

An Adaptable Pediatrics Faculty Mentoring Model

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An effective faculty mentoring program (FMP) is 1 approach that academic departments can use to promote professional fulfillment, faculty retention, and mitigate the risks of faculty burnout. Mentoring has both direct benefits for junior faculty mentees as they navigate the academic promotion process with their mentors, in addition to broader departmental and institutional benefits, with regard to recruitment, retention, and academic productivity. We describe a successful FMP model that has been adapted for use in 6 other pediatrics departments, summarizing the key personnel, mentoring process, and program evaluation methods. Important lessons learned and a generalizable mentoring “model” are provided. Program evaluation indicates a positive effect for the FMP on enhanced faculty self-efficacy, job satisfaction, and career development. The importance of communication, oversight, feedback, accountability, and valuing all faculty members is emphasized. Strategies to promote faculty engagement and the critical role of departmental leadership in prioritizing mentorship are discussed. The success of academic medical departments is inextricably linked to its commitment to the career development of individual faculty members at all levels and in all academic pathways. With our findings, we support the positive impact of a formal FMP in promoting enhanced self-efficacy and career satisfaction, which directly benefits the department and institution through enhanced productivity, retention, successful promotion, and overall professional fulfillment.

Equipping academic faculty members to define and achieve professional fulfillment is instrumental for the long-term sustainability of academic medical centers. Significant paradigm shifts in the administration and regulation of health systems and individual providers have been associated with high national rates of physician burnout that adversely impact productivity and career development. An effective mentoring program is a viable approach to mitigate these concerns in academic medical faculty.^{1,2} Increasingly, institutions are recognizing that targeted attention on career development and mentorship is crucial for successful faculty advancement, with direct benefits for both individual

faculty members as well as for the department and institution.^{3,4}

In addition to enhancing quantifiable outcomes such as faculty retention or attainment of academic promotion and/or tenure (PT), academic mentoring also enhances measures of career satisfaction, professional fulfillment, and faculty engagement.⁴ Institutional investment in mentoring and career development translates directly to increased academic productivity, which in turn generates increased research funding, clinical revenue, high-quality educational programs, and importantly, enhances retention of highly qualified individuals for service in leadership positions. Junior faculty benefit from

abstract



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Mean responses to a survey for faculty in the FMP who were reviewed for PT (2013 and 2014). CI, confidence interval.

Dr Cranmer conceptualized and designed the manuscript outline, assisted in drafting the initial manuscript, reviewed and revised the manuscript, participated in creating data collection tools, and assisted in evaluating data; Dr Scurlock drafted the initial manuscript, reviewed and revised the manuscript, participated in creating data collection tools, and assisted in evaluating data; Ms Hale assisted in the drafting of the initial manuscript, reviewed and revised the manuscript, and assisted in data collection via an online survey tool; Dr Ward reviewed and revised the manuscript, participated in creating data collection tools, and assisted in evaluating data; Dr Prodhan designed the initial flowchart of steps in the mentoring process and critically reviewed the manuscript; Dr Weber assisted in selecting survey questions, supervised the data tables creation, and critically reviewed the manuscript; Dr Casey critically reviewed the manuscript, assisted in revising the manuscript, and emphasized the positive impact of the faculty mentoring program on faculty morale; Dr Jacobs critically reviewed the manuscript, provided graphic data from annual faculty development reports, and emphasized the positive impact of the faculty mentoring program on recruitment; and all authors approved the final manuscript as submitted.

This work was presented at the University of Tennessee Health Science Center and Le Bonheur Children’s Hospital Faculty Mentoring Program “Kick-Off” Workshop; September 22, 2012; Memphis, TN; the Association of American Medical Colleges Group on Faculty Affairs conference; August 8, 2013; Minneapolis, MN; and the Women in Research: Poster Showcase, University of Arkansas for Medical Sciences; October 30, 2014; Little Rock, AR.

DOI: <https://doi.org/10.1542/peds.2017-3202>

To cite: Cranmer JM, Scurlock AM, Hale RB, et al. An Adaptable Pediatrics Faculty Mentoring Model. *Pediatrics*. 2018;141(5):e20173202

advice and support throughout the mentoring process, particularly as it relates to academic success and PT.^{1,4} Although there are little data to document the involvement of successfully mentored junior faculty in future mentoring activities, it is suggested in the literature and our experience that these junior faculty mentees are eager to “pay it forward” after academic promotion, thus growing the mentorship base and creating a positive workplace focused on individual career development and personal fulfillment.^{5,6} The implementation of effective faculty mentoring program (FMP) models is a vital and effective investment in departmental faculty members.⁵

