

How Do Nurse Practitioner-led Patient-Centered Medical Homes Differ from Other Patient-Centered Medical Homes?

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BACKGROUND

The patient-centered medical home (PCMH) is an enhanced model of primary care that has grown substantially since 2010. Although initially established as a physician-centric model, PCMHs have evolved to include models led by other clinicians, specifically nurse practitioners (NPs) (Cassidy, 2010). Currently there are almost 400 NP-led PCMHs recognized by the National Committee for Quality Assurance (NCQA), one of the major national PCMH accrediting organizations. Despite this evolution, there is little research on how NP-led PCMHs differ from physician-led PCMHs. The overall goal of this study is to understand whether there are differences in where and how these two PCMH models operate. Specifically, we explore the level of PCMH achievement, clinical staff composition, the population and geographic areas they serve, and associations with state-level NP scope of practice laws and Medicaid expansion status.

METHODS

We used data from the NCQA on 11,870 practices recognized as PCMHs by May 2016, and linked it to the Area Health Resource Files. We defined an NP-led PCMH as practices with no physicians in a given location. We tested for differences across the two practice types using an independent samples t-test and a chi-square test.

FINDINGS

We identified 391 NP-led PCMHs and 11,479 physician-led PCMHs, respectively.

PCMH Achievement: More physician-led PCMHs received Level 3 recognition, the highest level, than NP-led PCMHs (75% vs. 57%).

Clinical Staff Composition: Overall, the physician-led PCMHs have a larger number of clinicians (all types of physicians, NPs and physician assistants (PAs)) than NP-led PCMHs (4.9 vs. 1.7). The mean number of NPs at NP-led PCMHs was nearly three times the number at physician-led PCMHs (1.5 vs. 0.5).

Population and Geographic Area Characteristics: More NP-led PCMHs were located in areas with people who were under both Medicare and Medicaid (4% vs. 3%) or without health insurance (15% vs. 13%) than physician-led PCMHs. In addition, more NP-led PCMHs were located in rural (9.5% vs. 1.5%) and primary

KEY FINDINGS

1. The findings in this study suggest there are differences between NP-led and physician-led PCMHs. More NP-led PCMHs are providing services in rural and primary care shortage areas. They are also most prevalent in states with expansive NP scope of practice laws. On the other hand, NP-led PCMHs have fewer clinical staff, and have lower rates of Level 3 PCMH recognition than physician-led PCMHs.
2. Findings suggest that NP-led PCMHs fill an important gap in access to primary care by enhancing NPs' ability to serve vulnerable populations in rural and medically underserved areas. Policy and program leaders may wish to identify ways to spread the NP-led PCMH models, and advance to Level 3 status.

care health professional shortage areas (19.5% vs. 3.7%), as well as in areas with high unemployment rate (29% vs. 25%) and low population density (2,321 vs. 3,565 per square mile) than physician-led PCMHs.

State NP Scope of Practice Laws and Medicaid Expansion: More NP-led PCMHs were located in states granting NPs full practice and prescription authority in patient care (51% vs. 43%). There was no significant variation between the two practice settings regarding the current status of state Medicaid expansion decisions.

This study is limited to NCQA accredited PCMHs, which, while the largest accrediting organization, is not the only one. In addition, the study is limited to descriptive patterns of NP-led PCMHs vs. physician-led PCMHs. Further research controlling for additional factors are needed to be certain of findings. The study team is currently conducting a survey to collect detailed information on patient characteristics, full staff composition and services provided, as well as transformation strategies.

CONCLUSION

Compared to physician-led PCMHs, NP-led PCMHs were more likely to serve vulnerable populations in rural and medically underserved areas. NP scope of practice laws appear to facilitate the spread of NP-led PCMHs.

POLICY IMPLICATIONS

NPs now account for 19% of the primary care workforce and have historically played a vital role in providing primary care in rural and medically underserved areas (AHRQ, October 2011). Studies also suggest that NPs provide many primary care services as well as physicians, and that they achieve equal, and sometimes better, quality at lower cost (Newhouse et al., 2011). Amid an intensifying shortage of primary care physicians, NPs appear to be playing an increasingly important role in emerging models of primary care such as PCMHs (HRSA, 2016).

Our findings suggest that NP-led PCMHs may be filling an important gap in terms of serving populations with primary care provider shortages, and that scope of practice laws may enable their ability to do this. We also find that NP-led PCMHs are smaller and lag behind physician-led PCMHs in achieving the highest level of recognition. Policy and program leaders may wish to consider ways to help spread the NP-led PCMH model, and identify ways to help them advance to Level 3 recognition.

REFERENCES

- AHRQ. (October 2011). The number of nurse practitioners and physician assistants practicing primary care in the United States: primary care workforce facts and stats no. 2 Retrieved December 4, 2014, from
<http://www.ahrq.gov/research/findings/factsheets/primary/pcwork2/index.html>
- Cassidy, A. (2010). Health Policy Brief: Patient-Centered Medical Homes: Health Affairs.
- HRSA. (2016). National and Regional Projections of Supply and Demand for Primary Care Practitioners: 2013-2025. Rockville, Maryland: U.S. Department of Health and Human Services.
- Newhouse, R. P., Stanik-Hutt, J., White, K. M., Johantgen, M., Bass, E. B., Zangaro, G., . . . Weiner, J. P. (2011). Advanced practice nurse outcomes 1990-2008: a systematic review. *Nurs Econ*, 29(5), 230-250; quiz 251.