Community Health Centers Use Diverse Staffing and Can Provide Lessons for Other Medical Practices
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BACKGROUND
Numerous areas of the United States have an inadequate supply of primary care physicians and the shortfall is expected to grow and spread. To address these concerns, as well as to improve the quality of the care delivered, health policy experts have recommended that medical practices transform and embrace “team-based” care, encouraging a broader range of medical staff working together. This paper examines different medical staffing patterns in community health centers, the impact of staffing on productivity, staff roles and the factors affecting staffing patterns. The experiences of health centers are relevant not only for safety net providers, but also for the broader array of group medical practices in the United States as they implement team-based care approaches.

METHODS
Authors used the 2012 Uniform Data System (UDS) records for 1,191 community health centers to identify number of medical visits and medical patients served. UDS data was also merged with count-level Area Health Resource File data and state-level data on nurse practitioners’ scope of practice. Authors measured productivity as the number of weighted medical visits per center in 2012. To identify staffing patterns, cluster analysis was used based on the percentages of staff in each of four categories in each health center. Each cluster was designed to differ maximally from the other clusters. Authors also examined the patterns of staffing by estimating correlation matrices.

FINDINGS
Analyses indicate physicians are the leading contributors to productivity, but other medical staff also meaningfully contribute and increase the amount of care that can be delivered (see Figure 1). Given concerns about primary care physician shortages, our findings suggest that greater use of non-physician medical staff can enable more patients to be seen with limited resources. Staffing patterns vary across centers, indicating that staff functions also differ. But in general, health centers use diverse

KEY FINDINGS

1. The ability to implement effective team-based primary care is relevant not only to the future of community health centers, but also to the broader system of group medical practice in the United States.

2. Practices can be productive with varying blends of physicians, advanced-practice staff, nurses, and other medical staff. We found that local factors—such as rural location, the availability of clinicians in the area, scope-of-practice laws, and the patient and revenue mix of the centers—may be the most important determinants of staff composition.

3. Greater use of non-physician medical staff can enable more patients to be seen with limited resources.

4. Productivity levels were relatively similar across all staff configurations, and there did not appear to be a solitary “optimal” model.
CONCLUSION

As the number of community health centers grows, leading to potential staffing pressures, centers must develop innovative staffing and care approaches to provide quality primary care in an efficient manner. Authors’ findings indicate it is possible to include a broad array of advanced practice staff, nurses and other medical staff in ambulatory medical practices to work alongside physicians and make meaningful contributions to productivity. Authors found that productivity levels were relatively similar across all staff configurations, and there did not appear to be a solitary “optimal” model. Both health centers and the broader set of ambulatory practices can undertake diverse approaches that fit the needs and capacities of their communities and their practices.

POLICY IMPLICATIONS

This research has significant potential to inform HRSA’s ongoing workforce projection models and demonstrate the impact on health workforce supply of the growing number of nurse practitioners (NPs) and PAs. Considering that health centers are serving medically underserved areas, local planning could also be impacted by HRSA disseminating these findings that varied staffing patterns can be used without sacrificing productivity. In addition, HRSA should continue to capture health center data through UDS to continue evaluation of productivity changes associated with team based care models and perhaps augment the dataset to include local wage variables and other information that could further strengthen workforce research efforts. Given the growing focus on the importance of payment policy and use of NPs and PAs, HRSA might also want to consider funding studies that explore the role of payment policies on increased incorporation of advance practice providers in community health centers and other primary care settings.

Figure 1. Community Health Centers Employ Diverse Staffing Patterns

<table>
<thead>
<tr>
<th>Type of cluster</th>
<th>Physicians</th>
<th>Advanced-practice staff</th>
<th>Nursing staff</th>
<th>Other medical staff</th>
<th>Adjusted $R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>2,994****</td>
<td>1,584****</td>
<td>292</td>
<td>548****</td>
<td>0.952</td>
</tr>
<tr>
<td>Coefficient</td>
<td>(1,955,4,036)</td>
<td>(1,394,2,073)</td>
<td>(−119,704)</td>
<td>(352,745)</td>
<td>—a</td>
</tr>
</tbody>
</table>

SOURCE: Authors’ analysis of 2012 data from the Uniform Data System. NOTES The coefficients estimated by the models indicate the effect of adding one staff member on the number of weighted medical visits. For example, one additional advanced-practice staff member was associated with 1,584 additional visits. For details about the types of staff, see the "Data" section. CI is confidence interval.

NOTES: $^{a}$Not applicable; $^{***}p < 0.01$; $^{****}p < 0.001$