

Supporting Faculty Development in Hospital Medicine: Design and Implementation of a Personalized Structured Mentoring Program

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The guidance of a mentor can have a tremendous influence on the careers of academic physicians. The lack of mentorship in the relatively young field of hospital medicine has been documented, but the efficacy of formalized mentorship programs has not been well studied. We implemented and evaluated a structured mentorship program for junior faculty at a large academic medical center. Of the 16 mentees who participated in the mentorship program, 14 (88%) completed preintervention surveys and 10 (63%) completed postintervention surveys. After completing the program, there was a statistically significant improvement in overall satisfaction within 5 specific domains: career planning, professional

connectedness, self-reflection, research skills, and mentoring skills. All mentees reported that they would recommend that all hospital medicine faculty participate in similar mentorship programs. In this small, single-center pilot study, we found that the addition of a structured mentorship program based on training sessions that focus on best practices in mentoring was feasible and led to increased satisfaction in certain career domains among early-career hospitalists. Larger prospective studies with a longer follow-up are needed to assess the generalizability and durability of our findings. *Journal of Hospital Medicine* 2018;13:96-99. Published online first October 4, 2017. © 2018 Society of Hospital Medicine

The lack of mentorship in hospital medicine has been previously documented,¹⁻³ but there is scant literature about solutions to the problem.⁴ In other disciplines, data suggest that the guidance of a mentor has a positive influence on academic productivity and professional satisfaction. Mentored faculty at all levels in their careers are more successful at producing peer-reviewed publications, procuring grant support, and maintaining confidence in their career trajectory.^{5,6} In one study, mentored faculty physicians reported receiving career advice, improving communication skills, and growing their professional networks.⁷ Another study found that the primary benefits of physician mentoring were improved professional and personal well-being.⁸ Whether early-career hospitalists would have similarly favorable responses to a structured mentorship program is unknown. We report our experience in implementing a pilot mentorship program to support junior hospitalists at a large academic medical center.

METHODS

The mentorship program was implemented from October 2015 to June 2016 in the Hospital Medicine Unit (HMU) of the

Massachusetts General Hospital (MGH), a teaching affiliate of Harvard Medical School.

Program Goals, Design, and Development

In collaboration with the MGH Center for Faculty Development (CFD), we offered 3 training sessions over a period of 9 months, for both mentors and mentees, on how to maximize mentorship success. Funding was provided by the MGH Division of General Internal Medicine and CFD. There were no external funding sources. This study was exempt by the Partners Institutional Review Board.

Participants

Mentees had to be hired at >0.5 full-time equivalent and have 3 years or fewer of hospitalist experience. Mentors were physicians with at least 7 years of hospital medicine experience. All HMU faculty who met the criteria were invited to participate on a voluntary basis.

Mentor–Mentee Matching

Mentors were paired with 1 or 2 mentees. Participant information such as history of mentorship and areas of interest for mentorship was collected. Two authors matched mentors and mentees to maximize similarities in these areas. Four mentors were paired with 2 mentees each, and 12 mentors were paired with 1 mentee each.

Mentorship Training Sessions

The program provided 3 mentorship-training lunch sessions for both mentees and mentors during the 9-month program.

