Integrating Primary Care Appointments Into Resident Orientation

Alana M. Ewen, MPH Rodolfo Villarreal-Calderon, MD Sara Lynch, MBA Jeffrey I. Schneider, MD

ABSTRACT

Background Trainee well-being is a major concern for institutions and programs, yet many residents report suboptimal access to or contact with primary care for themselves.

Objective To address the health care needs of residents, we developed a mechanism whereby all incoming residents were offered an appointment with a primary care clinician (PCP) during institutional intern orientation.

Methods In April 2019, all incoming residents (17 specialties) were invited to participate. A collaboration involving the GME office and family medicine and internal medicine departments enabled interested residents to attend PCP appointments that were held at predesignated times during orientation and did not conflict with other orientation or learning activities. Residents received appointment details, and insurance billing processes were followed. A survey was administered to all participating PCPs and incoming residents 2 weeks following their scheduled PCP appointment.

Results Of the 144 incoming residents, 118 (82%) participated. Among the 71 of 144 (49%) residents who responded to the survey, 94% indicated that they desired an appointment, with 90% attending the appointment as scheduled; 52% purposed their visit as an introduction for future appointments, while 15% requested prescription refills. All but one recommended that the initiative be offered again in the future. Seventy-two percent stated that participating in the PCP initiative definitely/probably led to improvements in self-care, and 76% indicated that participating definitely/probably made them more conscious of their health and well-being.

Conclusions Integrating PCP appointments into orientation is feasible and was highly acceptable in a large academic medical center.

Introduction

The prevalence of burnout among trainees across varying specialties has been documented extensively in the literature. 1-3 Medical trainees are more susceptible to suicidality, have poorer quality of life than the general US population, and continue to be at an increased risk of mental health disorders as they transition to the role of an attending. 4 Not only affecting the individual physician, this lack of wellness, increased burnout, and loss of vitality is known to have an impact on the quality of care provided to patients. 5 These patterns begin in medical school and continue through residency and fellowship training. 5

Primary care is a critically important component of health promotion, detecting mental health conditions and treating chronic conditions. A survey study found nearly 1 in every 7 trainees reported a preexisting mental health condition before starting residency,⁶

DOI: http://dx.doi.org/10.4300/JGME-D-20-00158.1

Editor's Note: The online version of this article contains an offer letter to participate in the primary care physician initiative and the survey instrument used in the study.

and another revealed that approximately 1 in 4 residents suffer from a chronic medical illness.⁷

In a national survey of internal medicine and family medicine residents, only 60% reported having established care with a primary care clinician (PCP).⁶ Several factors contribute to residents not having a PCP or maintaining regular contact with one, including the long hours that many residents work and the often unpredictable nature of a trainee workday.⁸ Importantly, a study showed that residents with a PCP had significantly higher screening rates for hypertension, cholesterol, and cervical cancer,⁹ and patients with access to primary care had better health outcomes, including self-reported health.¹⁰

Through our "PCP Initiative," we endeavored to take concrete action to underscore the importance of the health of our trainees. Knowing that one of the major barriers preventing trainees from addressing their own health is protected time to do so, we integrated PCP appointments into a blocked time in orientation where there was a shared understanding among incoming residents, their program directors, and the institution that attendance at a PCP appointment would not interfere with any other activities or

expectations. We sought to determine if this strategy was feasible and acceptable during orientation.

Methods

The PCP Initiative was developed and implemented at Boston Medical Center (BMC), a large academic medical center and teaching hospital, which serves as the primary teaching affiliate for Boston University School of Medicine. During academic year (AY) 2019–2020, BMC sponsored 42 training programs and 2 combined programs accredited by the Accreditation Council for Graduate Medical Education, cumulatively representing more than 700 residents and fellows.

In AY 2019–2020, 144 incoming residents were required to attend intern orientation, and as part of the pre-hire communications between the hospital and the incoming residents, an offer to participate in the PCP Initiative was extended (provided as online supplemental material). This invitation included details of the initiative as well as information about timing, health insurance, and other pertinent information. All AY 2019–2020 incoming first-year BMC residents, regardless of chosen medical plan or coverage, health status, or specialty, were eligible to participate.

