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Perceptions of a faculty-trainee group mentorship program, the mentorship families program, in a residency training program: results from a cross-sectional survey

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Abstract

Background In residency programs, the availability of faculty mentors for traditional dyadic mentorship relationships may be limited. Few frameworks exist for mentorship programs with a combined faculty and peer mentorship approach. The authors developed the Mentorship Families Program (MFP), a faculty-resident group mentorship program within a psychiatry residency program to meet the need for mentorship for a large cohort of residents. A cross-sectional survey was used to evaluate the impact of the MFP after its first implementation year.

Methods Eleven mentorship families were created with 11 faculty members and 45 residents; each mentorship family consisted of one faculty member and 4–5 residents. A cross-sectional survey characterized the one-year perceived impact (2021–2022) of the MFP on resident and faculty mentoring experiences, with questions about the content, frequency, and quality of the MFP meetings and the strengths and areas of improvement for the MFP. Descriptive statistics were used to summarize quantitative feedback; directed content analysis was performed on open-ended feedback.

Results Twenty-seven residents (60%) and 8 faculty members (73%) responded to the survey. 70% of mentorship families met at least once. The MFP helped foster resident-faculty connections and provided an environment to gain career advice. However, residents and faculty reported challenges with scheduling meetings and a lack of meeting structure as barriers to effective engagement with the MFP. Most residents recommended that other training programs implement a program like the MFP as it offered multidimensional opportunities for connections between residents and faculty.

Conclusions A faculty-resident group mentorship program like the MFP can be implemented in residency training programs when traditional one-to-one faculty mentorship is often limited.

Keywords Mentoring, Residency, Career development, Mentorship program, Peer mentoring

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Background

Mentorship is vital to professional development during residency training and beyond: effective mentorship can serve as a catalyst for career success, improve scholarly productivity, impact specialty and academic career choice, and promote the career development of women and underrepresented minorities in medicine [1–4]. Notably, a "network" of mentors is critical in academic medicine since one mentor cannot provide a mentee with all the guidance needed for professional and personal development [5–8]. Establishing a network of mentors, particularly one that includes both faculty and peers, is challenging for many residents [9, 10].

Typical mentorship in residency training involves a dynamic relationship between a senior faculty member and a resident for career, professional, and personal development. However, this traditional mentorship model is limited in several ways. First, residency programs often struggle with recruiting faculty members to volunteer for one-on-one mentorship, due to the competing time demands on faculty. This challenge is compounded by the large number of residents who require individualized support, making it difficult to provide sufficient mentorship for all [11]. Second, while one-on-one mentorship can be valuable, it may limit trainee exposure to a broader range of expertise within a given medical discipline. In comparison to a network-based mentorship model, this traditional approach can restrict access to diverse career development opportunities and varied perspectives [12]. As a result, there is an increasing need for innovative mentorship models that go beyond the conventional dyadic mentor-mentee relationship to better support the multifaceted needs of residents. Considering the barriers faced by residency programs and mentors, and the possibilities afforded by resident peer mentorship [13, 14], one potential solution is the combination of resident peer mentorship and traditional mentorship models [15–17]. However, there is limited data on the barriers and facilitators of hybrid faculty-trainee group mentorship programs. To address these gaps, we developed the Mentorship Families Program (MFP), in which each mentorship family consists of one faculty member and one resident from each residency class. We evaluated the experience of residents and faculty with the MFP at the end of the first year of the program using a cross-sectional survey.

Methods

Setting and participants

The Mentorship Families Program (MFP) was led and coordinated by the associate training director of the Brigham and Women's Hospital/Harvard Medical School psychiatry residency program (HLA) and initiated at the start of the 2021–2022 academic year (June 2021). We assigned each resident in the program ($n=45$) to a mentorship family, which consisted of one faculty mentor and four residents (i.e., one postgraduate year [PGY]1, PGY2, PGY3, and PGY4 resident). Each mentorship family had one resident per class to promote peer mentorship between senior residents and junior residents. We invited 11 mid-career departmental faculty members who were not directly involved in evaluating residents on a regular basis to volunteer to serve as mentors for the MFP. We excluded residency program training directors so that residents could be grouped with faculty they might have fewer opportunities to interact regularly with.

