

Understanding Why Nurse Practitioner (NP) and Physician Assistant (PA) Productivity Varies Across Community Health Centers (CHCs): A Comparative Analysis

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BACKGROUND

The growth of nurse practitioners (NPs) and physician assistants (PAs), or Advanced Practitioner Clinicians (APCs) in primary care workforce has far exceeded the growth of primary care physicians (PCP) in community health centers (CHCs) over the last decade, yet their productivity varies dramatically across organizations. We ask what organizational characteristics are causing this variation to occur. Understanding the answer to this question will help inform CHC leadership's approach to optimizing APC productivity.

METHODS

We employed a pragmatic mixed methods design that began with a production function approach using the Uniform Data System to determine the marginal contribution of each profession to overall CHC visits, taking into account the interaction of that profession with other medical staff. We then constructed a maximum diversity sample and interviewed organizational leadership at 15 high and 15 low productivity CHCs using a semi-structured interview guide. Phone interviews were recorded when participants allowed (22) and notes were taken during the interview in all cases. Two researchers subsequently coded the text. Our qualitative analysis involved two phases. We began with a cross-case comparison using content analysis, and then used Qualitative Comparative Analysis (QCA) to identify sets of conditions that could explain high and low productivity outcomes.

FINDINGS

Findings revealed that all but three CHCs in our sample allow NPs/PAs to have their own panel, and that two of these were in the high productivity group. No single set of conditions in the QCA analysis explained all cases, but three combinations (parsimonious solutions) appear to explain high productivity and three different combinations explain low productivity.

Key conditions across the high productivity sets were: 1) scheduling for APCs and PCPs for the same number of visit, 2) formal education programs for onboarding designed especially for APCs, 3) high APC/PCP ratio, 4) no

KEY FINDINGS

1. 27 of 30 CHCs assign APCs their own panel, and of those that did not, two were in the high group and one in the low group.
2. High productivity CHCs scheduled APCs and PCPs for the same number of visits per day. They did not pay physicians to supervise APCs, nor were they as likely to provide productivity incentives. They were more likely to have formal education programs for APCs during onboarding and to have APC onboarding coordinators or preceptors. And they had stronger support staff ratios and tended to have higher APC/PCP ratios.
3. Across CHCs, leaders lamented the absence of APC residencies.
4. While restricted/reduced scope of practice was more common in the low productivity cases, expanded scope did not guarantee high productivity.

PCP payment for supervising APCs, and 5) when productivity incentives exist, they are the same for PCPs and APCs. Important conditions acting in conjunction with each other for low productivity were: 1) low level of support staff, 2) restricted scope of practice for APCs, and 3) leadership preference for a majority PCP workforce.

CONCLUSION

This study identified organizational level conditions that contribute to APC productivity. The content analysis identified conditions that are more likely to be present in either the low or the high productivity group, while the QCA allowed us to identify co-occurring sets of conditions that may interact in their relationship with productivity. The study also suggested that while scope of practice may constrain productivity, expansion of scope of practice laws does not guarantee high productivity. Additional changes to attitudes at the level of leadership, adequate support staff, and strong onboarding or residency programs for APCs are needed, in conjunction with other organizational policies that treat APCs in a manner that is the same as PCP in terms of scheduling and incentives.

POLICY IMPLICATIONS

These findings may be helpful to CHC managers as they explore alternative approaches to using their APC staff and seek to optimize APC productivity. This is the first study to allow them to benchmark themselves to peers with regard to APC policies and practices.

Findings regarding the relationship of medical and APRN residencies and student rotations to productivity suggest that, as important as these programs are for training future community-based clinicians, their presence may reduce productivity for APCs. On the other hand, the strong desire of CHC leaders in both groups to develop APC residencies is an important validation of the work HRSA is already doing in this area.