Increases employment opportunities for graduates of Georgia Nurse Practitioner and Physician Assistant training programs, as well as attracts outside practitioners to the state.
- Financial benefits for Georgia and patients.
- Offers the ability to provide medical attention to residents living in rural areas that often have little or no access to care.
- Utilization of experienced professionals that have been providing quality care for over 5 decades.
- Mitigates damages caused by physician shortages.
- Addresses growing health disparity concerns within Georgia.
- Supports goal of achieving health equity for rural Georgians.

Legislative Efforts in Other States

21 states including the District of Columbia, allow nurse practitioners to practice independently free of physician oversight, while many more are considering changes to their current laws. State legislators are recognizing the multitude of benefits these providers offer patients, and are making the necessary changes to laws preventing them from practicing at their full potential.

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