BRIEF REPORT

Advanced Practice Providers in Departments of Family Medicine: Status, Supervision, and Services

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Background: **Nurse practitioners (NP), physician assistants (PA), and other advanced practice providers (APP) are one solution to meet health care workforce shortage. Our study examined clinical workforce decisions and perceptions of APPs and family physicians (FPs) from the perspective of a national survey chairs of Departments of Family Medicine.**

Methods: **A survey was developed and distributed to family medicine department chairs as identified by the Association of Departments of Family Medicine (ADFM). In addition to demographic information, respondents were asked if their department directly employs APPs, major factors influencing departments of family medicine to hire APPs, services to patients currently being provided by APPs, and services preferentially provided by APPs. Descriptive statistics were reviewed. Bivariate analyses and Chi-square were computed comparing perceptions of APPs and FPs by how these types of health care providers are currently used in the respondent's clinical operation.**

Results: **The overall response rate for the survey was 48.4% (109/225). Most departments of family medicine (62.4%) use APPs. Access to care and filing gaps in team-based care are the primary factors for APP employment. Although most departments have APPs provide services that include complex chronic conditions complicated by coexisting conditions or not yet controlled, most department chairs do not prefer APPs provide these services.**

Discussion: **The role APPs in terms of specific patient care activities and services in the health care team of departments of family medicine is often in conflict with preferred roles as delineated by the chair. (J Am Board Fam Med 2023;36:1058–1061.)**

Keywords: **Advanced Practice Providers, Family Medicine, Family Physicians, Surveys and Questionnaires, Workforce**

Introduction

The Association of American Medical Colleges estimates a shortage of between 37,800 and 124,000 physicians (between 17,800 and 48,000 primary care physicians) by 2034.[1] Nurse practitioners (NP), physician assistants (PA) and other advanced practice providers (APP) are considered one solution to meet the looming workforce shortage and to meet the increasing need for health services for the US population, particularly in rural and underserved areas. Primary care practices are embracing interdisciplinary provider configurations which including APPs that can strengthen health care delivery.[2]

Most family physicians (FPs) routinely work with APPs and the number is continuing to increase.[3,4] Of 27,836 FPs surveyed, nearly 70% had NPs or PAs in their practice.[2]

Due to the lower salary requirements compared with physicians, APPs are likely seen by some health administrators as a health workforce strategy that is more cost-effective for staffing clinics and delivering care.[5] Chairs of departments of family medicine have roles that may conflict. They typically oversee clinics with expectations for providing

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care and generating revenue, which may suggest choosing APPs for clinic staffing rather than FPs based on basic financial considerations. They also need to meet the needs of patient populations using the varying scopes of practice provided by FPs and APPs. Finally, department chairs are in the business of medical education and creating the next generation of FPs. How chairs of departments of family medicine perceive the health workforce choices in the context of these two conflicting roles is not clear. Consequently, we examined clinical workforce decisions and perceptions of APPs and FPs from the perspective of a national survey chairs of departments of family medicine.

Methods

The questions for this survey-based study were part of a larger omnibus survey conducted by the Council of Academic Family Medicine Educational Research Alliance (CERA). The methodology of a CERA Survey has previously been described in detail.[6] The CERA steering committee evaluated questions for consistency with the overall subproject aim, readability, and existing evidence of reliability and validity. Pretesting was done on family medicine educators who were not part of the target population. Questions were modified following pretesting for flow, timing, and readability. The project was approved by the American Academy of Family Physicians Institutional Review Board in August 2022. Data were collected from August 16 to September 16, 2022.

The sampling frame for the survey was family medicine department chairs as identified by the Association of Departments of Family Medicine (ADFM). E-mail invitations to participate were delivered with the survey using the online program Survey Monkey. Four follow-up e-mails to encourage nonrespondents to participate were sent weekly after the initial e-mail invitation and a fifth reminder was sent the morning the survey closed. There were 219 US department chairs and 18 Canadian department chairs identified at the time of the survey. Six US e-mails were undeliverable. Five people in the US and 1 person in Canada indicated they were no longer a department chair. The survey was delivered to 225 department chairs (208 US and 17 Canadian).

Survey Items

Respondents were asked if their department directly employs APPs, major factors influencing departments of family medicine to hire APPs (access to care, filling gaps, finances, inability to hire physicians, optimizing patient satisfaction, sharing the workload), services to patients currently being provided by APPs, services to patients preferentially provided by APPs. In addition, the respondents were asked if they thought having specific roles in terms of services provided by APPs was important, if having APPs staff primary care clinics will negatively affect the future value of family physicians, and whether APPs are a necessary part of the health care workforce to have a financially profitable family medicine clinic.