The University of Arkansas for Medical Sciences (UAMS) Department of Pediatrics (DOP) FMP was established in 1994 to provide strategic career advice and support to faculty members in both tenure and nontenure academic pathways. The program uses department- and university-based advanced rank (associate professor, professor) faculty who have proven records of success in all mission areas: clinical, research, education, service, and leadership. In its 23-year history, more than 250 faculty members have been mentored, and a 96% overall success rate for promotion has been achieved. For the last 8 years (2010–2017), the success rate for PT has been 100%. Fundamental components of the successful UAMS DOP FMP include the engagement and commitment of both junior and advanced rank faculty members combined with the critical support of departmental leadership in placing a high value on mentorship. In this article, we highlight the personnel, process, and program evaluation used in this effective FMP model, which can be readily adapted to meet the distinct needs of departments of varying sizes and composition. In fact, we have been

invited to consult with 6 pediatric departments elsewhere, as well as numerous other departments and another college at our institution, with successful adaption and implementation. Additionally, professors from our department who have been recruited to chair other pediatrics departments all have adapted the UAMS DOP FMP for use in their departments. Lessons learned throughout the growth and evolution of this program provide practical considerations and data, in which a high degree of FMP satisfaction is indicated.

KEY ELEMENTS OF THE UAMS DOP FMP

Key Elements

The UAMS DOP FMP integrates accountability, leadership, and oversight within a formal faculty mentoring process (Fig 1). Direct interactions between the mentee and his or her unique mentoring committee (MC) are the heart of the mentoring process, with oversight by the FMP director, faculty affairs vice-chair (FAVC), and department chair. Each MC consists of the mentee and 3 advanced rank faculty mentors, 1 of whom is the chair, responsible for convening biannual meetings and documenting formal minutes. The section chief (SC) is an engaged and critical member of the process but is not included on the MC of a faculty member in his or her section, allowing for frank discussions related to academic advancement.

Key elements of the FMP (Table 1) include “mandatory” (expected) participation for all junior faculty to help them navigate the PT process and provide personal and professional support during the critical early years of their faculty appointment. Junior faculty convey satisfaction that they are required to participate in the mentoring program

(Table 2). In fact, our established FMP was a key factor in their recruitment, as documented by comments to the DOP chair from many newly recruited faculty as well as comments made to the FMP director (J.M.C.) and FAVC (P.H.C.) during the course of interviews, onboarding events, and meet-and-greet gatherings. Although the program primarily focuses on assistant professors to assure their promotion to associate professor, faculty members retain the option to continue meeting with their MC either formally or informally after achieving PT. Faculty members in both tenure and nontenure pathways, part-time or full-time, are equally valued and receive equal priority on mentoring, recognizing that diverse personal and professional demands necessitate different choices regarding academic trajectory. Faculty members at the associate professor or higher level voluntarily serve as mentors. Although mentoring is voluntary, the mentor base has increased to meet the demands of junior faculty mentees over time because of the priority placed on mentoring by departmental leadership and the desire of recently promoted and senior faculty members to pay it forward. After being promoted to associate professor (average 11 per year), a junior faculty member transitions from mentee to mentor and is invited to serve on an MC. In our pay it forward culture, 100% of the graduates of the program accept the invitation. Graduates of the FMP feel comfortable transitioning to a mentor role (Table 2, item 15); however, they don’t serve as MC chair until they have experience serving on 2 MCs. It is typical for an advanced rank faculty member to serve on 4 MCs at any given time. The MC experience is mutually rewarding for mentees and mentors alike. Mentoring is recognized as a valued contribution in both annual departmental faculty evaluations and the institutional PT guidelines:

TABLE 1 Key Elements of the UAMS DOP FMP

Participation	Mandatory for new and junior faculty Voluntary for mentors Tenure- and nontenure-track faculty equally mentored
Focus	Promotion from assistant to associate professor
Culture	Collegial and supportive Collaboration and advocacy Pay it forward
Process	Formal, time and event driven Biannual MC meetings Oversight and feedback loop
Product	Template-guided MC minutes
Recognition	Mentoring excellence is a component of annual evaluation
Resources	Mentor of the Year awards Online handbooks Archived workshops and seminars
Goal	Recommendation for PT review

<http://medicine.uams.edu/files/2012/07/2011-PT-Guidelines.doc>

The formal mentoring process is both time and event driven. MC meetings occur biannually and more frequently if needed. The interactions within the MC meeting are documented by the MC chair. The MC minutes are agreed on by all MC members, are reviewed by the FMP director and FAVC, both of whom have direct program oversight, and this report is shared with the SC for review and comment. The feedback and communication loop includes the mentee and everyone involved up through the department chair (Fig 1, Table 3). Online resources include a mentorship handbook and archived workshops and seminars, providing important resources for both junior faculty mentees and continuing education for mentors.

