Examining referral practices of primary care physician assistants

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ABSTRACT

Background Various barriers to specialty referrals that are initiated by physician assistants (PAs) have been reported to limit a PA's ability to care for patients effectively when they have a medical problem that requires specialty intervention. To assist in evaluating this matter, we conducted a survey to assess referral practices and perceived barriers to referral among primary care PAs in the United States. **Methods** A cross-sectional, random sample of 500 primary care PAs from across the United States was surveyed to determine their referral practices and perceived barriers to referrals. Standard descriptive statistics and univariate analysis of variables were carried out using Pearson chi-squared tests. **Results** Seventy-one percent of respondents identified barriers to referral of patients to specialists, although 86% were satisfied with their level of autonomy. The most frequently identified barrier (38%) was the patient's insurance company. This is not an unexpected finding, considering the managed care environment in which medicine is practiced in the United States. Of respondents who mentioned this barrier, the majority were in practice 5 years or less ($P<.05$) and lived in a community with 10,000 or more people ($P<.05$). Seventeen percent of respondents also identified refusal or reluctance of specialists to accept referrals from PAs as a barrier; of respondents who mentioned this barrier, the majority had been in practice 5 or fewer years ($P<.05$) and worked in a community of 10,000 or more people ($P< .01$). A reassuring finding was that the majority of PAs (86%) were satisfied with their level of autonomy in making referrals. This may reflect the level of confidence that supervising and specialty physicians have in a PA's ability to make appropriate decisions regarding referrals. **Conclusions** Further research is needed to determine whether these barriers affect a patient's access to cost-effective, high-quality care from specialist physicians.

In 1999, approximately 35,000 PAs were practicing in the United States-more than one half in primary care, which includes family medicine, general internal medicine, and general pediatrics. Millions of people in the United States receive health care from primary care PAs; the average number of patients seen by a primary care PA weekly in 1999 was 95- amounting to approximately 5,000 visits a year.[1] Given the magnitude of care provided by primary care PAs, it is imperative that barriers to providing the highest quality care in the most cost effective way be identified and, where possible, removed.

An important part of practicing medicine is recognizing the need for referral and being able to carry out the process. Inability to do so creates inconvenience for PAs and their patients, which, in the long run, can reduce the productivity of the PA, increase cost, and possibly impact the perceived quality of care provided.

Are primary care PAs given the authority to make a referral when they determine a need to? What barriers to referral do primary care PAs perceive within their practice? These questions have gone unanswered.

A recent study by Dehn and Hooker noted that "referring directly to a specialist" was among the most common activities undertaken by PAs who practice family medicine in Iowa.[2] But their study did not investigate barriers encountered in making such referrals.

Our review of the literature revealed no significant studies of referral practices of PAs; any research that has been done has focused on referral practices of physicians. One study looked at barriers to referral by pediatricians in a managed care system[3]; results suggest that barriers to referral of pediatric patients to subspecialists do exist because of the managed care process.

A need for information about referral practices and barriers exists as the role and cost effectiveness of primary care PAs are weighed. This study identifies those perceived barriers and, in doing so, raises additional questions for future research.

Methods

Design

This cross-sectional study investigated PA referral practices and barriers to referrals they perceive. The research was administered through the Department of Physician Assistant at Wichita State University, Wichita, Kansas, between September and October 1997.

Subjects

Five hundred primary care PAs (practicing general internal medicine, family medicine, or general pediatrics in the United States) were randomly selected from the 1997 database of the AAPA. Of that target population, 256 returned the survey, for a 51 % response rate that defines the study population. Of those 256, 245 were in practice and completed the entire survey and were therefore included in the final analysis (see Table 1).

Measurement

Participants were asked to respond to a survey that included questions on general demographics; practice setting and specialty; referral patterns and referrals per week; and perceived barriers to referrals. They were also asked to rate, on a five point Likert-type scale, their satisfaction with their level of autonomy in making referrals and their satisfaction with reports received from specialists (poles labeled "very dissatisfied" to ''very satisfied").

