



Rural Nurse Practitioners with Hospital Privileges and Accessibility to Inpatient Care

Kara Clifton BSN, RN, FNP-S

Masters of Nursing, Family Nurse Practitioner
April 16, 2023

Rural Nurse Practitioners with Hospital Privileges and Accessibility for Inpatient Care

Abstract

- **Purpose:** To review the current evidence and determine whether nurse practitioners (NPs) with hospital privileges in rural areas contribute to increased inpatient access for rural populations.
- **Methods:** This scoping review 2018 to 2023. Databases: Google Scholar, Cumulative Index of Nursing and Allied Health (CINAHL), and PubMed.
- **Results:** 16 studies. 5 studies discussed the NP's scope of practice. 4 studies discussed NPs as hospitalists. 4 studies discussed NPs in rural communities. 4 studies discussed NPs and patient care outcomes.
- **Conclusions:** NPs working within their full scope of practice (SOP) are valuable to the rural healthcare community increasing care access. Hospitalist programs including NPs are successful in rural facilities. NP care has similar patient care outcomes
- **Implications for Practice:** More research is needed. NPs can continue to advocate for full SOP, and for being utilized in the retention of patients in rural community hospitals.

Discussion

- It is estimated that **between 1997-2016**, 309 rural U.S. counties experienced at **least one hospital closure per year** and 71 counties experienced more than one (Germack et al., 2019).
- Many factors that contribute to the closure of hospitals including the lack of hospital funding, decreased revenue, lower patient census, and the **lack of physicians working in rural communities**.
- Association of American Medical Colleges (AAMC), the United States could see an **estimated shortage of anywhere between 37,800 to 124,000 physicians by the year 2034** (AAMC Report, 2021).
- NPs have been increasingly utilized to increase access to care for millions across the United States. **The annual growth of the NP is estimated to be three to nine times greater compared to physicians** (Woo et al., 2017).
- The American Academy of Nurse Practitioners (AANP) reported of the estimated 355,000 NPs licensed in the United States, **45.6% of those working full-time positions have hospital privileges** (NP Fact Sheet, 2022).
- **Twenty-six states**, and the District of Columbia, have **full scope of practice** (SOP) laws for NPs (State Practice Environment, n.d.).

Results

- **Hospitalists- This can be an NP too!**
- Klein et al. (2020) surveyed 405 hospital administrators from Magnet hospitals. **In 2019, 36% of the hospitals hired NPs as hospitalists. Of these hospitals, 40 employed family NPs for the role**
- Between the years 2016-2017, three critical access hospitals (CAH) in Montana, a full practice state, trialed a NP with telemedicine physician support hospitalist program. **NP hospitalist CAHs found up to 58% of cost savings while maintaining patient care quality standards** (Boltz et al., 2018)
- Kaplan and Klein (2020) surveyed 880 NPs in the year 2019. **Of the 880 NPs surveyed, 366 worked as hospitalists**
- In 2014, Johns Hopkins Bayview medical center in Baltimore Maryland **saved \$295,714 by adding APPs to the hospitalist group** (Lackner et al., 2019).

Results

Scope of Practice- affects rural care!

- **NPs in full SOP states employed in rural healthcare** communities increased from 35% to 45.5% between 2008 & 2016 (Barnes et al., 2018)
- **States with full practice laws had 5.07 more NPs per 100,000** population compared to states with restricted or reduced NPs (Kandrack et al. 2019)
- 9,782 NPs -693 were in full SOP states. **NPs working in or near an HPSA in the full practice state was found to be 30.5% compared to 22% of NPs in reduced or restricted states** (DePriest et al. 2020)
- Pittman et al. (2018) concluded that **there was no relationship between reduced/restricted practice states and hospital privileging**. The average NP privileging levels were below the education and scope of practice allowed of the individuals

Rural NP- More likely to work rurally!

- Germack et al. (2021) examined rural hospital closures & affect on NP workforce. . Data was collected between the years 2010-2017 from 1,544 rural U.S. counties -151 hospital closures. **2 years following hospital closure there was a 5% decline in NPs. There was no statistical difference in NP supply six years following the closure.**
- Spetz et al. (2017) designed a national sample survey of 13,000 rural and urban NPs in the United States in the year 2012. They discovered that **more rural NPs were employed in areas without physician oversight requirements**, had a drug enforcement administration (DEA) number, and hospital admitting privileges
- Before the integrated practice agreement IPA was lifted in 2014, 824 NPs worked in Nebraska. In 2016, **after the IPA, there was a 40% increase in NP practice to 1,122 providers** (Holmes & Waltman, 2019).

Patient Outcomes- Improved and Positive!