An Adaptable FMP Model for Other Pediatrics Departments

In data documented from The Association of Medical School Pediatric Department Chairs (personal communication, 2016), 48% of the 151 pediatric

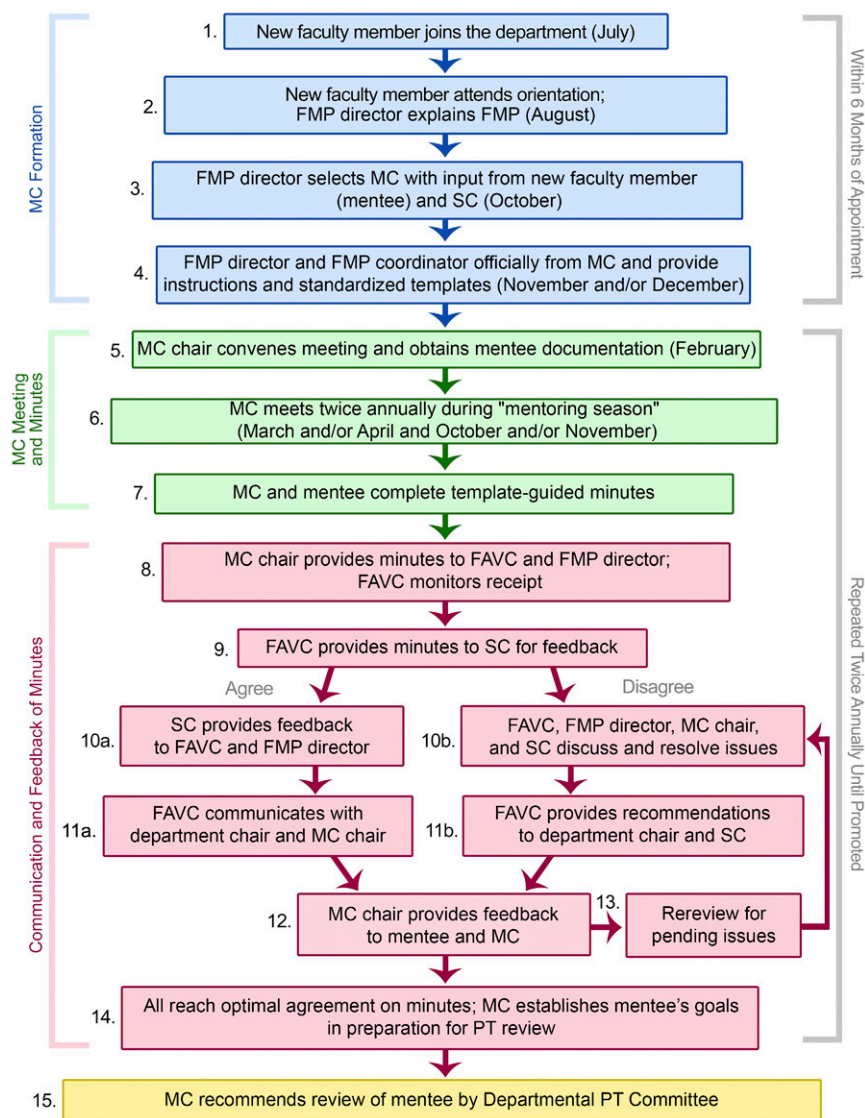


FIGURE 1 Steps in the process of the UAMS DOP FMP.

departments have more than 100 faculty members (range <50→500). The UAMS DOP FMP engages 233 faculty members; 92 members are junior faculty (instructors, assistant professors) mentees, and the rest (141) are advanced rank (associate professor, professor) faculty mentors. Eight percent of mentors are from other departments; however, they are not allowed to serve as MC Chairs. All mentors serve voluntarily. The FMP model presented in this article has been easily adaptable to meet the needs of small or large

departments in developing programs to mentor junior faculty for academic advancement and career satisfaction. It is directly relevant, and easily modifiable, to departments in which 25% or more faculty hold advanced rank. The UAMS DOP started with <100 faculty members using this FMP model. Biannual MC minutes in which members use a "promotion template," process, time line, and feedback loop are critical elements of the FMP, but the number, composition, roles, responsibilities of people involved, and criteria for PT can be modified

TABLE 2 Impact of the UAMS DOP FMP as Rated by Faculty in FMP Reviewed for PT

Survey Item	n	Mean (95% CI)	P
1. Overall, I was satisfied with the DOP FMP	23	4.61 (4.39–4.82)	<.001
2. I would recommend my mentor and/or committee to my colleagues	23	4.43 (4.15–4.72)	<.001
3. The DOP FMP was a valuable experience	22	4.73 (4.53–4.93)	<.001
4. I have implemented the knowledge and skills gained in the DOP FMP in my career	23	4.26 (3.99–4.53)	<.001
5. I am better prepared to fulfill my role in the institution as a result of participation in the DOP FMP	23	4.3 (4.03–4.58)	<.001
6. I am better prepared to advance my career as a result of participation in the DOP FMP	23	4.57 (4.35–4.78)	<.001
7. I feel more comfortable approaching institutional leaders	23	4.13 (3.83–4.43)	<.001
8. I believe my MC had a positive impact on my career advancement	23	4.52 (4.3–4.74)	<.001
9. I have benefited from the mentoring relationship	23	4.52 (4.27–4.78)	<.001
10. My MC is readily available	23	4.39 (4.11–4.68)	<.001
11. I meet with my MC at least twice a year during mentoring season	23	4.17 (3.79–4.56)	<.001
12. I am better prepared to initiate and negotiate new mentoring relationships	23	4.17 (3.92–4.42)	<.001
13. My mentor and/or committee help(s) me to integrate my personal and/or professional responsibilities	22	3.95 (3.63–4.27)	<.001
14. I would like to have an official MC for my midcareer advancement	23	4.13 (3.75–4.51)	<.001
15. I feel comfortable transitioning from a mentee to a mentor role	23	4 (3.74–4.26)	<.001