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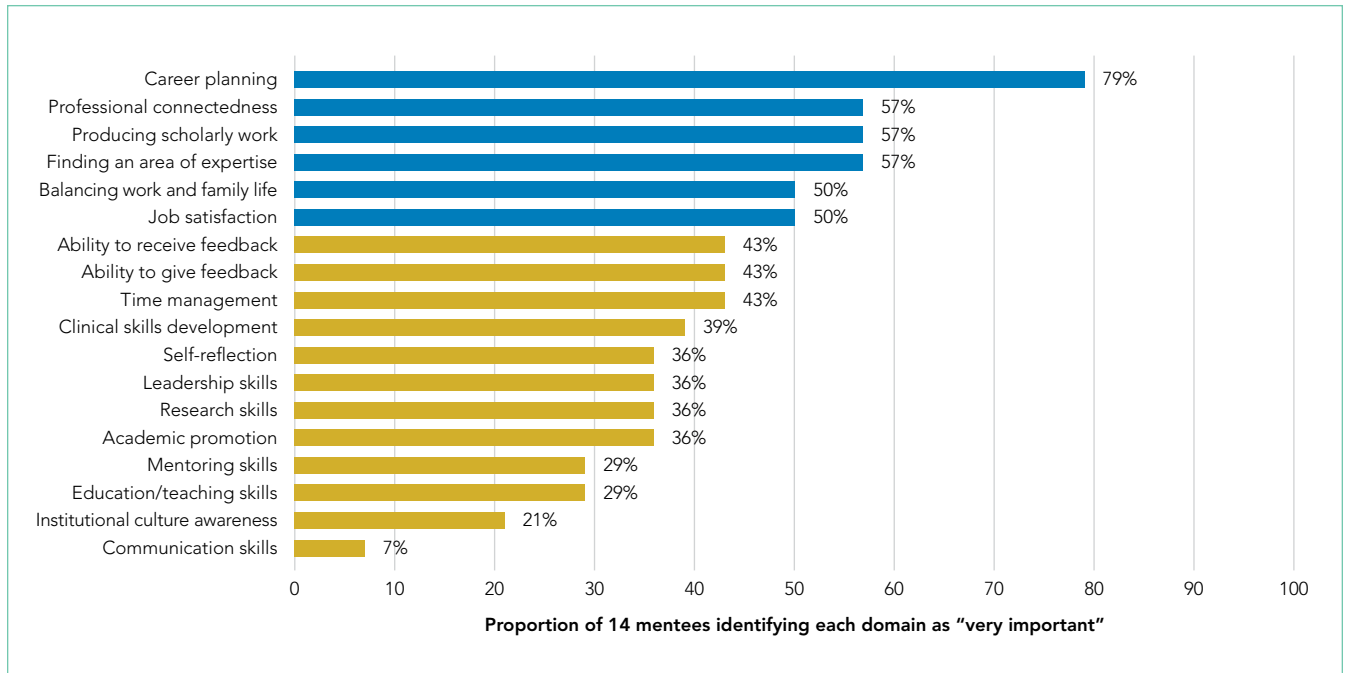


FIG 1. Priorities of early-career hospitalists. The baseline proportion of 14 mentees identifying each domain as "very important."

To enrich attendance, mentees were provided coverage for their clinical duties. The initial training session provided an opportunity to meet, articulate expectations and challenges, and develop action plans with individualized goals for the mentoring relationship. The second training session occurred at the midpoint. Pairs considered their mentorship status, evaluated their progress, and discussed strategies for optimizing their experience. At the final training session, participants reflected on their mentoring relationships, identified their extended network of mentoring support, and set expectations regarding whether the mentoring relationship would continue.

Mentorship Meetings

In addition to the training sessions, mentee–mentor pairs were expected to meet a minimum of 2 times during the formal mentorship program. CFD experts performed participant outreach via e-mail to assess progress. Mentees were given dining facility gift cards to support meetings with their mentors.

Program Evaluation

Confidential, anonymous semiquantitative surveys were used to assess the efficacy of this prospective, nonrandomized intervention study. An online survey platform was utilized to assess the frequency of mentorship meetings, satisfaction and challenges with mentorship, perception of support, degree of career satisfaction, and perceived need for and value of mentoring. Data were collected from both mentors and mentees prior to the first training session and after completion of the program. To preserve anonymity and encourage responses, surveys did not contain identifying information. As such, individual respondent data were not directly matched pre- and postintervention.