Data analysis

The 31-item survey was analyzed using standard descriptive statistics and univariate analysis of variables using Pearson chi-squared tests.

Results

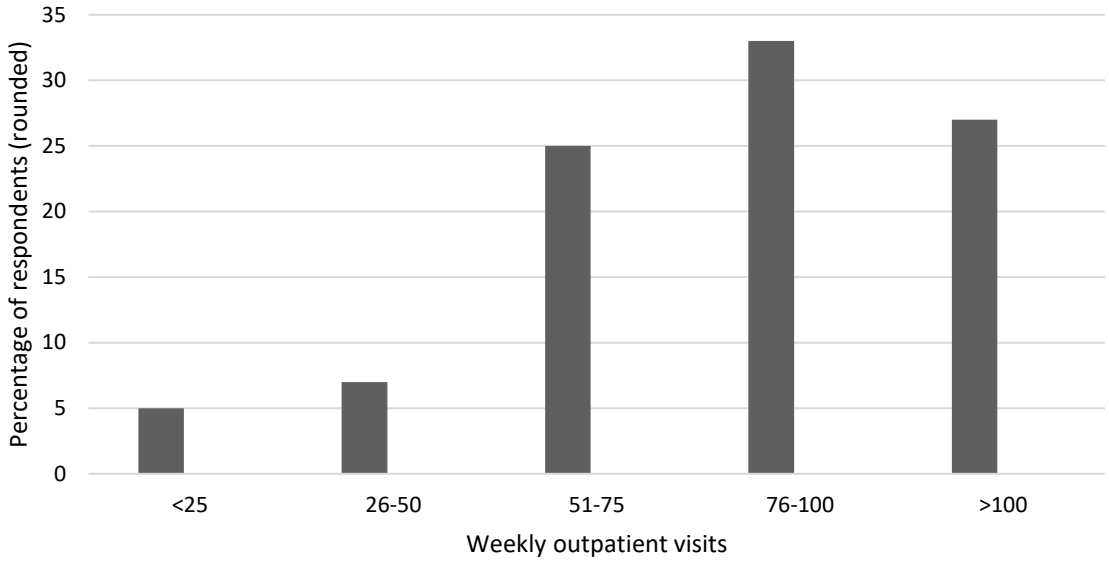
The examined population totaled 245 respondents. Analysis revealed 72% specialized in family practice; 20%, in general internal medicine; and 6%, in pediatrics. Those percentages are consistent with I999 AAPA census data regarding the percentage of PAs practicing in each primary care specialty.[1] Seventy-two percent practiced in a city of more than 10,000 people. Forty-seven percent practiced in a private, office-based practice. Eighty-six percent evaluated 51 or more patients each week (see Figure 1, page 82); 75% referred 1 to 10 patients to outside consultants each week (see Figure 2); and 79% referred 1 to 10 patients each week to their supervising physician (see Figure 3). Overall, 20% of respondents were required to consult with their supervising physician before referring a patient for emergency, specialty, or managed care. Similarly, 20% were required to consult their supervising physician before ordering a CT or MRI scan.

On the other hand, fewer than 2% needed approval from their supervising physician before ordering routine clinical laboratory tests (e.g., urinalysis, CBC, blood chemistry, or routine radiographs) or preventive screening exams (e.g., mammography, flexible sigmoidoscopy, or Pap smear). The five specialties to which PAs referred patients most often were orthopedics (53.1 %), cardiology (47.3%), general surgery (46.9%}, dermatology (40.4%), and obstetrics-gynecology (32.7%).

Seventy-one percent of respondents identified barriers to making referrals although 86% were satisfied with the level of autonomy they possessed in making those referrals. Forty-two percent were satisfied with reports received from consulting physicians.

