Improving Well-Being Among Trainees: A Partnership to Reduce Barriers to Primary Care Services

Christelle Tan, BS
Catherine Kuhn, MD
John Anderson, MD, MPH
Alexander Borun, MD
David A. Turner, MD
Krista Whalen, BS
Kevin Shah, MD, MBA

ABSTRACT

Background Improved well-being is a focus for graduate medical education (GME) programs. Residents and fellows often express difficulty with visiting primary care physicians, and this issue has not been thoroughly investigated.

Objective We reported implementation and utilization of a primary care concierge scheduling service and a primary care video visit service for GME trainees.

Methods GME leaders collaborated with Duke Primary Care to offer trainees a concierge scheduling service and opportunity for primary care video visits. This quantitative evaluation included (1) analysis of the institutional GME survey results pre- and post-intervention, and (2) review of use of the concierge scheduling line.

Results Comparison of the 2018 and 2019 internal GME surveys showed a decrease in perceived barriers accessing primary care (58% to 31%, $P < .0001$), a decrease in perceived delays to access primary care (27% to 21%, $P = .023$), and an increase in respondents who reported needing health care services in the past year (37% to 62%, $P < .0001$). Although increased need for health services was reported, there was no difference in the proportion reporting use of health services (63% and 65%, $P = .43$). Of the 142 concierge line calls reviewed, 127 (87%) callers requested clinic appointments, and 15 (10%) callers requested video appointments. Of callers requesting clinic appointments, 99 (80%) were scheduled.

Conclusions Providing resources to connect trainees to primary care greatly reduces their perception of barriers to health care and may provide a convenient mechanism to schedule flexible primary care appointments.

Introduction

The rigor of physician training programs often results in professional and personal stressors that may affect trainee health and well-being.[1] Additionally, resident burnout has been linked to lower quality of patient care, higher medical error rates, and elevated rates of physician drug abuse and suicidal ideation.[2,3] The Accreditation Council for Graduate Medical Education has emphasized the importance of trainee well-being in its revision of the Common Program Requirements that include measures to promote trainee health and well-being.[4]

While emphasis has been appropriately placed on behavioral and mental health, trainees express difficulty maintaining routine primary care.[5] Prior evidence suggested that programs can improve overall resident well-being by increasing the convenience of primary care.[6] However, residents are significantly less likely than demographically similar peers to use a primary care provider or dentist.[7] Trainees describe long and unpredictable hours, privacy concerns, and lack of support from residency programs as limiting factors.[8]

Video visits represent a novel opportunity to enhance graduate medical education (GME) trainee access to primary care. Studies evaluating video visits across a variety of settings have reported positive patient experiences, associated time savings,[9] and increased convenience.[10] To our knowledge, there are no data regarding video visits specifically focused on GME trainees.

In response, GME leaders collaborated with Duke Primary Care to develop a 2-pronged intervention to improve primary care access for GME trainees: (1) a concierge scheduling service for GME trainees and their immediate families, and (2) primary care video visits for residents and fellows.

We hypothesized that after implementation we would see improved trainee satisfaction regarding access to primary care services, increased utilization of primary care services, and increased utilization of video visits.

Methods

The intervention took place in an academic hospital system in central North Carolina. The services were available to all GME trainees (approximately 1000).

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Editor's Note: The online version of this article contains a summary of the telephone calls made to the concierge line.

Concierge Line

The concierge line is a dedicated telephone number available only to trainees and their immediate families. It provides rapid telephone response and flexible appointment scheduling by waiving usual scheduling rules. This resource was advertised at orientation, Graduate Medical Education Committee and resident council meetings, GME newsletters, and other informational platforms. Additionally, an information card was provided to all trainees.

Video Visits

Scheduled video visits are available for trainees only and are free of charge. Initially, these visits required trainees to have an established Duke health care provider. GME trainees can schedule a video visit appointment by calling the trainee concierge line.

Outcomes

First, we conducted a pre-post analysis of an annual internal GME survey to measure differences in primary care use, delays in scheduling primary care appointments, and GME trainee perception and satisfaction data. The 2 institutional surveys were developed by GME faculty without testing for validity evidence. All survey data were anonymous, and only aggregated responses were analyzed. No individual survey responses were reviewed.

Second, we quantified and characterized trainee demand for primary care services via a review of recorded calls to the concierge scheduling line for 1 year post-implementation. Data collected included the reason for the call, whether and when an appointment was scheduled, and barriers to scheduling. Data collection from concierge line recordings was conducted via a predefined RedCap survey instrument and stored securely within RedCap. The call center data application does not include patient information, and all data collection excluded patient identifiers.

Summary statistics were used to evaluate the implementation and use of video visits and the concierge line. The chi-square test of independence with a P value equal to .05 was used to determine significance. For questions using a Likert scale, the responses "strongly agree" and "somewhat agree" were aggregated to create a proportion of positive responses.

