ALLIANCE for ACADEMIC INTERNAL MEDICINE

AAIM Perspectives

AAIM is the largest academically focused specialty organization representing departments of internal medicine at medical schools and teaching hospitals in the United States and Canada. As a consortium of five organizations, AAIM represents department chairs and chiefs; clerkship, residency, and fellowship program directors; division chiefs; and academic and business administrators as well as other faculty and staff in departments of internal medicine and their divisions.

Why Internal Medicine Program Directors Remain in Their Positions and Are Effective and Thrive: A Qualitative Study

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INTRODUCTION

Medical education must be led by qualified, experienced physician-educators.[1,2] Residency program directors (PDs) balance unique challenges and responsibilities that include personal and professional development of their trainees while ensuring accreditation requirement compliance.[2] The Accreditation Council for Graduate Medical Education (ACGME) mandates that a single PD has the authority, accountability, and responsibility for the program and requires that PDs serve long enough to ensure program stability.[2]

High PD turnover has been reported in multiple residency program specialties, including internal medicine, emergency medicine, obstetrics and gynecology, family medicine, and pediatrics.[3-5] A 2018 national survey of internal medicine PDs found that 53% considered resigning in the past year.[4] PD attrition is a key performance indicator in program accreditation, and turnover affects trainees and the sponsoring institution by contributing to program instability and poor performance.[2,5]

Program leaders are responsible for educational outcomes; thus, shorter PD tenure should concern academic leaders and the public who receive care from learners and graduates. Although several studies have explored factors associated with PD turnover, including burnout, it is instructive to study the converse attributes of long-standing PDs. Exploring why PDs remain in their positions and why they thrive and feel effective could identify factors that might promote PD retention. To date, no published studies have identified specific rewards and challenges of program leadership in

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graduate medical education (GME). To address this deficit, we conducted a nationally representative qualitative study of long-standing internal medicine PDs to identify reasons they remained in their positions, reasons they considered leaving, and resources essential for their role.

METHODS

Survey Instrument and Ethical Approval

The Association of Program Directors in Internal Medicine (APDIM) is a charter organization of the Alliance for Academic Internal Medicine (AAIM), a professional association representing more than 10,000 internal medicine educators and administrators. In fall 2018, the APDIM Council studied PD turnover and mitigation thereof. The subcommittee surveyed internal medicine PDs in their positions for 10 years or longer, well above the 6.4 mean number of years in the role. The survey instrument included 7 closed-ended questions about PD demographics and professional characteristics and 11 essay questions about experiences in their role (see Appendix, available online, for the survey instrument).

PERSPECTIVES VIEWPOINTS

- Four positive domains are identified for long-standing Program Directors (PDs): purpose, culture, nature of the work, and sense of achievement.
- Nature of the work is associated with long-standing PDs continuing in their role, finding joy, and thriving.
- PDs who do not feel effective or thriving consistently describe threats.
- Academic medicine leadership should prioritize mitigation of the identified threats because PD retention remains a major area of concern across graduate medical education.

This study focuses on 5 of the essay questions that addressed 1) why PDs continue in their roles, 2) what brings PDs joy and a sense of achievement and how that has changed over time, 3) whether PDs feel effective and why or why not, 4) whether PDs believe they are thriving and why or why not, and 5) what issues made them strongly consider leaving their position, phrased as "what brought you to the PD ledge?" Three additional questions asked how PDs used key resources for success. Responses to the questions about effectiveness and thriving were coded as yes, no, or equivocal. That sorting process was separate from but used in conjunction with the qualitative content analysis described.

The study (#19-AAIM-105) was deemed exempt under 45 CFR 46.101(b) category 2 by Pearl IRB (US DHHS OHRP #IRB00007772) in accordance with FDA 21 CFR 56.104 and DHHS 45 CFR 46.101 regulations. ES served as principal investigator and AAIM personnel (MK) served as project staff.