With initial planning beginning nearly a year before orientation, multiple meetings involving graduate medical education (GME) staff, practice managers, members of the benefits team, and revenue cycle leadership (those responsible for the registration of new patients, charges, and billing for visits) took place to discuss the process, potential barriers to implementation, and all administrative aspects of the effort. With the vast majority of first-year residents selecting to participate in our organization-sponsored health insurance plan, and coverage not beginning until the date of hire (which was only 1 day prior to the day of the appointments), careful attention had to be paid to benefits enrollment and preregistration in the internal medicine and family medicine clinics. Practice mangers recruited clinicians who were available to participate, and appointment slots on the afternoon of the initiative were "blocked" so that other patients could not be scheduled during this time. Appointment details were provided to the residents directly from the practice managers and staff; typical processes for insurance billing were

Incoming residents were given approximately 1 month to consider whether they wanted to participate in the initiative. An online checklist (New Innovations Inc, Uniontown, OH) was used to capture responses and resident preference to be seen either in family

What was known and gap

Residents are at high risk for burnout and often are unable to address their own health care needs.

What is new

This innovative program incorporated primary care physician appointments into new resident orientation during a "protected" time period so as to not interfere with other orientation activities.

Limitations

The long-term effects of this program on the burnout and vitality of residents are unknown.

Bottom line

This novel program provided a mechanism by which the health of residents was directly and explicitly addressed, and it was very well received by those who participated.

medicine or internal medicine clinics, whether they preferred a physician or nurse practitioner, and if they preferred a male or female clinician, with the understanding that preferences may not be able to be accommodated. Concurrently, the incoming residents were able to review and select benefits and health plan options. To aid in the booking of appointments and so that preregistration could be completed, and incoming residents could be placed into available appointment slots, reports were sent to the internal medicine and family medicine practice managers and to Patient Access Services every week. Reports included first-year resident names, phone numbers, and preferences regarding clinician department, clinician gender, and profession (ie, physician or nurse practitioner). The PCP had access to any data in the electronic health record and to any records provided to them by the patient. First-year residents were contacted directly by each practice with the time and location of their appointment. Hard copy reminders were provided on the first day of orientation. The privacy of the first-year residents was critically important, and this was made explicit to them in the introductory materials about the initiative. Only 2 individuals in the GME office (designated institutional official and administrative director) and clinic registration staff were aware of which first-year residents chose to enroll in the program as well as their individual preferences for clinician type. Program directors were not aware of first-year resident participation or preferences. All clinic appointments were scheduled on one afternoon during intern orientation, at a time free of official orientation activities and prior to the start of clinical duties for most specialties (in previous years, this time period was often unfilled by a break between intern orientation activities and departmental activities). Residents were distributed across 2 primary care clinics-internal medicine and family medicine. Each of these practices encompasses multiple clinicians,

TABLE Incoming Resident Participant Demographics (June–July 2019)

Characteristic	PCP Initiative Participants (N = 118), n (%)	Survey Respondents (N = 71), n (%)
Age, y		
25–34	114 (96.6)	69 (97.2)
35–44	3 (2.5)	1 (1.4)
45–54	1 (0.8)	1 (1.4)
Gender		
Male	58 (49.2)	39 (54.9)
Female	59 (50.0)	31 (43.7)
Genderqueer	1 (0.8)	1 (1.4)
Ethnicity (check all that apply)		
Asian	41 (34.7)	25 (35.2)
Black or African American	5 (4.2)	4 (5.6)
Hispanic or Latino	7 (5.9)	3 (4.2)
White or Caucasian	59 (50.0)	42 (59.2)
Prefer not to answer/Not available	11 (9.3)	1 (1.4)
Native American or Native Alaskan	1 (0.8)	0 (0)
Did you indicate you wanted a PCP appointmen	t as part of this initiative?	
Yes	N/A	67 (94.4)
No	N/A	4 (5.6)

and each occupies a suite in a large outpatient clinical building. The participating incoming residents were distributed across 18 clinicians who cared for the residents. Appointments were held in clinics on campus, thus removing potential transportation barriers. Any copays were determined by the insurance provider, and with most residents choosing the institution-sponsored health insurance product, the visits were completely covered.

A survey was administered to all incoming residents and participating PCPs in July 2019 via Qualtrics (Qualtrics LLC, Provo, UT) to gauge resident and PCP perceptions of the initiative, with a 1-year follow-up survey distributed to the same cohort of first-year residents in June 2020. The survey instrument was developed by the research team, which included clinician educators, but was not piloted prior to dissemination (provided as online supplemental material). Descriptive statistics were used to report findings. The study protocol was deemed exempt by the Boston University Institutional Review Board and included informed consent.

Results

Of the 144 first-year residents who attended the June 2019 orientation, 118 (82%) signed up to participate via the pre-arrival survey, and 18 PCPs from internal medicine and family medicine offered to see these trainees in their clinics.