Intervention

At the beginning of the program, we provided all faculty mentors and residents with an informational brochure describing mentorship needs residents had previously shared during an informal needs assessment by residency leadership and basic expectations for meeting frequency (see Additional file 1). We strongly encouraged mentorship families to meet quarterly during the academic year with additional as-needed meetings determined by the faculty mentor and residents. The faculty lead for the MFP checked in with residents and faculty every 3–4 months and encouraged quarterly meetings, without penalizing groups that were unable to meet as frequently.

Outcomes measured

We conducted a self-administered cross-sectional survey from June to July 2022 to evaluate the impact of the first year of the MFP on residents' and faculty's perceived experiences with mentorship informed by prior work assessing mentorship experiences among residents in an academic medical center; [18] outcomes measured are described below. All eligible participants ($n=56$; 45 residents and 11 faculty) received an e-mail invitation to voluntarily participate in an anonymous survey via Research Electronic Data Capture (REDCap), a secure, web-based application that is compliant with the Health Insurance Portability and Accountability Act (HIPAA) and designed to support data collection for research studies [19]. Three reminder e-mails were sent. The complete survey is available as an additional file (see additional file 2).

Survey participants

The inclusion criteria for the survey were residents who were assigned to a mentorship family in the MFP during the 2021–2022 academic year and faculty who had served as mentors for the MFP during this timeframe.

Sociodemographic data

Resident and faculty participants self-reported demographic data, including age range, race, ethnicity, and

Table 1 Characteristics of 2021–2022 mentorship families Program Mentee/Resident Survey respondents

	N **= 27**
Age range, n (%)	
20–29	10 (37.0%)
30–39	16 (59.3%)
40–49	1 (3.7%)
Sex, n (%)	
Male	10 (37.0%)
Female	16 (59.3%)
Missing	1 (3.7%)
Race, n (%)	
White	15 (55.6%)
Asian/Asian American	10 (37.0%)
More than one race	1 (3.7%)
Missing	1 (3.7%)
Year of Training, n (%)	
PGY-1	5 (18.5%)
PGY-2	7 (25.9%)
PGY-3	6 (22.2%)
PGY-4	8 (29.6%)
Missing	1 (3.7%)
Number of Professional Mentors, mean (SD)	2.7 (1.3)
Mode of Establishment for Primary Mentoring Relationship, n (%)	
Assigned by Program	2 (7.4%)
Self-initiated	20 (74.1%)
Assigned by Program and Self-initiated	1 (3.7%)
No Primary Mentor	4 (14.8%)

biological sex. Additionally, residents provided their year of training during the 2021–2022 academic year.

Program feedback

Residents and faculty completed closed- and open-ended questions about the MFP to provide feedback about their experiences with the MFP and other mentorship experiences. Questions to elicit feedback about the MFP were informed by discussion with study team members who are medical education researchers with expertise in mentorship/coaching (KP, KD) [18].

Analysis of the outcomes

We performed all statistical analyses using STATA 18.0 (StataCorp, College Station, TX). We summarized participants' sociodemographic characteristics using descriptive statistics for continuous variables and proportions for categorical variables. We used proportions to describe participant feedback on the mentorship program. For open-ended questions, two study team members (MG, EDW) reviewed all open-ended questions independently for patterns in the data, discussed any discrepancies with a third team member (HLA), and summarized outcomes following a directed content analysis approach [20].

Table 2 Characteristics of 2021–2022 mentorship families Program Mentor/Faculty Survey respondents

	N **= 8**
Sex, n (%)	
Male	4 (50%)
Female	4 (50%)
Age, n (%)	
20–29	0 (0%)
30–39	4 (50%)
40–49	3 (37.5%)
50–59	1 (12.5%)
60+	0 (0%)
Race, n (%)	
White	3 (37.5%)
Black/African American	0 (0%)
Asian/Asian American	3 (37.5%)
Native American	0 (0%)
More than one race	2 (25%)
Other	0 (0%)
Ethnicity, n (%)	
Hispanic/Latinx	3 (37.5%)
Not Hispanic/Latinx	5 (62.5%)

IRB statement

The Mass General Brigham Institutional Review Board deemed the study exempt from IRB review.