Analysis

The analysis began with descriptive statistics. Bivariate analyses, chi-squares, were computed comparing perceptions of APPs and FPs by how these types of health care providers are currently used in the respondent's clinical operation. Significance levels were set at the conventional confidence level of 0.05.

Results

We received 121 responses to the survey invitation. Twelve survey responses were abandoned after answering only demographic questions and were removed from the results, meaning there were 109 responses to the survey invitation. The overall response rate for the survey was 48.4% (109/225).

Most departments of family medicine (62.4%) use APPs. Access to care and filing gaps in team-based care are the primary factors for APP employment in departments of family medicine (Table 1). Finances, inability to hire physicians, and optimizing patient satisfaction were not rated as a factor by more than 60% of respondents.

Although most departments have APPs provide services that include complex chronic conditions complicated by coexisting conditions or not yet controlled, most department chairs do not prefer APPs provide these services (Table 2). In contrast, most department chairs (79.3%) prefer APPs provide population management than are currently doing so (58.6%). Most department chairs (67.6%)

Table 1. Factors Influencing Advanced Practice Provider (APP) Employment and Frequency of Priority Levels

Factors	Primary Factor (%)	Secondary Factor (%)	Tertiary Factor (%)	Not Rated (%)
Access to care	52 (49.1)	21 (19.8)	9 (8.4)	27 (24.8)
Filling in gaps	18 (17.0)	30 (28.3)	21 (19.2)	40 (36.7)
Finances	11 (10.4)	10 (9.4)	22 (20.2)	66 (60.6)
Inability to hire physicians	10 (9.4)	18 (17.0)	7 (6.4)	74 (67.9)
Optimizing patient satisfaction	0 (0)	4 (3.8)	7 (6.4)	98 (89.9)
Sharing the workload	10 (9.4)	17 (16.0)	24 (22)	58 (53.2)
Other	5 (4.7)	3 (2.8)	10 (9.2)	94 (86.2)

believe it is important to have specific roles in terms of services provided by APPs. Most department chairs (58.1%) do not believe having APPs staffing primary care clinics will negatively affect the future value of family physicians.

Using bivariate analysis, departments employing APPs are more likely to have APPs serve as the preferred provider of coordination of care transition services (46.0%, $P = .024$) and follow-up for abnormal screening tests (42.5%, $P = .023$). A similar association was not found regarding complex chronic conditions complicated by coexisting or not yet controlled conditions or care coordination at care transitions and population health management.

Discussion

APPs are employed by most departments of family medicine to increase access for patients and fill voids in team-based care. The role of APPs in terms of specific patient care activities and services in the health care team of departments of family medicine is often in conflict with preferred roles as delineated by the chair. This issue is exemplified by respondents indicating that APPs often provide care for patients with complex chronic conditions complicated by coexisting conditions. Most chairs prefer that APPs not provide this service. The care of these patients is often felt to be under the prevue of the family physician and this role is often being abdicated based on the results of this study.

Further, the current activities by APPs noted in this study may undermine the value of family physicians to the health care system which contrasts our findings that most respondents do not believe having APPs staffing primary care clinics will negatively affect the future of value of FPs. These contradictory findings suggest that roles for members of the health care team are often not clearly delineated, or how those roles may be optimized based on education, skills, and experience to perform duties within their scope of practice.

In conclusion, although most department chairs believe it is important to have specific roles for APPs, APPs often provide similar services to FPs. The impact of FPs and APPs with differing training, practice patterns and compensation levels providing similar services may negatively impact family medicine as a discipline. Further research is needed to define the skills and roles of APPs within family medicine clinics, specifically their scope of practice and how they can further promote quality and safety in patient care. In addition, whether differences are noted between US and other countries regarding the use of APPs needs to be explored.

Table 2. Current and Preferred Services Offered by Advanced Practice Providers (APPs) (out of 87 Respondents)

Service	Currently Performed (%)	Not Currently Performed (%)	Preferred (%)	Not Preferred (%)
Complex chronic conditions complicated by coexisting conditions or not yet controlled	64 (73.6)	23 (26.4)	32 (36.8)	55 (63.2)
Care coordination at care transitions	62 (71.3)	25 (28.7)	67 (77.0)	20 (23.0)
Follow-up for abnormal screening results	64 (73.6)	22 (25.3)	61 (70.1)	26 (29.9)
Population health management	51 (58.6)	36 (41.4)	69 (79.3)	18 (20.7)

To see this article online, please go to: http://jabfm.org/content/36/6/1058.full.

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