Among all 144 incoming residents, 71 (49%) completed the voluntary survey. Those who completed the survey were largely male (55%, 39 of 71), "White or Caucasian" (59%, 42 of 71), and indicated they wanted a PCP appointment as part of the initiative (94%, 67 of 71; TABLE). The small percentage that did not want a PCP appointment stated they already had a PCP, did not respond to the invitation on time, or recently had another preventive care visit, thus electing not to participate.

Most of the respondents (52%, 35 of 67) who signed up to participate in the initiative reported that they saw the initiative as an opportunity to facilitate an introduction to a particular clinician for future appointments. (There were 4 first-year residents who responded to the survey but who did not sign up to participate in the initiative, and were therefore not asked to answer a series of questions related to attending a PCP appointment or a desire to be seen by a PCP during intern orientation). A few (15%, 10 of 67) indicated that they signed up due to a need to obtain a refill of a prescription. There were 3 first-year residents who did not arrive for their scheduled appointment (3%). Although uncommon, barriers included conflicts with other orientation requirements. Most respondents (67%, 40 of 60) indicated that their appointment lasted longer than 10 minutes, with some being seen for acute problems. The majority of participants (76%, 51 of 67) stated they

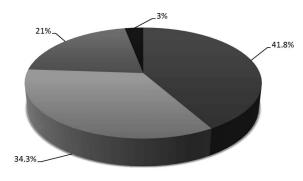




FIGURE 1

Plans to See Primary Care Physician Within the Next Year $\left(N=67\right)^a$

^a The 4 first-year residents who did not sign up to participate in the initiative were not asked to answer this question.

definitely/probably plan to see their PCP again within the next year (FIGURE 1).

Thirty-six percent of respondents (24 of 67) reported that the program definitely made them more conscious of their health/well-being, with 78% (52 of 67) definitely recommending the program be offered again in subsequent years (FIGURE 2).

A survey was also disseminated to the 18 participating PCPs, and 11 (61%) completed the survey in its entirety. Of the 11, 8 worked clinically in internal medicine (73%) and the remaining 3 worked clinically in family medicine (27%). Most were female (64%, 7 of 11), a physician (91%, 10 of 11), and spent 20 to 40 hours per week (or 50 - <100% FTE, clinically with patients (55%, 6 of 11). All 11 PCPs reported spending more than 10 minutes with each incoming first-year resident/patient and would recommend that this program be offered to future incoming residents. The majority (82%, 9 of 11) stated that participation in the PCP Initiative definitely made them more conscious of trainees' health and well-being and should definitely be expanded to include all trainees, regardless of postgraduate year level.

Discussion

This initiative provided interested incoming first-year residents with an opportunity to have a PCP appointment during a protected time slot as part of intern orientation. Most residents elected to participate in the program, and the majority recommended that it be offered in subsequent years to future classes. With advance planning and coordination of key stakeholders, other institutions may be able to provide a similar program.

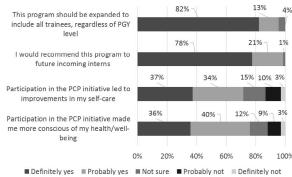


FIGURE 2 First-Year Resident Perceptions of the Initiative $(N=67)^a$ Abbreviations: PGY, postgraduate year; PCP, primary care physician. ^a The 4 first-year residents who did not sign up to participate in the initiative were not asked to answer these statements.

While improved well-being and vitality remain a focus in graduate medical education, there is a relative paucity of literature depicting effective interventions, particularly those related to access to primary care. One recent study described the development and implementation of a "concierge" scheduling service, which reduced trainee perception of barriers to receiving care. Though a different intervention than the one described here, it perhaps represents an important complementary approach to addressing the emphasis on measures to promote trainee health and well-being from the Accreditation Council for Graduate Medical Education (ACGME).

There are limitations to this study. The PCP Initiative was implemented at a single large institution; therefore, results may not be applicable to other sponsoring institutions of varying sizes, with different primary care frameworks or time constraints during orientation. The barrier to obtaining an initial appointment was reduced by this program, but it is not yet clear whether subsequent PCP visits will occur, or if this program affects resident well-being during training.

The administered surveys were not tested for validity evidence, and thus, respondents may have interpreted questions differently than intended. While our initiative alone is not sufficient to satisfy a current ACGME common program requirement that residents are given the opportunity to attend health care appointments whenever needed, we do believe that it reinforces the important message that the health of our residents is as valuable to us as the health of our patients.

As a result of this work, we have since scaled the program to include incoming residents *and* fellows, expanded our pool of clinicians to include local affiliated satellite clinics (off-campus), exclusively adopted telemedicine for our 2020 incoming residents

and fellows due to the COVID-19 pandemic, and based on feedback, aim to expand the program to include behavioral health services. Further investigation will allow us to determine the impact of this initiative on resident well-being, and better understand whether this program led to additional visits to a PCP by our residents.