Results

Resident/mentee characteristics

Of the 45 residents who participated in the MFP, 27 (60%) submitted the feedback survey. Table 1 summarizes characteristics of mentee survey respondents. Sixteen out of 27 resident respondents (59%) were female, 15/27 (56%) were White, and 10/27 (37%) were Asian. The distribution of year of training during participation in the MFP was: 5/27 (19%) PGY1, 7/27 (26%) PGY2, 6/27 (22%) PGY3, and 8/27 (30%) PGY4. Most resident respondents (20/27, 74%) reported they had self-initiated other mentorship relationships with a faculty member outside the MFP who they identified as their primary mentor in the department and 4/27 (15%) reported they had not been able to establish any mentorship during residency outside of the MFP.

Mentor characteristics

Of the 11 faculty who served as mentors for the MFP, eight (73%) participated in the survey to share their experiences with the MFP. Table 2 summarizes characteristics of mentor survey respondents. Half of the faculty respondents (4/8, 50%) were female, 3/8 (38%) were Asian, and 3/8 (38%) identified as Hispanic/Latinx.

Resident feedback on the MFP

Table 3 summarizes resident quantitative feedback on the MFP. Most of the residents (19/27, 70%) reported they

Table 3 Resident quantitative feedback on the 2021–2022 mentorship families program

Feedback	*N* (%)
Number of Meetings	
0	8 (29.6%)
1	14 (51.8%)
2	4 (14.8%)
3	1 (3.7%)
Length of Meetings	
< 30 min	5 (18.5%)
30–60 min	16 (59.3%)
> 60 min	1 (3.7%)
Missing	5 (18.5%)
Career Development Goals Discussion	
None	19 (70.4%)
Annually	5 (18.5%)
Bi-annually	1 (3.7%)
Missing	2 (7.4%)
Quality of Mentor Communication	
Poor	3 (11.1%)
Fair	12 (44.4%)
Good	6 (22.2%)
Excellent	3 (11.1%)
Missing	3 (11.1%)
One-on-One Meetings	
No	19 (70.4%)
Yes	7 (25.9%)
Missing	1 (3.7%)
Connection to Other Residents	
To a great extent	0 (0%)
Moderately	4 (14.8%)
Somewhat	11 (40.7%)
Not at all	8 (29.6%
Missing	4 (14.8%)

met at least once with their mentorship family, and 16/22 (73%) reported meetings lasted between 30 and 60 min. About two-thirds of residents (19/25, 76%) reported that career development goals were not discussed during the past year and 12/24 (50%) reported that the quality of mentor communication was "fair." About a quarter (7/26, 27%) reported one-on-one meetings with the faculty mentor of their mentorship family outside the group meetings and 15/23 (65%) reported that the MFP "somewhat" or "moderately" facilitated connection to other residents. The majority of residents (18/23, 78%) reported that they would "definitely" or "probably" recommend implementing a program similar to the MFP at other training programs (Fig. 1A).

Resident feedback on the impact of the MFP

About a third of residents (7/22, 32%) reported that the MFP "somewhat" improved their self-confidence and work relationships (Fig. 1B). However, the majority of residents reported the MFP "somewhat" or "definitely" did not affect administrative burdens (16/22, 73%), cultural humility (19/22, 86%), work-life balance (15/21, 71%), information processing (18/22, 82%), or navigating work-hour restrictions (19/22, 86%).

Resident and faculty open-ended feedback on the MFP

In response to open-ended questions about the benefits and challenges of the MFP, both residents and faculty shared that the MFP encouraged connections between residents, fostered relationship-building between residents and faculty, and provided opportunities for career advice (Table 4). Residents and faculty noted that areas of improvement for the MFP included facilitating meeting scheduling and adding more structure to the program. [Place Table 4 here]

Benefits of the MFP

Encouraging connections between residents

The MFP encouraged informal connections with residents in other training years, who could share practical advice on navigating common situations in residency.

> *"Connected to residents of different years that may otherwise not have connected with at all." ID27, resident.*
>
> *"…allow residents to give and get advice about different rotations and strategies for success, discuss strategies for completing scholarly work and balancing with clinical responsibilities." ID11, faculty.*

Fostering connections between residents and faculty

The MFP fostered meaningful relationship-building between residents and faculty. Faculty could provide advice to residents who were still developing their career interests.

> *"Fostering a closer, more personal bond with faculty and providing an additional point-of-contact in the program for resources, questions, or anything else." ID27, resident.*
>
> *"Good opportunity to meet residents at an early stage in their careers." ID02, faculty.*

Providing career advice

The MFP provided residents with an additional avenue to receive informal long-term career advice from peers across training years and from faculty. Faculty could share advice on navigating uncertainty and finding jobs after residency.

