Improving the Perception of Outpatient Practice: A Second Continuity Experience for Internal Medicine Residents

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ABSTRACT

BACKGROUND: The challenges trainees experience in the traditional medical clinic are felt to be one deterrent to choosing a primary care career.

OBJECTIVE: We examined whether participation in a second outpatient continuity experience (Second Site) affects trainee perception of primary care practice.

METHODS: 241 current and former graduates of the Brown Alpert Medical School Internal Medicine training programs were surveyed about their experiences with Second Site.

RESULTS: Of the 232 potential responders, 160 completed the survey. Although most did not feel that the experience altered their chosen career path, a positive perception of outpatient practice was noted by 97% of the primary care respondents and 92% of the subspecialty respondents.

CONCLUSION: Second Site improved the perception of outpatient practice. A large number of our residents enter primary care, thus, few residents' careers were influenced by Second Site. Despite this, Second Site might enhance interest in primary care careers at other institutions.

KEYWORDS: Medical education, primary care, ambulatory practice

INTRODUCTION

United States workforce researchers predict a shortage of primary care physicians. West et al. reported that far fewer trainees pursue careers in general internal medicine than subspecialty medicine. This holds true even for trainees in primary care tracks.[1] One of the purported reasons for the inadequate numbers of trainees pursuing primary care is the experience of the traditional medical clinic. As noted by Nadkarni, "Complex patients, insufficient resources, stressed residents, stressed clinic directors, and lack of separation from inpatient duties were felt to be barriers to meaningful ambulatory education and to be one cause of negative perception of outpatient practice."[1] Ambulatory training provides trainees with an essential educational experience while providing care to the underserved. However, this experience may create negative perceptions of outpatient practice and deter trainees from primary care pursuits.

Unlike many internal medicine training programs, our residents have a weekly ambulatory day, one half day spent in traditional medical clinic and the other half in their Second Site. When the resident is assigned to his/her ambulatory day, all other responsibilities are covered by a day float resident. For their three primary continuity clinics, our 128 residents are assigned to one of three clinics: the majority attend the tertiary care hospital clinic (Rhode Island Hospital), one-third attend an academic community hospital (The Miriam Hospital), and nine go to our Veteran's Hospital clinic. In the Second Site experience, second-year residents are paired with a single precepting physician for a weekly, two-year continuity experience. Second Site is designed to provide a complementary experience to traditional medical clinic in a more "real- world" environment devoid of the challenges of traditional medical clinic. Trainees work with populations distinct form traditional medical clinic, work in efficient offices and observe mentors in the type of environment where many will ultimately practice. Residents choose their site after reviewing a biography of voluntary preceptors which includes practice demographics, preceptor expertise and ancillary services provided. Second Sites include academic and community-based practices in primary care (37% of total with representation from women's health, men's health, and prison medicine) as well as subspecialty medicine (endocrinology, rheumatology, infectious disease, cardiology, gastroenterology, hematology oncology, pulmonary medicine, and palliative care). Preceptors must provide new patients, follow-up and acute visits, exposure to the "business" of medicine and provide direct observation and feedback.

METHODS

Our aim was to determine if Second Site positively influences resident perception of outpatient practice. In the spring of 2013, a questionnaire was sent to 232 current and former graduates of the Brown Alpert Medical School Lifespan-affiliated categorical and primary care residency programs. Survey participants were contacted anonymously via email and were asked to complete the online questionnaire using SurveyMonkey©.[a]

We sought to assess resident rankings of the Second-Site experiences in comparison to rankings of traditional medical clinic for the period 2010–2012. We assessed the demographic

differences between the traditional clinics and the Second-Site practices. All resident rotations were evaluated on a nine-point Likert scale where 1 is "below expectations" and 9 is "exceeded expectations/superior to other experiences."

Lifespan IRB approval was obtained and the study was exempted from full review.

PARTICIPANTS

Criteria for inclusion in the survey was successful completion or current enrollment in the residency programs during the years 2008–2013 and having an active email address.

INSTRUMENT

The questionnaire consisted of 14 items (see appendix). In addition to demographic questions, respondents were queried about the Second-Site program's rating compared to other rotations, educational value, effect on perception of outpatient practice, impact on career choice, and whether Second Site differed from their experience with traditional medical clinic. We also allowed free text comments for several of the questions. The analysis was conducted in SAS©[b] software, where chi-square test was used for bivariate analysis.

RESULTS

We had a 69% response rate (160 out of 232). Two-thirds of the respondents were graduates of the program and 37% were current trainees. Fifty-three percent of the respondents were women and 47.5% were men. More respondents (62%) identified current careers in subspecialty medicine than primary care (38%) (**Table 1**).