- A study conducted in 2014 on a Med/Surg unit .382 patients, 263 of which were followed by NPs hospitalists, the remaining by physicians only. The two groups were compared. **The mortality rate of patients cared for by NP hospitalists was 6% less than that of the physician only group. Patients were also less likely to be transferred to an intensive care unit, 7.2% compared to 16.8% in the physician only group** (Patel et al., 2021).
- Aiken et al. (2021) researched 579 hospitals from 2015 to 2016. **The hospitals that employed nurse practitioner hospitalists had a reduction in 30-day mortality, 7-day readmissions, shorter length of hospital stay, and better reported patient care quality**

Conclusions

- This scoping review of research aimed to discover if NPs can keep patients local for their inpatient medical care if allowed hospital privileges.
- The answer to this question is not simple, as there is little research completed on this specific topic. There are also limitations due to the state's SOP laws and individual organizational policies for NPs having hospital privileges.
- Hospitals need providers and providers need hospitals. As rural hospitals face closure and the physician workforce leave this area, hospitals have may have options to keeping patients local and maintaining access to medical care.
- In the 1990s, hospitals started to utilize physician hospitalists for the delivery of inpatient care. These programs decreased hospital costs, reduced patient length of stay and readmissions, and improved the quality of care (Society of Hospital Medicine, n.d.). NPs have been working in hospital inpatient roles during the same time period.
- NPs practicing with full SOP are able to diagnose, order and interpret diagnostic tests, manage treatment plans, and prescribe medications independently of a physician.
- **NPs can help fill provider gaps in rural areas!**
- **NPs can help reduce hospital costs!**
- **NPs can provider safe patient care!**

Methods

- **Scoping review:** Research performed January 3rd, 2023- February 8th, 2023 . 16 research articles
- Consistent search parameters: articles published between 2018-2023, printed in the English language
- **Databases:** Google Scholar, CINAHL, and PubMed
- Key words: "rural", "hospitals", "physician shortage", "nurse practitioners", "admissions", "critical care access hospitals", "scope of practice", "hospitalists", and "access to care", "patient care outcomes". Excluded: NPs outside of the United States, long-term care facilities, and specialty departments