The study was determined exempt by the Duke Institutional Review Board.

Results

The 2018 and 2019 institutional GME trainee surveys achieved a 45% (463 of 1028) and a 53% (564 of 1064) response rate, respectively. Comparison of the 2018 and 2019 surveys shows an increase in respondents who reported needing health care services in the past year, from 37% (170 of 463) to 62% (351 of 564; $P < .0001$). However, there was no change in the proportion of trainees who reported actually accessing health care services in the past year (63% [292 of 463] and 65% [369 of 564], $P = .43$).

The comparison also showed a decrease in barriers to accessing health care services, from 58% (269 of 463) to 31% (174 of 564; $P < .0001$), and a decrease in delays in access to primary care, from 27% (125 of 463) to 21% (118 of 564; $P = .023$; TABLES 1 and 2).

During the implementation period, 147 telephone calls to the concierge line were identified. Five recordings were cut off, leaving 142 recordings for analysis. One-hundred eleven (78%) appointments were scheduled. Eleven calls were made on behalf of family members (0.1%; TABLE 3). Of the 142 concierge line calls reviewed, 127 (87%) callers requested clinic appointments and 15 (10%) callers requested video appointments. Of callers requesting clinic appointments, 99 (80%) were scheduled. The leading reason for a clinic appointment not being scheduled was that the caller asked for a non-primary care appointment. A summary of the calls made to the concierge line is provided as online supplemental material.

What was known and gap
Residents and fellows often report that it is difficult to visit primary care physicians, given their busy schedules.

What is new
A primary care concierge scheduling service and a primary care video visit service for trainees.

Limitations
In order to protect the confidentiality of trainees, identifying information was not recorded, preventing analysis of demographic factors, and there is no certainty that individuals using the services are GME trainees.

Bottom line
Providing resources to connect trainees to primary care greatly reduces their perception of barriers to health care.

Discussion

An institution-wide addition of a comprehensive program to increase access to primary care among GME trainees, through a concierge primary care scheduling line and video visit, reduced perceived barriers and delays accessing care over a 1-year period. The number of trainees reporting using these services did not change, and video visits were less preferred by trainees.

TABLE 1
Comparison of Responses Between the 2018 and 2019 Annual GME Surveys

Question	Response	2018 Survey (n = 463), No. (%)	2019 Survey (n = 564), No. (%)	Relative Change	*P* Value
I needed health care services in the past year.	Strongly agree/ somewhat agree	170 (37)	351 (62)	+69.5%	< .0001
During the past year, have you accessed a personal physician or health care provider?	Yes	292 (63)	369 (65)	+3.8%	.43
I encountered barriers accessing health care services in the past year.	Strongly agree/ somewhat agree	269 (58)	174 (31)	−46.9%	< .0001
In the past year, have you experienced any delays in access to primary care for your personal health?	Yes	125 (27)	118 (21)	−22.5%	.023

Note: This table shows the responses to pre-specified questions in the 2018 and 2019 annual graduate medical education (GME) trainee wellness surveys, representing survey responses before and after a partnership between GME and Duke Primary Care (DPC) to increase access to primary care services. There are significant decreases in reported barriers and delays to health care services and an increased need for health care services after implementation of the intervention developed by GME and DPC.

The most interesting finding is trainee perception of improved access and reduced barriers when seeking primary health care services. This improvement is notable, especially given there was no change in the number of trainees seeking primary care and nearly one-third of respondents denied needing primary care. We believe this difference demonstrates the importance of the program's availability to reduce the perception of barriers, even for trainees who may not necessarily use the service.

Utilization of the concierge line since the deployment of the partnership demonstrates relatively high demand. The 146 callers represent approximately 15% of all trainees. Contrary to our original prediction, we did find that the vast majority of trainee demand for primary care services is for in-person visits, rather than video visits. The concierge line and video visit service were advertised to trainees simultaneously, and scheduling for both services was identical, suggesting the low volume of video visits is a function of low demand. The reasons for this finding are unclear and warrant further exploration.

The implementation of the concierge call line performed as expected. The majority of callers are able to promptly and successfully schedule primary care appointments through the concierge line.

There was a small group of callers who were not able to obtain a scheduled appointment. The majority of unscheduled appointments were requests for acute and specialty care; therefore, improving scheduling for acute care and specialty appointments is an opportunity for future improvement.