for departments of different sizes and focus.

FMP PROCESS (“TOOLKIT”)

MC Formation

The department chair and FMP director meet personally with faculty recruits during initial interviews and early in each faculty member’s appointment to discuss expectations and review academic pathways to assure correct pathway assignment and time and effort allocation. The FMP director also participates in new faculty onboarding and orientation programs (Fig 1, steps 1–4).

Formation of each faculty member’s unique MC is a critical step in the mentoring process. An FMP database maintained by the FMP director and program coordinator is used to identify possible mentors on the basis of pathway, rank, interest, department, and number of MCs per mentor. Faculty mentors with relevant academic interests, experiences, and perspectives are offered to the mentee for consideration. After consultation with the mentee and SC, the FMP director invites potential mentors and provides the new faculty member’s

curriculum vitae (CV), academic pathway, and job description. Ideally, the 3-member MC is composed of (1) an experienced mentor who has chaired MCs, (2) a mentor who has served on a few MCs and is “in training” within the context of the MC to be a chair, and (3) a recently promoted faculty member in transition from mentee to mentor (the pay it forward mentor). Once 3 invited mentors have committed to serve, a chair is designated, and the MC is officially formed. The official MC formation memorandum includes resources (toolkit) to support the full function of the MC, including a MC membership letter, summary of FMP key points, MC responsibilities (Table 3), steps in the process of the UAMS DOP FMP (Fig 1), template for MC minutes (Supplemental Fig 2), PT guidelines specific to the mentee’s pathway and rank, sample electronic PT packets, and the FMP Handbook with links to workshop and seminar presentations.

MC Meetings and Minutes

The initial MC meeting occurs within the first 6 months of the faculty appointment, providing a forum for which the mentee and mentors can build relationships and

TABLE 3 Key Roles and Responsibilities Within the UAMS DOP FMP

Role	Responsibilities
Mentee	<ul style="list-style-type: none"> Know the PT guidelines Provide the following to the MC: <ul style="list-style-type: none"> Updated CV Job description and time and effort allocation Summary of recent accomplishments Summary of teaching evaluations and portfolio Short- and long-term goals Evolving PT packet (start from d 1) Annual faculty evaluation from department chair (voluntary) Work with MC chair to ensure MC meets twice per y during “mentoring season” Review and approve MC minutes before submission
Mentor	<ul style="list-style-type: none"> Know the PT guidelines Know the mentee’s pathway, y in rank, and time and effort allocation Meet twice per y during “mentoring season” Review updated CV, evolving PT packet, and other materials before the meeting Evaluate mentee performance according to the UAMS and COM PT guidelines in the following areas: <ul style="list-style-type: none"> Clinical service Research Teaching Administrative service Other scholarly activity Professional recognition Discuss work-life balance and avoidance of burnout Discuss strategic career planning and goal setting Provide mentee feedback on other issues that arise Review and approve MC minutes before submission
MC chair	<ul style="list-style-type: none"> All of the mentor responsibilities noted above With mentee, make sure the MC meets twice a y during the “mentoring season” Lead the meeting and address all points on the MC minutes template Be available between MC meetings for additional mentoring needs Prepare template-guided MC minutes Obtain approval of MC minutes from mentee and MC members before submission Provide MC minutes to FAVC and FMP director
SC	<ul style="list-style-type: none"> Provide an environment conducive to success Assist mentee with goal setting Provide input on MC formation to FMP director