Table 1. Profile of respondents	
Characteristic	**Percentage (n = 245)**
Gender	
Female	51
Male	49
NCCPA* certification	97
Years in practice	
<1	1.6
1-2	12.7
3-5	24.9
6-10	20.0
11-15	19.6
>15	21.2
Years in current clinical position	
<1	14.3
1-2	24.1
3-5	35.5
6-10	17.6
11-15	4.9
>15	3.7
*National Commission on Certification of Physician Assistants.	

Figure 1. The weekly outpatient load



Barriers included the predetermined consultation policy of the patient's health care insurer (38%); the predetermined consultation policy of the PA's employer (17%); refusal or reluctance of specialists to accept referral from a PA (17%); and the requirement that PAs consult with a supervising physician before referring (6%). (The survey allowed a respondent to identify more than one barrier.)

Further analysis revealed that, of the 38% of respondents who identified the predetermined consultation policy of an insurer as a barrier, 66% lived in a community pf 10,000 or more people (*P*<.05) and 49% worked in a practice owned by their supervising physician (*P*<.001). Of respondents who identified their employer's predetermined consultation policy, the majority had been in practice 5 or fewer years (*P*<.05). Of respondents who identified the refusal or reluctance of specialists to accept referrals from a PA, 80% had been in practice 5 or fewer years (*P*<.05) and 66% worked in a city of 10,000 or more people (*P*<.01).

Figure 2. Weekly referrals to specialists

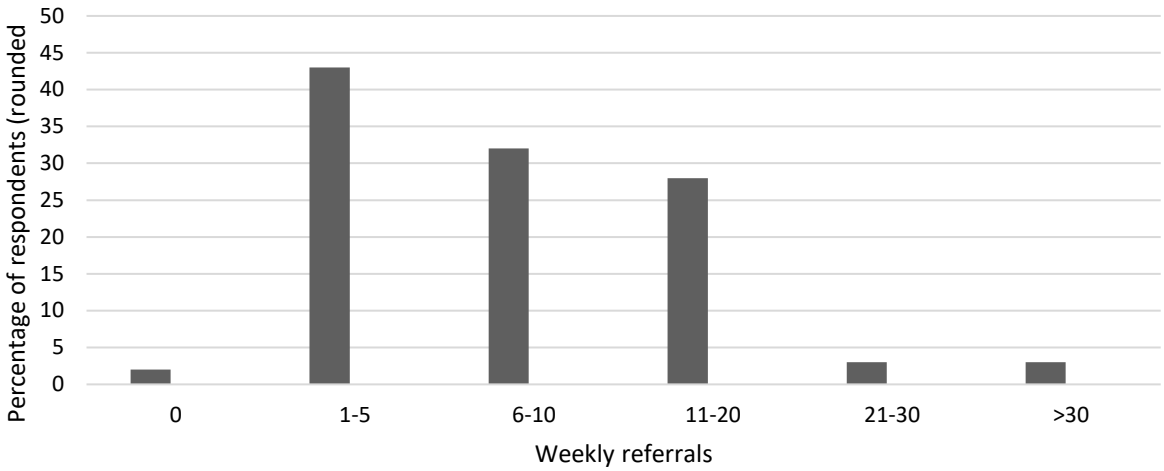
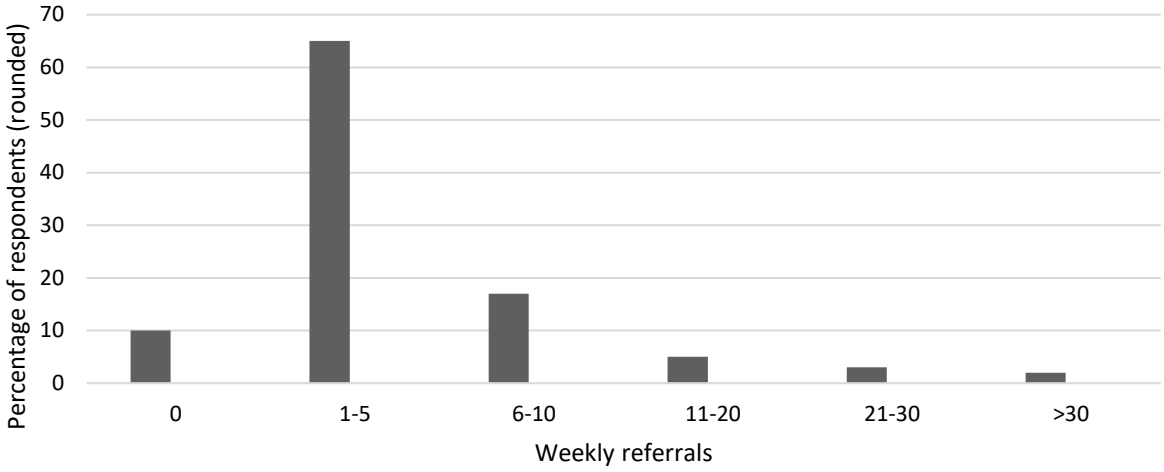