Statistical Analysis

Individual satisfaction scores (ranked 1 to 5, with 5 being very satisfied) were assigned to each response within each of the 18 domains. A composite satisfaction score was then calculated for each respondent both pre- and postintervention. An unpaired Student's *t* test was first used to assess change in overall satisfaction scores pre- and postintervention. As there was a statistically significant change in this aggregate score, Wilcoxon rank sum testing was used to compare ordinal scores pre- and postintervention within each of the 18 domains. The proportion of respondents ranking their satisfaction in each domain as satisfied or very satisfied was also compared pre- and postmentorship. This approach of modified "top-box" reporting is similar to prior major national survey-based experiences.⁹

RESULTS

Program Participation and Response Rate

Of the 25 eligible mentees, 16 (64%) participated in the mentorship program. Of the 20 eligible mentors, 12 (60%) participated. One participating mentee and 1 mentor left the institution during the intervention period. Fourteen mentees (response rate: 88%) and 9 mentors (response rate: 75%) completed the preintervention survey. Ten mentees (response rate: 63%) and 8 mentors (response rate: 67%) completed the postintervention survey.

Mentor Characteristics

Ninety-two percent of mentors were clinician educators. The mentors had 21 peer-reviewed publications during the year of the study, 25% of the mentors had external research funding,

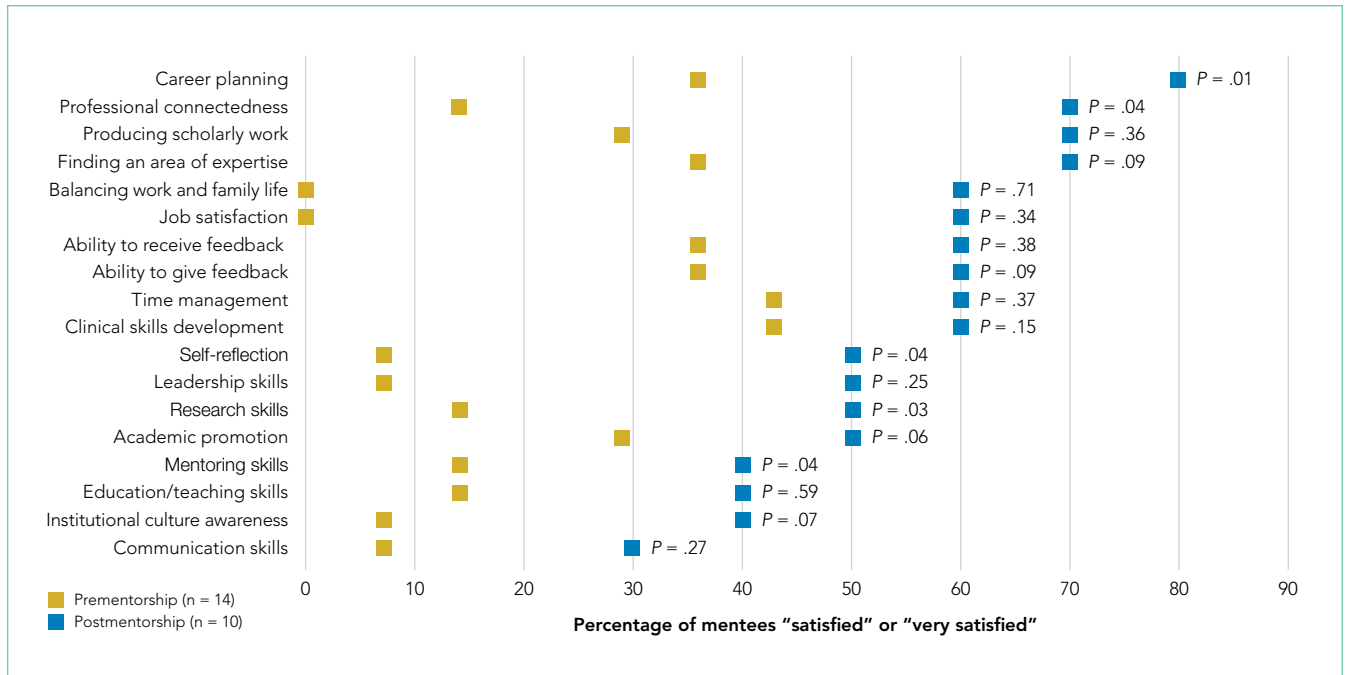


FIG 2. Satisfaction with career domains prementorship (n = 14) and postmentorship (n = 10).