TABLE 3 Continued

Meet with mentee on a regular basis to provide assessment and feedback	Enable and facilitate recommendations from the MC
Provide feedback on MC minutes to FAVC and FMP director	Mediate and resolve disagreement between MC and SC if cannot be resolved by FAVC
Address any problems identified in MC minutes	
FMP director	
Explain FMP during new faculty recruitment and orientation	
Work with new mentee and SC to identify most appropriate mentors	
Invite identified mentors and officially form a 3-member MC	
Provide all background materials and instructions to support the MC meeting process	
Review all MC minutes	
Follow-up recommendations from MC minutes in conjunction with the FAVC	
Work with mentee to change pathway or track if needed	
Present FMP workshops and seminars; maintain a library of video-archived presentations	
Advise or refer mentee on any aspect of faculty development or work-life balance as needed	
Update department chair if a concern about a mentee or mentor arises	
Maintain FMP database and provide periodic reports	
Provide MC recommendations to department PT committee when mentee is reviewed	
Make changes or adjustments to FMP process whenever needs or improvements are identified	
Conduct ongoing evaluations of FMP to identify potential weaknesses	
Publish all aspects of the FMP in appropriate peer-reviewed journals	
FAVC	
Announce and/or remind all faculty of spring and fall “mentoring season”	
Monitor and assure MC meets	
Maintain a database on meeting times, receipt of minutes, and minutes transmittal in the feedback loop	
Provide MC minutes to SC for feedback	
Facilitate agreement if discordance between SC input and MC recommendations	
Transmit final approved MC minutes to department chair and the MC chair	
Departmental chair	
Provide financial support to the FMP	
Emphasize and be a role model for the importance of mentoring in the department	
Recognize and reward mentoring excellence	
Sponsor Mentor of the Year awards	
Evaluate FMP and PT process in annual faculty development review	

TABLE 3 Continued

Enable and facilitate recommendations from the MC
Mediate and resolve disagreement between MC and SC if cannot be resolved by FAVC

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cooperatively establish measurable goals. Documentation of these initial goals in the MC minutes by the MC chair is a critical first step in assuring a successful academic trajectory through effective oversight and accountability (Fig 1, steps 5–7). The primary objective of the MC meetings is thorough evaluation of the mentee’s progress in achieving goals and the mentee’s performance in the following areas: (1) clinical service, (2) teaching, (3) research, (4) administrative service, (5) other scholarly activity, and (6) professional recognition, according to the mentee’s job description.

Each MC meeting convenes with a discussion of the mentee’s CV, recent activities summary, and/or a drafted PT document provided to the MC for review before the meeting. The mentee shares problems or barriers to meeting goals and potential solutions are discussed. New short- and long-term goals with corresponding action items are identified for review at the next meeting. The mentee is provided with constructive feedback, advice, and recognition. Additional topics may be discussed, such as teaching skills and evaluation methods, publication skills, clinical load management, work-life balance, and planning for promotion. After the MC meeting, the MC chair circulates a draft of the MC minutes to the mentee and all committee members for review and feedback.

Communication and Feedback: MC Minutes

Documentation and review of the MC minutes ensure fair, appropriate feedback for the faculty mentee.⁷

After approval by all MC members, the formal MC minutes review process begins with submission and review of the minutes by the FAVC and the FMP director (Fig 1, steps 8–14). The MC minutes are subsequently forwarded to the SC. If in agreement, the SC approves the minutes and the FAVC notifies the MC chair. If the SC does not agree with the MC assessment and recommendations, then he or she provides written communication to the FAVC who relays feedback to the FMP director and MC chair. In addition to written communication, the SC and MC chair along with the VCFA and/or FMP director may meet to discuss additional information. The FAVC discusses concerns with the department chair, FMP director, and the SC to resolve any remaining issues and outline a written plan of action. The mentee receives feedback, especially if concerns are raised or alternate plans needed. All plans are finalized in writing through an addendum to the MC minutes. Additional MC involvement may be needed to ensure resolution of any problem areas.

Although our FMP has demonstrated high success rates of PT and career satisfaction, not all mentoring is effective, and not all MCs work all the time. A failed mentoring experience can result from numerous factors, including lack of engagement or direction of the mentee, a committee that is not a “good fit” (bad chemistry),^{8,9} inactive research or education mentors, or a SC who is minimally participatory with individualized mentoring or poorly engaged with the faculty member or committee.¹⁰ If there appears to be any level of mentoring failure, an alternate plan must be considered. A successful FMP must have the flexibility to provide alternate mentors, mentorship training, honest and timely communication, and role definition at the outset to identify

possible issues early. Change of MC composition can be requested at any time by any member of the MC to the FAVC or FMP director in the MC minutes or anonymously. This possibility is explained when the MC is formed (Fig 1, steps 2–3).

Goal: MC Recommends Review by DOP PT Committee

The mentoring process culminates in the MC's recommendation, supported by the FMP director and departmental leadership, for the DOP PT Committee to review the mentee (Fig 1, step 15). The FMP director's role as chair of this internal review body integrates the entire mentorship process with the PT review, providing faculty members with the opportunity for further feedback before navigating the institutional PT review. The goal is to review the mentee by the departmental PT committee 1 to 2 years before consideration by the institutional committee to assure the mentee's best opportunity for successful promotion.