The only other intervention to enhance GME trainee access to health care that we are aware of is an institutional time off policy that requires programs

TABLE 2
Comparing Reasons for Reported Delays in Accessing Primary Care Services in 2018 and 2019

Question	Response	2018 (n = 125), No. (%)	2019 (n = 118), No. (%)	Relative Change	*P* Value
Was the delay related to being able to schedule an appointment (eg, the scheduling process)?	Yes	102 (82)	83 (70)	−13.8%	.044
Was the delay related to timing of the appointment from the time you scheduled (eg, appointment was not timely enough for the health issue)?	Yes	74 (59)	48 (41)	−31.3%	.004

Note: This table shows responses to questions from trainees who reported experiencing delays in accessing primary care services in the 2018 and 2019 annual graduate medical education (GME) trainee wellness surveys, representing responses before and after a partnership between GME and Duke Primary Care (DPC). There are significant decreases in reported delays due to scheduling and timeliness of appointments after implementation of the intervention developed by GME and DPC.

TABLE 3
Scheduling Status by Type of Appointment Requested Through GME Concierge Line

Type of Appointment	Appointment Not Scheduled, No. (%)	Appointment Scheduled Within a Week, No. (%)	Appointment Scheduled Within a Month, No. (%)	Appointment Scheduled Later Than a Month, No. (%)
Establish care/annual visit (n = 67)	3 (5)	42 (63)	18 (27)	4 (6)
Acute care (n = 49)	9 (18)	40 (82)	0 (0)	0 (0)
Medication refills (n = 6)	3 (50)	1 (17)	2 (33)	0 (0)
Other[a] (n = 20)	16 (80)	4 (20)	0 (0)	0 (0)
Total (n = 142)	31 (22)	87 (61)	20 (14)	4 (3)

[a] Specialty appointments, vaccinations, shots, pregnancy test, or occupation forms.
Note: This table shows the scheduling status of calls through the concierge line by type of appointment requested. Calls to the concierge line between October 2018 and April 2019 were reviewed to collect the reported information. Approximately 75% (107 of 142) of calls resulted in scheduled appointments within the month and acute care appoints accounted for the majority of unscheduled appointments.

to assign residents 4 half-days off per academic year for health care and wellness.[11] However, there is no other intervention to our knowledge that allows trainees easier scheduling capability or offers video visit appointments. Furthermore, analysis of this intervention evaluated only utilization of and not perceived barriers to health care.

A limitation of this study is that in order to protect the confidentiality of trainees, identifying information was not recorded, preventing analysis of demographic factors. Furthermore, there is no certainty that individuals using either of the services are GME trainees. Thus, it is possible that the data from the concierge line and video visit use by residents and fellows may include other callers. In addition, resident and fellow use of primary care services outside the concierge line was not measured and may have decreased or increased during the study period.

Given the technical challenges with how the calls were recorded and catalogued, call center data are only available after September 2018. It is possible there was more demand from July to September that we are unable to evaluate. In addition, for a subgroup of calls, the first 10 seconds had to be screened in order to determine if the call was for the concierge line, and it is possible that not all concierge calls were identified.

Low response rates (45% and 53%) to the surveys allow for response bias. In addition, without survey validity evidence, respondents may not have interpreted questions as intended. To protect trainee identity, analysis was unable to look at paired survey responses or examine how representative survey respondents were versus the total population of trainees. Marketing to trainees was robust at institutional orientation, but may have been less effective to trainees continuing in programs.

Expanding the concierge line to schedule appointments outside of Duke Primary Care to include pediatrics and obstetrics and gynecology will address an unmet need. Given the limited interest in video visits, we plan to further evaluate alternatives to these types of appointments that could include an asynchronous service where trainees are able to communicate with physicians.

Conclusions

Providing resources to connect trainees to primary care greatly reduces their perception of barriers to health care. A well-publicized concierge line for primary care access may facilitate trainee self-care and provide a convenient mechanism to efficiently schedule primary care appointments.

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Christelle Tan, BS, is a Fourth-Year Medical Student, Duke University School of Medicine; **Catherine Kuhn, MD,** is Associate Dean for Graduate Medical Education, Duke University School of Medicine, and Designated Institutional Official and Director of Graduate Medical Education, Duke University Health System; **John Anderson, MD, MPH,** is Chief Medical Officer, Duke Primary Care, and Assistant Professor, Family Medicine and Community Health, Duke University Health System; **Alexander Borun, MD,** is Consulting Associate and Assistant Professor, Department of Family Medicine and Community Health, Duke University Health System; **David A. Turner, MD,** is Associate Director of Graduate Medical Education, Duke University Health System, and Associate Professor, Division of Pediatric Critical Care, Duke University Department of Pediatrics; **Krista Whalen, BS,** is Innovation Program Manager, Duke Institute for Health Innovation; and **Kevin Shah, MD, MBA,** is Associate Chief Medical Officer for Innovation and Improvement, Duke Primary Care, and Assistant Professor of Medicine, Division of General Internal Medicine, Duke University Department of Medicine.

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Corresponding author: Kevin Shah, MD, MBA, Duke University Department of Medicine, 11th Floor, 411 W Chapel Hill Street, Durham, NC 27701, 919.544.6644, kevin.shah@duke.edu

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