References

- AAMC report reinforces mounting physician shortage. (2021). Association of American Medical Colleges. <https://www.aamc.org/news-insights/press-releases/aamc-report-reinforces-mounting-physician-shortage>
- Aiken, L. H., Sloane, D. M., Brom, H. M., Todd, B. A., Barnes, H., Cimiotti, J. P., Cunningham, R. S., & McHugh, M. D. (2021). Value of nurse practitioner inpatient hospital staffing. *Medical Care*, 59(10), 857–863. <https://doi.org/10.1097/mlr.0000000000001628>
- American Hospital Association. (2022). *Rural-hospital-closures-threaten-access-report* [PDF]. <https://www.aha.org/system/files/media/file/2022/09/rural-hospital-closures-threaten-access-report.pdf>
- Barnes, H., Richards, M. R., McHugh, M. D., & Martsolf, G. (2018). Rural and nonrural primary care physician practices increasingly rely on nurse practitioners. *Health Affairs*, 37(6), 908–914. <https://doi.org/10.1377/hlthaff.2017.1158>
- Boltz, M., Cuellar, N. G., Cole, C., & Pistorese, B. (2018). Comparing an on-site nurse practitioner with telemedicine physician support hospitalist programme with a traditional physician hospitalist programme. *Journal of Telemedicine and Telecare*, 25(4), 213–220. <https://doi.org/10.1177/1357633x18758744>
- Chattopadhyay, S., & Zangaro, G. (2019). The economic cost and impacts of scope of practice restrictions on nurse practitioners. *Nursing Economics*, 37(6), 274–283.
- Cuenca, E. M., & Crawford, C. L. (2015). *Academy of evidence based practice: Academy of EBP evidence leveling system (ELS)* [PDF]. Kaiser Permanente Southern California, Regional Nursing Research Program.
- DePriest, K., D'Aoust, R., Samuel, L., Commodore-Mensah, Y., Hanson, G., & Slade, E. P. (2020). Nurse practitioners' workforce outcomes under implementation of full practice authority. *Nursing Outlook*, 68(4), 459–467. <https://doi.org/10.1016/j.outlook.2020.05.008>
- Germack, H. D., Kandrack, R., & Martsolf, G. R. (2021). Relationship between rural hospital closures and the supply of nurse practitioners and certified registered nurse anesthetists. *Nursing Outlook*, 69(6), 945–952. <https://doi.org/10.1016/j.outlook.2021.05.005>
- Germack, H., Kandrack, R., & Martsolf, G. R. (2019a). When rural hospitals close, the physician workforce goes. *Health Affairs*, 38(12), 2086–2094. <https://doi.org/10.1377/hlthaff.2019.00916>
- Germack, H., Kandrack, R., & Martsolf, G. R. (2019b). When rural hospitals close, the physician workforce goes. *Health Affairs*, 38(12), 2086–2094. <https://doi.org/10.1377/hlthaff.2019.00916>
- Hickman, D. (2017). *The role of NPs and PAs in hospital medicine programs - the hospitalist*. The Hospitalist. <https://www.the-hospitalist.org/hospitalist/article/142565/leadership-training/role-nps-and-pas-hospital-medicine-programs>
- Historical timeline*. (n.d.). American Association of Nurse Practitioners. <https://www.aanp.org/about/about-the-american-association-of-nurse-practitioners-aanp/historical-timeline>
- Holmes, L. R., & Waltman, N. (2019). Increased access to nurse practitioner care in rural nebraska after removal of required integrated practice agreement. *Journal of the American Association of Nurse Practitioners*, 31(5), 288–292. <https://doi.org/10.1097/jxx.0000000000000153>
- Kandrack, R., Barnes, H., & Martsolf, G. R. (2019). Nurse practitioner scope of practice regulations and nurse practitioner supply. *Medical Care Research and Review*, 78(3), 208–217.
- Kaplan, L., & Klein, T. A. (2020). Characteristics and perceptions of the us nurse practitioner hospitalist workforce. *Journal of the American Association of Nurse Practitioners*, 33(12), 1173–1179. <https://doi.org/10.1097/jxx.0000000000000531>
- Klein, T. A., Kaplan, L., Stanik-Hutt, J., Cote, J., & Brooks, O. (2020). Hiring and credentialing of nurse practitioners as hospitalists: A national workforce analysis. *Journal of Nursing Regulation*, 11(3), 33–43. [https://doi.org/10.1016/s2155-8256\(20\)30132-0](https://doi.org/10.1016/s2155-8256(20)30132-0)
- Lackner, C., Eid, S., Panek, T., & Kisuule, F. (2019). An advance practice provider clinical fellowship as a pipeline to staffing a hospitalist program. *Journal of Hospital Medicine*, 14(6), 336–339.
- NP fact sheet*. (2022). American Association of Nurse Practitioners. Retrieved February 3, 2023, from <https://www.aanp.org/about/all-about-nps/np-fact-sheet>
- Ortiz, J., Hofler, R., Bushy, A., Lin, Y., Khanijahani, A., & Bitney, A. (2018). Impact of nurse practitioner practice regulations on rural population health outcomes. *Healthcare*, 6(2), 65. <https://doi.org/10.3390/healthcare6020065>
- Patel, M. S., Hogshire, L. C., Noveck, H., Steinberg, M. B., Hoover, D. R., Rosenfeld, J., Arya, A., & Carson, J. L. (2021). A retrospective cohort study of the impact of nurse practitioners on hospitalized patient outcomes. *Nursing Reports*, 11(1), 28–35. <https://doi.org/10.3390/nursrep11010003>
- Physicians and surgeons: Occupational outlook handbook: U.S. Bureau of Labor Statistics*. (2022). U.S. Bureau of Labor Statistics. Retrieved February 15, 2023, from <https://www.bls.gov/ooh/healthcare/physicians-and-surgeons.htm>
- Pittman, P., Everett, C., & McElroy, D. (2018). NP and PA privileging in acute care settings: Do scope of practice laws matter? *Medical Care Research and Review*, 77(2), 112–120.
- Rural hospital closures: Affected residents had reduced access to health care services*. (2022). U.S. Government Accountability Office. <https://www.gao.gov/products/gao-21-93#:~:text=Yet%2C%20over%20100%20rural%20hospitals,common%20services%20like%20inpatient%20care.>
- Society of Hospital Medicine. (n.d.). *Timeline of SHM's history*. https://www.hospitalmedicine.org/about/history-mission/#Timeline_of_SHM_s_History
- Spetz, J., Skillman, S. M., & Andrilla, C. A. (2016). Nurse practitioner autonomy and satisfaction in rural settings. *Medical Care Research and Review*, 74(2), 227–235. <https://doi.org/10.1177/1077558716629584>
- State practice environment*. (n.d.). American Association of Nurse Practitioners. Retrieved February 3, 2023, from https://www.aanp.org/advocacy/state/state-practice-environment?gclid=Cj0KCQiAgOefBhDgARIsAMhqXA6AanJLXprfyj7VuZJZd1Dc43Ln-LrJ6Hu8nWFCw4z3b2BCrrPTPr4aAvOjEALw_wcB
- Woo, B., Lee, J., & Tam, W. (2017). The impact of the advanced practice nursing role on quality of care, clinical outcomes, patient satisfaction, and cost in the emergency and critical care settings: A systematic review. *Human Resources for Health*, 15(1). <https://doi.org/10.1186/s12960-017-0237-9>