Table 1. Demographic Characteristics and Career Plans of Residents in 2009–2011

Residents characteristics	Residents		
	Primary Care Practice (n=60)	Subspecialty Practice (n=100)	Full sample (n=160)
Gender, no. (%)**			
Female	41 (68.3)	43 (43.0)	84 (52.5)
Current trainee status no. (%)			
Graduate	36 (60.0)	71 (71.0)	107 (66.9)
PGY2	13 (21.7)	12 (12.0)	25 (15.6)
PGY3	11 (18.3)	17 (17.0)	28 (17.5)
Number of years since graduation, no. (%)a			
Less than 1 year	6 (5.6)	2 (1.9)	8 (7.5)
1-2 years	14 (13.1)	44 (41.1)	58 (54.2)
2-3 years	0 (0.0)	2 (1.9)	2 (1.9)
More than 3 years	8 (7.5)	8 (7.5)	16 (15)
Other	8 (7.5)	15 (14.0)	23 (21.5)
Career plan[b]			
Addiction Medicine	-	1 (1.0)	-
Allergy/Immunology	-	1 (1.0)	-
Cardiology	-	16 (16.0)	-
Endocrinology	-	4 (4.0)	-
Gastroenterology	-	9 (9.0)	-
Hematology/ Oncology	-	15 (15.0)	-
Hospitalist/ER	-	5 (5.0)	-
Infectious Diseases	-	10 (10.0)	-
Palliative Care	-	4 (4.0)	-
Pulmonary/ other Diseases	-	10 (10.0)	-
Rheumatology	-	8 (8.0)	-
Transplant Nephrology/ Nephrology	-	3 (3.0)	-
Undecided	-	2 (2.0)	-
Unknown	-	12 (12.0)	-

Notes: ** – p-value < 0.01.
a) We are only considering the residents that graduated.
b) We are only considering the residents in subspecialty practice.
Abbreviations: PGY-2 – postgraduate year 3; PGY-3 – postgraduate year 3.

Findings demonstrated that Second Site was highly valued. Three quarters of all respondents rated it as the most valuable or top third of their residency rotations. Program evaluation data for 2012–13 showed that Second Site was rated more highly than the medical clinics. On a nine point Likert scale, Second Site received a score of 7.89 compared with 6.61 for the clinic at Rhode Island Hospital and 7.13 for the clinic at the Miriam Hospital.

The program positively influenced the respondent's perception of outpatient practice. Fifty-five of the 57 of residents who reported a current or future career in primary care practice felt that Second Site contributed positively to their perception of outpatient practice. Additionally, 92% of those going into or currently in subspecialty medicine felt that Second Site resulted in a positive perception of outpatient practice. Of the small number of respondents who reported a negative perception, the reasons cited appear to align with reported frustrations of practicing physicians and included the burden of "paperwork, documentation, and electronic records," "time pressures," "long hours and hard work."

Representative free text responses to the question, "Do you feel the Second-Site rotation impacted your perception of outpatient practice positively?" include the following: "Second Site is a wonderful glimpse into "real-life" practice, an invaluable experience and a major reason why I chose Brown IM for residency." "Seeing how medicine is practiced in private offices is incredibly valuable since our residency clinics do not reflect that." "Second Site provided a very different

patient demographic with lots of bread-and-butter medicine that I actually hadn't dealt with much in resident clinic."

Most respondents felt that Second Site did not change their chosen career path; however, 29% reported an effect. Of these, the six respondents who chose to describe their answer further noted that Second Site reaffirmed their interest in primary care. One respondent described how the Second-Site program influenced her/his desire to pursue primary care: "Though I didn't know which specialty, I came in expecting to pursue fellowship and the positive experience in the primary care office definitely contributed to my decision to pursue a career in general internal medicine." Another respondent wrote, "I had a more positive primary care experience compared to my resident clinic. I had a clear example of what a future career as a PCP would look like which can be very different than a resident clinic." A third commented, "Second Site made me appreciate primary care and want to be in outpatient medicine."

DISCUSSION

Four major institutions, the American College of Physicians, the Society of General Internal Medicine, the Association of Program Directors in Internal Medicine and the Alliance of Academic Internal Medicine have called for residency education reform to meet the educational needs of trainees and to improve preparation for future practice.[3] Part of this redesign has been to increase the amount of time trainees spend in the outpatient setting. Unfortunately, increased exposure may worsen perception if the exposure is frustrating. Traditional resident clinics ask the most inexperienced practitioners to care for patients who are the most complex and challenging and often in resource-poor settings.

A 2012 study surveyed clinic directors of ACGME-accredited internal medicine training programs about their residency continuity clinic infrastructure and educational milieu. They found patient panels included patients of lower socioeconomic status and high percentages of Medicaid, Medicare and self-pay. There were high numbers of minority patients and 17% required translators. Our residency clinics care for similar patients. Clinic demographic data from 2013 shows that 50% of patients reported speaking a language other than English as their primary language. Only 3% of patients had private insurance. This is in contrast to data from two large outpatient practices where many residents rotated for Second Site. In these practices, over 90% of patients reported that English was their primary language and over 60% of patients in the outpatient practices had private insurance. Language barriers and lack of patient resources may frustrate young inexperienced doctors and may discourage some residents who might have otherwise pursued careers in outpatient medicine and primary care.