> *"It was helpful to see what career advice questions residents had in different years of the program, so*

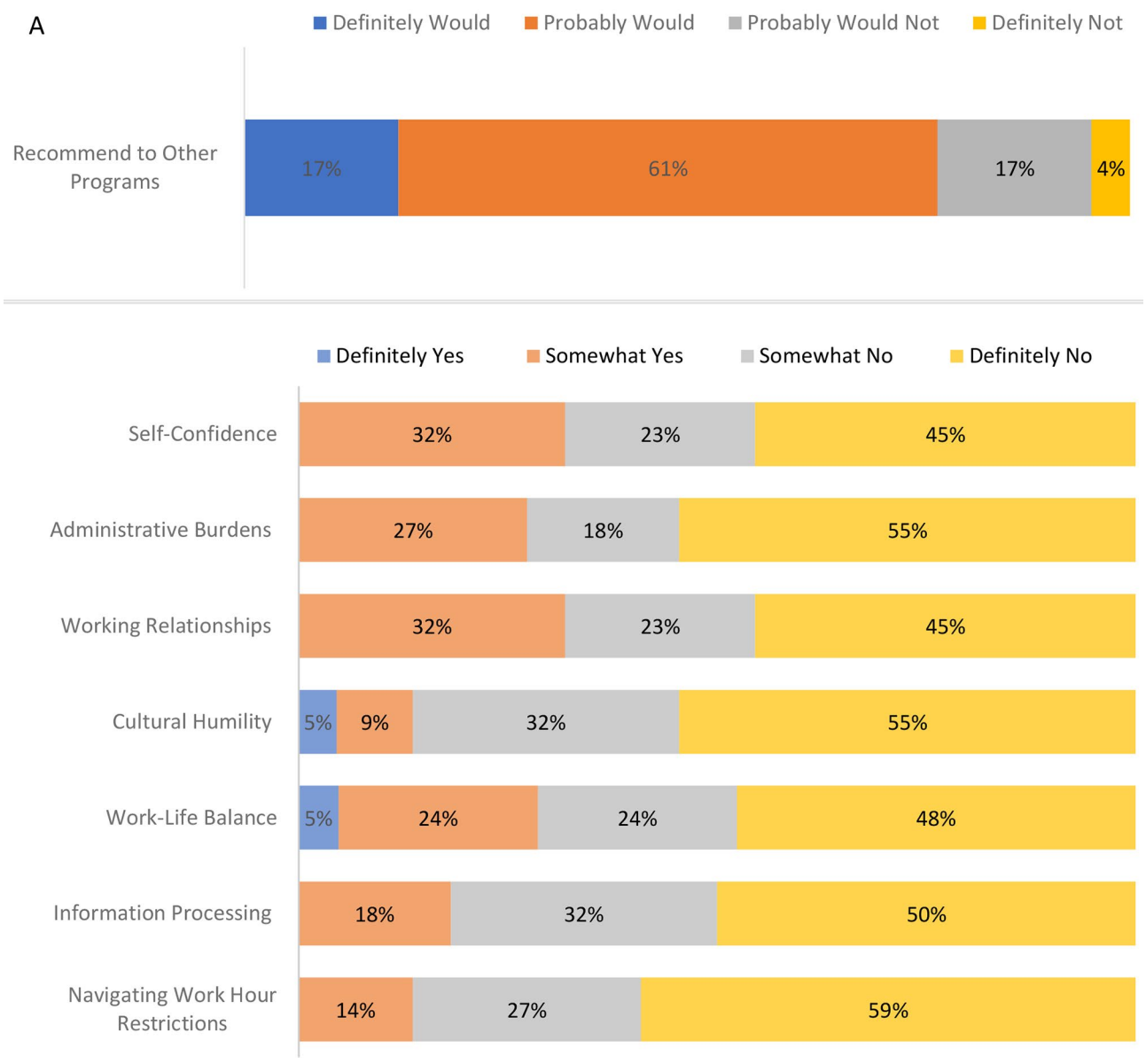

Fig. 1 Graphical representations of residents' responses to the June 2022 survey on the 2021–2022 Mentorship Families Program. Residents responded to the following questions: (**A**) Would you advise other training programs to implement a similar mentorship program? Response options were: "definitely would," "probably would," "probably would not," and "definitely would not." (**B**) Has the mentorship families program connection improved any of the following? Categories were self-confidence, administrative burdens, working relationships, cultural humility, work-life balance, information processing, and navigating work hour restrictions. Response options were: "definitely yes," "somewhat yes," "somewhat no," and "definitely no."

that I could have a sense of the longer-term trajectory." ID23, resident.