PROGRAM EVALUATION

Successful Achievement of PT

A major goal of the FMP is the mentee's successful PT in a timely manner. Before initiation of the FMP (although numbers were much smaller, and specific data from >24 years ago are not available), the success rate for PT was ~75%. In the past 13 years (2005–2017), 143 of 148 (96%) promotion requests and 59 of 63 (94%) tenure requests were granted by the university system president and board of trustees. In the last 8 years (2010–2017), 100% of promotion (average 15 per year) and tenure (average 7 per year) requests have been granted. All candidates were mentored in our FMP.

All DOP Faculty: Annual Faculty Development Reports

Program evaluation is critical for ongoing quality improvement. Although the outcome of mentee promotions is a useful rubric, it is important to evaluate the quality of the FMP. As part of the annual faculty development report submitted to the DOP chair, faculty members complete 4 anonymous survey questions. These questions are used to assess faculty satisfaction with the FMP and examine whether the DOP has been successful in sustaining a workplace culture in which faculty members feel valued. All questions are presented in a Likert-scale format, with answers ranging from (1) strongly disagree to (5) strongly agree. The ratings are used to evaluate faculty satisfaction with education and support regarding the PT process (question 1); support for growth of faculty in education, research, and service endeavors (question 2); adequate access to communicate issues of personal concern (question 3); and feeling valued as a faculty member (question 4). Over the years, with some fluctuations, ~85% to 90% of our total faculty moderately or strongly agree with each statement, despite growing morale issues during the last few years, which are reflective of national physician and/or provider burnout trends.

Impact of the UAMS DOP FMP as Rated by Faculty in the FMP Reviewed for PT

We conducted a 15-question post hoc survey of a group of assistant professors who had completed the FMP process and were being reviewed by the DOP PT committee for promotion to associate professor. Means and SDs are summarized in Table 2. A 1-sided *t* test was used to evaluate whether the true mean of each question was different from a value of 3 (neutral). Scores for all

TABLE 4 Lessons Learned

Department chairs must place a high value on mentoring
Faculty buy in is essential
Junior faculty are eager to pay it forward after successful promotion
Every 6 mo is an optimal frequency for MC meetings
Three mentors on an MC is ideal
SCs should not serve on MCs of faculty in their sections
Mentors must have previous experience navigating the promotion process
MC service provides an arena in which members may develop their mentoring skills
Standardized templates allow for better mentee progress assessment
MC meeting oversight ensures compliance with timelines and completion of min
Tenure- and nontenure-track faculty members should be mentored equally
Participant investment in the FMP requires continuous communication and feedback
Participants must clearly understand their roles in the FMP
Mentors value formal recognition of service
Continuous fine-tuning of the FMP is essential for adaptation to evolving mentee needs
Mentees need a section-specific liaison who serves as their go-to person

items were highly significant ($P < .001$). By using a scale of (1) strongly disagree to (5) strongly agree, all scores were 4.0 or greater except 1, which was just slightly lower (3.95), concluding that participation in the mentoring program has a positive effect on mentee confidence (self-efficacy) and skills for career advancement. Our human subjects study design was submitted for initial institutional review board review and determined to be exempt from informed consent.

LESSONS LEARNED

In over 2 decades of faculty mentoring, many lessons have been learned that have contributed to the overall refinement and improvement of the FMP (Table 4). The 13 lessons summarized below can be applied to new or developing pediatrics mentoring programs that are using our provided toolkit of mentoring resources.

Critical Role of the Department Chair: Value and Support

The department chair serves a critical role in creating a culture in which mentorship is valued. The chair's commitment to faculty mentoring, recognition of outstanding mentors, and financial support are key elements in sustaining a departmental FMP.

Faculty "Buy-In" and Value of Mentoring

Specific action steps foster faculty buy in and engagement with the FMP. In addition to being self-rewarding, participation in the FMP is valued in the annual faculty evaluation, incorporated into the institutional PT guidelines, and factors into various mentoring and teaching award criteria. There is no financial incentive to participate in the FMP or serve on MCs. The actual time commitment for advanced rank faculty to serve on a MC is modest (~1.5 hours per MC meeting twice a year). The MC chair spends more time preparing the minutes, but much of this task is shared and accomplished during the meeting itself.

Engender a Pay It Forward Culture

Newly promoted faculty members appreciate the benefits they obtained from their mentors and the mentoring process and are eager to pay it forward after successful academic promotion. One hundred percent of mentees who have achieved PT enthusiastically agreed to serve on an MC. This is a key factor in how we grow our mentorship base and underscores the pay it forward culture that has been created. Faculty members entering the mentoring program are the benefactors of this legacy for mentoring, which sustains the mentoring program by developing the mentorship base.

Frequency and Timing of Meetings

Through trial and error, we learned that every 6 months is the ideal frequency for scheduling MC meetings. Biannual meetings are infrequent enough to not stress the mentorship base and allow time for the mentee to achieve goals set in meetings; however, meetings are frequent enough that any issues can be identified before they become barriers to successful academic advancement.