Currently, only 10–20% of internal medicine graduates nationwide practice primary care. Improving the ambulatory experience might increase this number. A recent survey of our primary care graduates from 1981 through 2012 showed that nearly 60% of our graduates practice primary care.[4] This contrasts with a rate of 40% in a nationwide survey of 562 graduating residents in primary care tracks surveyed by West.[1] Residents overwhelmingly reported their Second-Site experience was distinct from traditional medical clinic and positively impacted their perception of outpatient medicine. One respondent's comments encapsulate the frustrations trainees may feel in the challenging environment of the traditional medical clinic. "I loved clinic but the work there was tough; lots of paperwork with little support, non-English speaking patients without translators; patients with psychosocial barriers that made it difficult to care for them properly. At my Second Site, such patients do exist but were by far the exception, not the rule, allowing me to actually focus on primary care medicine."

Our clinics share the barriers and challenges faced in most training programs. Although this study was not designed to determine if our Second-Site program ultimately resulted in more primary care providers, the number of graduates from our program choosing primary care positions suggests that it may indeed have an impact. The large number of residents from our program entering primary care may have mitigated the impact of the Second-Site experience on primary care career choice. A bigger impact of Second Site might be seen in a program where many graduates traditionally enter subspecialty medicine. In our program, Second Site may have served to reaffirm and encourage our residents' original career goals. Given the low numbers of residents pursuing primary care nationwide, positively influencing even a single resident's career choice toward primary care could aid in reducing the primary care physician shortage. In addition, given the positive perception of outpatient medicine noted by respondents, even if trainees do not pursue primary care, their positive perception may have downstream effects.

LIMITATIONS

Although the response rate was high, all respondents were from a single training program, limiting generalization. Respondents may have been motivated to answer the survey because of their positive experience with the program. The mixture of sites in the program, which includes primary care and subspecialty, may have confounded some of the results.

CONCLUSIONS

Our Second-Site Program is highly valued by trainees and fosters a positive perception of outpatient medicine. Programs across the country struggling to enhance the primary care experience of their trainees may wish to consider implementing a Second Site at their own institution. Preceptors in the program find their participation rewarding and generally report that hosting a resident is cost neutral. The program requires a dedicated faculty member to oversee the program.

Other costs include token thanks to preceptors in the form of an office plaque, teaching textbook and faculty development opportunities. In starting a new program, there would be many opportunities to study the experience and find out its impact on career choices.

[a] The data analysis for this paper was collected using SurveyMonkey. Copyright © 2015 Palo Alto, California, USA. www.surveymonkey.com

[b] The code/data analysis for this paper was generated using SAS software, Version 9.3 of the SAS System for Windows. Copyright © 2016 SAS Institute Inc. SAS and all other SAS Institute Inc. product or service names are registered trademarks or trademarks of SAS Institute Inc., Cary, NC, USA.

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Appendix

Survey Questions: Changing the Perception of Outpatient Practice: A Second Continuity Experience for Internal Medicine Residents

1) Current Trainee Status
- PGY2
- PGY3
- Graduate
- If graduate, state number of years since graduation

2) Gender
- Male
- Female

3) Career Pathway
- Primary Care Practice
- Subspecialty Practice
- If subspecialty, please specific type

4) **Did you receive your first choice for your Second Site rotation?**
- Yes
- No

5) **Did the existence of the Second Site program impact your decision to choose Brown for residency?**
- Mostly Positively
- Mostly Negatively
- Neutral

6) **Did you career path change because of your Second Site experience?**
- Yes
- No
- If yes explain how

7) **How would you rate your Second Site experience compared to other required rotations? Choose 1**
- Most valuable
- Top 1/3
- Middle 1/3
- Bottom 1/3
- Other, please specify

8) **Is/was the time spent in Second Site adequate?**
- Yes
- No
- Other, please specify

9) **Did you join the practice you participated in?**
- Yes
- No
- Not applicable

10) **Did you join a similar practice to the one you participated in?**
- Yes
- No
- Not applicable

11) **On a scale of 1 to 3, please rank the value of each of the following educational components of the Second Site program**
- 1-Little value, 2-Moderate value, 3-Substantial value
- Medical knowledge
- Communication skills
- Coordination of care
- Record keeping
- Utilization of an EMR
- Office flow
- Other valuable component

12) **Do you feel the Second Site rotation impacted your perception of outpatient practice positively?**
- Yes
- No

13) **Do you feel the Second Site rotation impacted your perception of outpatient practice negatively?**
- Yes
- No

14) **Did you Second Site experience differ from your primary continuity experience?**
- Yes
- No
- If yes, please describe how.