"I really enjoyed getting to know residents, their concerns and passions, and helping them navigate post-pandemic uncertainty, as well as better understand the job landscape." ID22, faculty.

Areas of improvement

Scheduling difficulties

Residents and faculty shared that it was difficult to schedule group meetings, and suggested dedicating time in residents' schedules for the MFP meetings.

"Large and unwieldy- too many people to try to schedule to meet together at the same time- ended up meaning forgoing other goals/priorities during

Table 4 Outcomes from resident and faculty feedback on the 2021–2022 mentorship families program

Outcome	Explanation	Resident Quotes	Faculty Quotes
Benefits			
Encouraging connections between residents	The Mentorship Families Program encouraged connections between residency years.	"Good to connect with other coresidents." ID24 "Camaraderie-building, additional avenue for support." ID16	"Ways to connect residents from different classes who might not normally spend time with one another, allow residents to give and get advice about different rotations and strategies for success, discuss strategies for completing scholarly work and balancing with clinical responsibilities." ID11
		"Connected to residents of different years that may otherwise not have connected with at all." ID27	"Connecting with a group that is diverse in their experiences and resident year." ID29
Fostering connections between residents and faculty	The Mentorship Families Program fostered relationship-building between residents and faculty.	"Fostering a closer, more personal bond with faculty and providing an additional point-of-contact in the program for resources, questions, or anything else." ID27	"Getting to know some residents better." ID28
		"Great to have a designated contact person from the beginning." ID5	"Good opportunity to meet residents at an early stage in their careers." ID02
Providing career advice	The Mentorship Families Program fostered an environment to receive helpful career advice while community building across residency years.	"Informal space to get honest career advice, create a sense of community." ID12	"Excellent opportunity for residents to have more guidance." ID20
		"It was helpful to see what career advice questions residents had in different years of the program, so that I could have a sense of the longer-term trajectory." ID23	"I really enjoyed getting to know residents, their concerns and passions, and helping them navigate post-pandemic uncertainty, as well as better understand the job landscape." ID22
Areas of Improvement			
Scheduling difficulties	Logistical difficulties with scheduling meeting times was a challenge.	"Difficulty has been finding days in which everyone has been able to meet." ID32	"Difficult to coordinate meetings and ultimately couldn't even engage with the PGY1 who was rotating on different services." ID02
		"Large and unwieldy- too many people to try to schedule to meet together at the same time- ended up meaning forgoing other goals/priorities during academic time, or after-hours meetings… would be better if integrated into career dev sessions during didactics or on-site 'retreat' days that include faculty or something. 7pm meetings just don't work for some of us, and others have Thursday clinic, etc." ID03	"I think it'd be great to have allotted time in the residents' schedules to meet on a regular basis. The way it is now is a bit unstructured and we have to work on figuring out when everyone can meet- which is tricky." ID29
Lack of structure	Residents and faculty shared the desire for more specific goals and discussion topics.	"It was hard with 4 different residents to feel like we had something to talk about, whereas in one on one mentorship scenarios I've had in the past it was clear that the agenda was to focus on my career development." ID17	"Would be useful to have more structure regarding suggested scheduling and topics of discussion" ID20
		"I was hoping the faculty member would set up a meeting for us all to meet eventually (all residents plus faculty mentor) but we haven't done that. I think it's a great idea but perhaps a system needs to be in place to ensure mentorship families are "actively" meeting." ID10	
		"Meeting more frequently with more concrete goals." ID15	
Group mentorship limitations	Residents shared that the group mentorship setting was a barrier to asking for advice from faculty.	"Have stronger mentorship relationships with other faculty formed more naturally through shared interests and work experiences, and sometimes don't feel as comfortable asking for advice on topics in these mentorship meetings." ID18	
		"A bit impersonal, only met with advisor once or twice as a group, quite generalized Q&A format." ID12	
Lack of financial support	Faculty shared their desire for more departmental support.		"Would love to have support to take residents out to lunch or dinner." ID28
			"Could be helpful to have funding from the residency program for food/drink given inflation." ID11

academic time, or after-hours meetings…" ID03, resident.
"I think it'd be great to have allotted time in the residents' schedules to meet on a regular basis. The way it is now is a bit unstructured and we have to work on figuring out when everyone can meet- which is tricky." ID29, faculty.