Number and Composition of MC Members

Three mentors on an MC is the most conducive to a productive discussion while limiting demands on the mentorship base. More than 3 mentors limit the intimacy, interactions, and efficiency of a small group meeting, can seem overpowering to the mentee, and taxes the mentorship base. Less than 3 members may not provide the broader input and perspective desired. Membership on an MC can be modified (additions, substitutions) at any time by simple request of any member.

Who Should Not Chair or Serve on an MC?

In addition to refining the number and composition of MC membership, another important lesson included learning which individuals should not serve on MCs. Three groups fall into this category: (1) SCs are precluded from serving on the MC of a faculty member in their section to provide more open discussion of potential issues or barriers; (2) instructors and assistant professors are not appointed to an MC because they have not yet negotiated the promotion process; and (3) faculty whose primary appointment is not in the DOP do not serve as MC chairs but provide valuable support as mentors related to their specific

expertise in research, clinical, administrative, or educational areas.

Mentor the Mentors Within the MC Meeting

Supporting and educating the mentorship base to keep up with both recruitment of new faculty and changing policies is an ongoing challenge. A variety of traditional methods are available from both our college of medicine and DOP to train mentors, including seminars, workshops, panel discussions, question and answer sessions, role playing, assigned reading, and discussion groups. However, the approach proven to be most effective in our FMP is "mentoring the mentors" within the actual MC meeting itself, whereby a newly promoted faculty member is paired with an experienced mentor. More experienced mentors model mentoring strategies and delegate tasks over time (eg, scheduling and presiding over meetings, completing minutes) while maintaining oversight. This approach is time efficient; occurs in a small, relevant group setting; and is focused on the individual.

Uniform Template for MC Minutes

Initially, MC minutes followed no specific format and were variable in degree of usefulness. Without specific goals in each area (clinical, teaching, research, administration, professional recognition), it was difficult to evaluate progress 6 months later. Over time, we developed a standardized template for MC minutes that reflects the institutional PT guidelines and facilitates following progress (Supplemental Fig 2).

Accountability and Oversight of Meetings and Minutes

Another lesson that became apparent early in the course of the FMP was the need to remind MCs of the time to meet, keep

track of compliance, and monitor completeness of documentation. This task is performed by the FAVC and, if necessary, reinforced by the department chair.

Tenure- and Nontenure-Track Faculty Mentored Equally

During the early years of the FMP, the large proportion of junior to advanced rank faculty greatly limited the number of mentees for whom MCs could be formed. Consequently, a decision was made to focus on faculty in the tenure track because their time in which to achieve tenure was fixed (6 years). Although this strategy was necessary at that time, it seemed unfair to faculty in the nontenure track who are equally valued and eligible for promotion although they do not have a tenure clock ticking. As soon as junior faculty members were promoted, they transitioned from mentee to mentor and were added to the mentorship base. Thus, within a few years, the increased number of advanced rank faculty was sufficient to form MCs for all junior faculty, regardless of pathway.

Role Clarity and Communication

Continuous communication and feedback are crucial for keeping all participants informed and invested in the FMP and dedicated to the academic advancement of the mentee. All participants in the mentoring process have a defined role and should clearly understand that role. The responsibilities of the mentee, mentors, MC chair, SC, FMP director, FAVC, and department chair are delineated and well defined (Table 3).

Recognition of Mentors

Formal recognition of the time, energy, commitment, and skill

needed to be a good mentor is important. The UAMS DOP formally recognizes exceptional mentors annually with Mentor of the Year awards presented at an awards ceremony during faculty meetings. In addition, annual faculty development reports are used to value mentoring as critical to the mission of the department and is valued by departmental leadership as a metric of productivity. Furthermore, mentoring has been added to the criteria for promotion in the institutional PT guidelines.

Annual Evaluation and Continuous Fine-Tuning

Annual evaluation of the FMP in the faculty development report provides guiding feedback. Continuous fine-tuning of the FMP is essential for adaptation to evolving mentee needs.

CONCLUSIONS

The UAMS DOP FMP has some features in common with other FMPs^{4,5,7} but is unique in that it has been functioning in a formal, successful way for 23 years, during which time we have refined the process (Fig 1, Table 1), defined the roles of key participants (Table 3), and learned many lessons (Table 4). Our FMP is also novel and useful because our process is readily adaptable to other departments. We have identified ways to modify the process and have consulted with 6 pediatrics departments outside our institution to adapt our FMP model.