Figure 3. Weekly referrals to the supervising physician



Discussion

A significant majority (71%) of respondents identified one or more barriers that affect their referral practice. While several barriers were cited, the one most frequently identified was the pre-determined consultation policy of the patient's health care insurer.

Of respondents who identified this barrier, a statistically significant percentage lived in a community or city of 10,000 or more people; this is not unexpected, considering the predominance of

managed care generally and its increasing penetration in urban areas. This finding is also similar to what Cartland and Yudkowsky found in their study of referral barriers reported by pediatricians.[3]

It is reassuring that the majority of responding PAs--86%--were satisfied with their level of autonomy in making referrals. This satisfaction may reflect the level of confidence that supervising physicians have in a PA's ability to make timely and appropriate referral decisions.

Another interesting finding of this study is that some PAs experience difficulty with specialist physicians who either are reluctant or refuse to accept referrals from a PA. Of respondents who identified this barrier, the majority had been in practice for 5 or fewer years and practiced in a community or city of 10,000 or more people. This observation may indicate that specialist physicians are more reluctant to accept referrals from a less experienced PA or one with whom they are less familiar.

Conclusion

More study needed Based on these results, we believe that further research is necessary to determine the impact of referral barriers on PA practice. A paucity of published data exists for review and comparison of these findings. More study is indicated to gain insight into several areas:

- Do PAs believe that referral policies of health care insurers are a barrier to quality medical care for their patients?
- Do PAs experience primarily administrative delays when they arrange for specialist care or are referrals in fact being denied?
- Are perceived barriers presented by insurers based on questions of medical necessity, unwillingness to recognize referrals from a PA, or lack of avail-ability of preferred specialists in the insurer's network?
- Why are specialist physicians reluctant-or why do they refuse to accept referrals from a PA? Are specialist physicians satisfied with the quality (i.e., appropriateness) of referrals from PAs?
- What is the average referral rate among primary care PAs, and how do they compare to the referral rate among other providers (e.g., physicians, nurse practitioners)? (Some data suggest that more experienced clinicians actually have higher referral rates than inexperienced ones.[4])

Arranging for consultation and referral is an important part of primary care among PAs in this area of practice. Barriers to referral do exist, but overall, PAs in this study are satisfied with their ability to provide access to routine, preventive, and specialist care for their patients, in a collaborative relationship with supervising and consulting specialist physicians.

REFERENCES

1. American Academy of Physician Assistants. *1999 AAPA Physician Assistant Census Reports*. Available at: http://www.aapa.org/r8S881Ch/1ndex.html. Accessed April 26, 2000.
2. Dehn RW, Hooker.RS. Clinical activities of Iowa family practice PAs: implications for practice edu-cation. *JAAPA Journal of the American Academy of Physician Assistants* 1999;12(4):63-77.
3. Cartland JD, Yudkowsky BK. Barriers to pediatric referral in managed care systems. *Pediatrics* 1992;89(2):183-192.
4. Calman NS, Hyman AB, Licht w. Variability in consultation rates and practitioner level of diagnostic certainty. *J Fam Pract* 1992;35(1):31-38.