Lack of structure

Residents noted that the MFP could benefit from more program structure, such as clear expectations of residents and faculty to encourage stronger mentoring relationships. Similarly, faculty would have preferred a clear agenda for each meeting to facilitate information sharing.

"I was hoping the faculty member would set up a meeting for us all to meet eventually (all residents plus faculty mentor) but we haven't done that. I think it's a great idea but perhaps a system needs to be in place to ensure mentorship families are 'actively' meeting." ID10, resident.
"Would be useful to have more structure regarding suggested scheduling and topics of discussion." ID20, faculty.

Group mentorship limitations

Residents offered specific feedback that they felt less comfortable asking for personalized advice from faculty in front of their peers. Other mentorship relationships with faculty outside of the MFP tended to form "more naturally through shared interests and work experiences." ID18.

Actionable feedback from residents and faculty

Several aspects of resident and faculty feedback were actionable. First, faculty mentors requested financial support from the residency program to defray the costs of meals at in-person meetings. Second, residents asked for dedicated time during the weekly didactic schedule for mentorship families to meet. Finally, given that residents and faculty reported that scheduling among a group was challenging, residency program leadership could provide administrative support to help schedule meetings.

Discussion

This study reports the survey results representing resident and faculty experiences in a newly implemented faculty-peer group mentorship program during one academic year in a psychiatry residency training program. Residents and faculty reported that the MFP helped foster connections between residents and faculty and provided opportunities for discussions on professional topics, including career trajectories. Additionally, when we asked residents and faculty to provide areas of improvement for the MFP, we identified several areas of actionable feedback that could be readily implemented to overcome these concerns.

Residents reported that the MFP fostered honest career advice discussions from faculty and peers on several topics, including work-life balance, with less time spent on specific suggestions for career development. Further work is needed to evaluate the perceived impact of a longitudinal mentorship program on career development, a well-established benefit of mentorship in academic medicine and during residency; [3, 18] a one-year program may not readily yield benefits for career development due to the short timeframe and relative infrequency of meetings. While residents appreciated getting to know faculty more personally through these informal group meetings, prior work also suggests that the group setting may have decreased residents' willingness to ask individualized questions about career development that could be more useful for tailoring their own careers than general questions [21]. Although current evidence suggests a network of mentors is most impactful for career development for junior faculty researchers [14], a group format with only one faculty mentor may have made it challenging for faculty to ascertain residents' specific interests on a deeper level and to thus offer tailored career development suggestions to individual residents. Residents can be encouraged to schedule one-on-one time with their MFP faculty mentor and other mentors in their mentorship network for tailored suggestions and resources for their career development. With prior work highlighting the need for a network of mentors in academic medicine, especially for early career individuals [8, 14, 22], it is essential to encourage residents to foster meaningful mentorship relationships within and beyond the MFP to serve as a foundation for this professional network. Feedback from respondents that they appreciated advice from peers is in line with perspectives shared by interventional radiology residents in a group mentorship model [22], highlighting the value of including multiple class years within one mentorship family.

Residents also shared notable actionable feedback worth considering for other programs that may choose to implement a program like the MFP. Logistical challenges with scheduling among residents are not unique to this context, as prior work has shown that time constraints can hinder mentorship among residents [23]. Based on feedback that more program structure would be helpful, we incorporated regularly scheduled time (i.e., monthly without disrupting existing didactic curricula) during residents' weekly didactics for mentorship families to meet – residents have a full day per week dedicated to didactics and scholarly time separate from clinical

service responsibilities, so it was feasible to block out time for these meetings. Establishing a minimum number of required meetings for each mentorship family may also be beneficial, as prior work has shown that bi-annual meetings and meetings that happen earlier in residency facilitate attendance at these meetings [8]. Further, the number of mentorship meetings correlated positively with academic self-efficacy in a recent academic psychiatry and psychology faculty survey [24]. A meeting agenda template with suggested topics could provide additional structure. An established residency budget for mentorship programming supported by department leadership also signals to faculty and residents that mentorship is a priority, which may also motivate more faculty to volunteer to serve as mentors. Setting clear expectations with faculty for the frequency and content of communication may improve residents' perceptions of the quality of faculty communication. Subsequent survey assessments of residents and faculty will evaluate how the suggested modifications to the MFP have enhanced its implementation and impact on residents' mentorship and career development. Although there is limited data on hybrid trainee-faculty mentorship programs like the MFP for residency programs, a similar program for pediatric cardiology fellows where senior fellows took ownership for coordinating mentorship meetings and driving peer mentorship highlights the important role of trainee commitment and leadership in ensuring the mentorship program is relevant and helpful to residents [25].