The success and sustainability of an academic institution is linked inextricably to its support and development of faculty at all levels. Physician leaders and health care organizations have recognized the increasing concern of physician burnout and morale related to inefficiencies of practice and changes in models of health care delivery.^{1,2} With a heightened focus on the

institutional role in ameliorating burnout, it has been indicated that mentoring is an effective strategy.^{11–13} Both individual and organizational strategies have been shown to result in meaningful reduction in physician burnout.^{11–13} In a recent statement from the Association of Medical School Pediatric Department Chairs, the development of formal mentoring programs for new and junior faculty was suggested as an example of a possible individual level solution.¹³ Junior faculty members often enter the academic workforce with enthusiasm and knowledge of clinical or research topics but lack the skills necessary to successfully negotiate the PT process. The traditional hierarchical “sink or swim” approach has been increasingly abandoned as leaders in academic medicine recognize the importance of nurturing their investment and preventing the substantial cost of losing productive faculty members. Career development, academic success, and professional fulfillment are more likely to be achieved with positive mentorship that supports the individual and collective academic advancement of its participants and fosters strong collegial and social relationships within the entire academic medicine community.

We present an effective adaptable pediatrics FMP model with over 2 decades of success in achieving academic PT and present data in which high levels of faculty satisfaction with this FMP are indicated. We conclude that targeted attention to career development through a formal time- and event-driven departmental FMP not only contributes to successful academic promotion and retention, but factors significantly in career satisfaction. The full support of the department chair and a collective appreciation of the value of mentoring by all faculty involved is of central importance

in maintaining a successful FMP. However, this important investment of time by experienced faculty interested in helping younger colleagues in their academic development pays off in rich dividends for the department and institution by demonstrating the value placed on its faculty members and helping them successfully navigate the PT process and fostering high levels of long-term faculty professional fulfillment.

ACKNOWLEDGMENTS

We acknowledge the strong contribution of the previous chairs of the Department of Pediatrics since the inception of the FMP: Robert H. Fiser, Jr, MD (deceased) and Debra H. Fiser, MD.

We thank Drs Ariel Berlinski, Rhonda Dick, Stacie Jones, Todd Nick (deceased), and Valerie Lumpkins, MHS and Mrs Phaedra Yount for their contributions and support.

ABBREVIATIONS

CV: curriculum vitae
DOP: Department of Pediatrics
FAVC: Faculty Affairs
Vice-Chair
FMP: faculty mentoring program
MC: mentoring committee
PT: promotion and/or tenure
SC: section chief
UAMS: University of Arkansas for Medical Sciences

Accepted for publication Feb 16, 2018

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PEDIATRICS (ISSN Numbers: Print, 0031-4005; Online, 1098-4275).

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FINANCIAL DISCLOSURE: The authors have indicated they have no financial relationships relevant to this article to disclose.

FUNDING: Funded in part by Robert H. Fiser Jr, MD, Endowed Chair in Pediatrics, University of Arkansas for Medical Sciences.

POTENTIAL CONFLICT OF INTEREST: The authors have indicated they have no potential conflicts of interest to disclose.

REFERENCES

- West CP, Dyrbye LN, Erwin PJ, Shanafelt TD. Interventions to prevent and reduce physician burnout: a systematic review and meta-analysis. *Lancet*. 2016;388(10057):2272–2281
- The Physicians Foundation. 2016 survey of America's physicians practice patterns and perspectives. 2016. Available at: https://physiciansfoundation.org/wp-content/uploads/2018/01/Biennial_Physician_Survey_2016.pdf
- Chung KC, Song JW, Kim HM, et al. Predictors of job satisfaction among academic faculty members: do instructional and clinical staff differ? *Med Educ*. 2010;44(10):985–995
- Thorndyke LE, Gusic ME, Milner RJ. Functional mentoring: a practical approach with multilevel outcomes. *J Contin Educ Health Prof*. 2008;28(3):157–164
- Thorndyke LE, Gusic ME, George JH, Quillen DA, Milner RJ. Empowering junior faculty: Penn State's faculty development and mentoring program. *Acad Med*. 2006;81(7):668–673
- Carey EC, Weissman DE. Understanding and finding mentorship: a review for junior faculty. *J Palliat Med*. 2010;13(11):1373–1379
- Bussey-Jones J, Bernstein L, Higgins S, et al. Repaving the road to academic success: the IMERGE approach to peer mentoring. *Acad Med*. 2006;81(7):674–679
- Jackson VA, Palepu A, Szalacha L, Caswell C, Carr PL, Inui T. "Having the right chemistry": a qualitative study of mentoring in academic medicine. *Acad Med*. 2003;78(3):328–334
- Straus SE, Chatur F, Taylor M. Issues in the mentor-mentee relationship in academic medicine: a qualitative study. *Acad Med*. 2009;84(1):135–139
- Berk RA, Berg J, Mortimer R, Walton-Moss B, Yeo TP. Measuring the effectiveness of faculty mentoring relationships. *Acad Med*. 2005;80(1):66–71
- Epstein RM, Privitera MR. Doing something about physician burnout. *Lancet*. 2016;388(10057):2216–2217
- Shanafelt TD, Dyrbye LN, West CP. Addressing physician burnout: the way forward. *JAMA*. 2017;317(9):901–902
- Wei J, Rosen P, Greenspan JS. Physician burnout: what can chairs, chiefs, and institutions do? *J Pediatr*. 2016;175:5–6