75% had internal funding for projects or administrative roles, and 75% were above the rank of instructor. Most mentors were married with children.

Mentorship Meetings and the Mentorship Network

All participants attended at least 2 of the 3 trainings. For the mentees who completed the postintervention survey, 9 (90%) met with their mentors 3 or more additional times, and 8 (80%) were connected by their mentor to at least 1 additional faculty mentor.

Perceptions and Overall Satisfaction with Mentorship

Prior to starting the mentoring relationship, 86% of mentees and 78% of mentors anticipated that differing career goals would be a challenge to a successful mentor–mentee relationship. At the end of the program, only 30% of mentees and 38% of mentors felt that such differences were a challenge. Ninety percent of mentees and 88% of mentors were satisfied or very satisfied with their mentorship match. Forty-three percent of mentees felt supported by the HMU prior to the mentorship program, while 90% felt supported after the program. All the mentees agreed that future HMU faculty should participate in a similar program.

Impact of Mentorship on Critical Domains

At baseline, the following domains were most commonly rated as very important by mentees: career planning, professional connectedness, producing scholarly work, finding an area of expertise, balancing work and family life, and job satisfaction (Figure 1). There was a significant improvement in composite satisfaction scores after completion of the mentorship pro-

gram (54.5 ± 6.2 vs 65 ± 14.9 , $P = 0.02$). The influence of the mentorship program on all domains is shown in Figure 2. After completion of the mentorship program, there was a significant improvement in mentee satisfaction in the following domains: career planning, professional connectedness, self-reflection, research skills, and mentoring skills.

DISCUSSION

Our pilot structured mentorship program for junior hospitalists was feasible and led to improved satisfaction in select key career domains. Other mentoring or faculty coaching programs have been studied in several fields of medicine¹⁰⁻¹²; however, to our knowledge, there have not been published data studying a structured mentorship program for junior faculty in hospital medicine. Our intervention prioritized not only optimizing mentorship matches but also formalizing training sessions led by content experts.

After experiencing a structured mentoring relationship, most mentees felt a greater sense of support, were satisfied with their mentoring experiences, were connected to additional faculty, and had significant improvement in satisfaction in key career domains. Satisfaction with other self-identified “very important” domains, including scholarly activity, finding an area of expertise, job satisfaction, and work and family-life balance, did not significantly improve by the end of the program.

Perceived challenges to mentoring did not persist to the same degree with the implementation of a structured program. This highlights the importance of building mentorship skill sets (such as mentoring across differences and goal setting) through expert-led training sessions and perhaps also the importance of matching based on career goals.

This study has several limitations, including a small sample size, modest response rate, and short study period. Additionally, the

assessment relied on self-reporting. This study was performed at a large academic institution, and mentors were almost all clinician educators with some research experience, which limits generalizability. Surveys were entirely anonymized and did not contain identifying information, so individual respondent data could not be matched pre- and postintervention. Given that this was an observational study without a control group, mentorship can only be said to be associated with, and not necessarily causally linked to, the observed improvements. Other cointerventions occurring during the same time frame that may have impacted satisfaction include annual career conferences, changing leadership, and other faculty development seminars. Finally, given the study design and the reliance on survey-based data, the net improvement in satisfaction scores may be influenced by the Hawthorne effect.

CONCLUSION

Effective and sustainable career development requires mentorship. In our pilot study, implementing a personalized and

structured mentorship program for junior hospitalists focusing on building mentor–mentee relationships was feasible and was met with satisfaction. Indeed, the proportion of junior hospitalists who felt supported more than doubled, which could potentially improve academic productivity, recruitment, and retention. Larger prospective studies with a longer follow-up are needed to assess the impact of a structured mentorship program on hospitalist careers.

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