The limitations of this study may impact our findings in several ways. To promote honest feedback from residents and faculty, the survey was completely anonymous and we were unable to assess differences between responders and non-responders. Mentorship families were not provided with dedicated time to meet or rigorous expectations for discussions. Most of the mentorship families met only once and almost a third of the residents did not meet at all, limiting our ability to draw conclusions about the MFP's impact or relevance since most impactful mentorship relationships are longitudinal. Due to the small sample size, we could not also establish meaningful associations between outcomes (e.g., satisfaction with mentorship) and resident characteristics. However, with ongoing mentorship needs in post-graduate medical education, lessons learned about increasing engagement of residents for a group mentorship program like the MFP are especially relevant. Residents and faculty were at an academic medical center, so findings may not be generalizable to community programs which may have fewer faculty, more limited resources, or different priorities. The lack of randomization of participants to the MFP versus a control group that did not participate in the MFP did not allow us to make causal inferences. Although a third of our faculty respondents identified as Hispanic/Latinx, most resident and faculty respondents were from racial and ethnic majority backgrounds. Hence, our findings may not apply to residents and faculty from backgrounds underrepresented in medicine, who have unique mentorship needs, which should be considered in mentorship program design [26]. Mentorship training of mentors and mentees has been shown to enhance mentoring [27]. However, mentors and mentees for the MFP did not receive any formal training. Established resources for mentorship training should be considered for mentors and residents going forward [28].

Future work exploring the feasibility and impact of a refined MFP based on actionable feedback from this pilot study will further establish the role of hybrid faculty-trainee mentorship programs like the MFP for residents who report inadequate mentorship during training as well as potential characteristics of residents who may benefit most from this type of mentorship programming.

Conclusions

In summary, a faculty-resident group mentorship program is a feasible alternative to traditional one-on-one mentoring in a residency training program. However, more work is needed for program refinement and testing to establish its effect in addressing the persistent unmet mentorship needs reported by residents.

Abbreviations

MFP Mentorship Families Program
PGY postgraduate year

Supplementary Information

The online version contains supplementary material available at https://doi.org/10.1186/s12909-024-06447-2.

Additional file 1, file format.docx. Title: Mentorship Families Program Informational Brochure. Description: Informational brochure for the Mentorship Families Program administered to all residents and faculty participating in the Mentorship Families Program.

Additional file 2, file format.docx. Title: Mentorship Families Program Survey. Description: Surveys administered to resident and faculty participants in the Mentorship Families Program.

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Author contributions

HLA conceptualized and designed the study, analyzed and interpreted data, drafted the article, and revised the draft critically. MCF contributed to the conception of the study and revised the draft critically. MG analyzed and interpreted data, drafted the article, prepared Tables 1, 2, 3 and 4, prepared Fig. 1, and revised the draft critically. FM conceptualized the study and revised the draft critically. EDW contributed to study conception and design and acquisition of data, analyzed and interpreted data, prepared Table 4, and revised the draft critically. KP contributed to the design of the study and revised the draft critically. KD contributed to the design of the study, interpreted data, and revised the draft critically. HJ contributed to the conception of the study, analyzed and interpreted data, and revised the draft critically. RB contributed to the conception of the study and revised the draft critically. DS contributed to the conception of the study and revised the draft critically. All authors read and approved the final manuscript.

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Data availability
The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

Declarations

Ethics approval and consent to participate
The Mass General Brigham Institutional Review Board deemed the study exempt from IRB review on 06/01/22, reference number 2022P001190. All study protocols were approved by the Mass General Brigham Institutional Review Board. Participants gave informed consent via completion of the voluntary anonymous survey.

Consent for publication
Not applicable.

Competing interests
The authors declare no competing interests.

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