Conclusions

This innovative program to facilitate PCP visits during intern orientation was successful in connecting most incoming first-year residents to a primary care clinician, with high satisfaction among those who responded to a survey administered shortly after the visit.

References

- 1. Jennings ML, Slavin SJ. Resident wellness matters: optimizing resident education and wellness through the learning environment. *Acad Med*. 2015;90(9):1246–1250. doi:10.1097/ACM.0000000000000842.
- 2. Konopasek L, Slavin S. Addressing resident and fellow mental health and well-being: what can you do in your department? *J Pediatr.* 2015;167(6):1183–1184.e1. doi:10.1016/j.jpeds.2015.09.037.
- 3. Dyrbye LN, West CP, Satele D, Boone S, Tan L, Sloan J, et al. Burnout among U.S. medical students, residents, and early career physicians relative to the general U.S. population. *Acad Med.* 2014;89(3):443–451. doi:10. 1097/ACM.00000000000000134.
- Dyrbye LN, Thomas MR, Massie FS, Power DV, Eacker A, Harper W, et al. Burnout and suicidal ideation among U.S. medical students. *Ann Intern Med*. 2008;149(5):334–341. doi:10.7326/0003-4819-149-5-200809020-00008.
- West CP, Tan AD, Habermann TM, Sloan JA, Shanafelt TD. Association of resident fatigue and distress with perceived medical errors. *JAMA*. 2009;302(12):1294–1300. doi:10.1001/jama.2009.1389.
- 6. Whelan KZ, Levy K, Voit JH, Razon AN, Chopra V. Utilization of primary care physicians by medical residents: a survey-based study. *J Clin Outcomes Manag.* 2018;25(8):357–366.
- Campbell S, Delva D. Physician do not heal thyself. Survey of personal health practices among medical residents. Can Fam Physician. 2003;49:1121–1127.

- 8. Rosen IM, Christie JD, Bellini LM, Asch DA. Health and health care among housestaff in four U.S. internal medicine residency programs. *J Gen Intern Med*. 2000;15(2):116–121. doi:10.1046/j.1525-1497.2000. 11218.x.
- 9. Gupta G, Schleinitz MD, Reinert SE, McGarry KA. Resident physician preventive health behaviors and perspectives on primary care. *R I Med J*. 2013;96(5):43–47.
- Starfield B, Shi L, Macinko J. Contribution of primary care to health systems and health. *Milbank Q*. 2005;83(3):457–502. doi:10.1111/j.1468-0009.2005. 00409.x.
- 11. Douthit N, Kiv S, Dwolatzky T, Biswas S. Exposing some important barriers to health care access in the rural USA. *Public Health*. 2015;129(6):611–620. doi:10.1016/j.puhe.2015.04.001.
- 12. Tan C, Kuhn C, Anderson J, Borun A, Turner DA, Whalen K, et al. Improving well-being among trainees: a partnership to reduce barriers to primary care services. *J Grad Med Educ*. 2020;12(2):203–207. doi:10.4300/JGME-D-19-00520.1.



Alana M. Ewen, MPH, is a Data Analyst, Graduate Medical Education, Boston Medical Center; Rodolfo Villarreal-Calderon, MD, is a Resident, Department of Internal Medicine, Boston Medical Center; Sara Lynch, MBA, is Administrative Director, Graduate Medical Education, Boston Medical Center; and Jeffrey I. Schneider, MD, is Designated Institutional Official, Graduate Medical Education, Boston Medical Center, and Associate Professor, Department of Emergency Medicine, Boston University School of Medicine.

Funding: The authors report no external funding source for this study.

Conflict of interest: The authors declare they have no competing interests.

The authors would like to thank John Kuhns, Family Medicine Operations Manager, Brenda Smith, Internal Medicine Operations Manager, and Nelson Rodrigues, Manager of Patient Access Services, who were instrumental in scheduling PCP appointments and ensuring all interested incoming first-year residents received care. We also would like to thank the 18 primary care clinicians who provided services for our incoming first-year residents.

Corresponding author: Jeffrey I. Schneider, MD, Boston Medical Center, Graduate Medical Education, 801 Albany Street, Ground Floor, Boston, MA 02119, 617.414.4064, jeffrey.schneider@bmc.org, twitter @J_SchneiderMD

Received February 25, 2020; revisions received July 24, 2020, and August 28, 2020; accepted September 2, 2020.