Data Collection

In January 2019, 112 APDIM-member PDs were identified as entering their 10th consecutive year or greater as PD using the ACGME *Web Accreditation Database System (Public; WebADS)*. At the time of the study, APDIM member programs represented 85% of 518 US/US territory-based residency programs of "continued" or "initial" accreditation status.[6] The survey was programmed in the Qualtrics platform and the landing page included an informed consent statement.[7] The survey launched January 28, included 3 nonrespondent email reminders, and closed March 1. Only staff had access to the survey software during data collection.

Data Analysis

Quantitative analysis of the qualitatively-coded data was conducted in *Stata 16 SE*. Before de-identifying the responses for analysis, the study population data set was appended with residency program data from third-party sources, including US Census Bureau region, number of approved resident positions, and program type.[8,9]

Descriptive statistics were used to assess the representativeness of the results, comparing essential characteristics of respondent programs to the complete survey-eligible population using variables from the third-party data (Table 1). Bivariate tests for association between single-choice categorical variables included Pearson χ^2 or Fisher exact test. Tests for association between categorical and continuous variables used a nonparametric equality-of-medians test.

We applied a constructivist paradigm to study the qualitative data for content. We intentionally used survey data collection rather than multistage interviews with respondents for follow-up to minimize cognitive load and overcontact with respondents. This design was imperfect but necessary.[10] We were able to quantifiably represent and compare concepts and themes that emerged from the essay responses using our agreed-on methodological approach of content analysis.[11]

First, the authors read all responses to identify and reach consensus over important constructs. Next, we developed a "report" for each essay question that reflected all responses. Two authors developed a preliminary coding scheme iteratively by reviewing the reports for 3 of the open-ended questions and drafting memos as they read them. This primarily was an inductive process, with the codes emerging from the responses. The approach also included deductive components as we identified certain codes for analysis from

Table 1 Core Characteristics of Internal Medicine Residency Responding and Nonresponding Programs

	Respondents (n = 78) No.(Column %)	Nonrespondents (n = 34) No.(Column %)	Total (n = 112) No.(Column %)	*P* Value*
Description (FREIDA)†				
University-based	27 (34.6)	10 (29.4)	37 (33.0)	0.666
All other program types	51 (65.4)	24 (70.6)	75 (67.0)	
US Census Bureau Region‡				
Northeast	25 (32.5)	8 (24.4)	33 (30.0)	0.497
Midwest	14 (18.2)	12 (36.4)	26 (23.6)	0.051
West	14 (18.2)	5 (15.2)	19 (17.3)	0.789
South	24 (31.2)	8 (24.4)	32 (29.1)	0.502
Accreditation Status: Continued (ACGME)	76 (97.4)	33 (97.1)	109 (97.3)	0.910
	Median (SD)	Median (SD)	Median (SD)	*P* Value§
Program size: No. filled positions (ACGME)	53.5 (39.5)	51.5 (36.3)	52.5 (38.5)	0.837
Program director tenure (as of January 2019): years (ACGME)	13 (6.5)	13.5 (6.6)	13 (6.5)	0.668
Program accreditation year (ACGME)	1965 (18.3)	1964 (16.8)	1964.5 (17.8)	0.681

ACGME = Accreditation Council for Graduate Medical Education; FREIDA = American Medical Association Residency and Fellowship Database; SD = standard deviation.

Alpha-level for all tests for association: 0.05.

*Pearson χ^2 test; Fisher exact test used when expected cell counts are less than 5 or for dichotomous bivariate tests. Tests the association between "Respondents" and "Nonrespondents."

†"All other program types" include community-based, community-based, university-affiliated, and military programs.

‡Excludes US territories due to small cell sizes/data confidentiality.

§Nonparametric equality-of-medians test.

another study of APDIM member program directors.[12] One author with content analysis expertise synthesized a preliminary coding scheme and codebook.

Development of the Coding Scheme

During initial development of the preliminary coding scheme, the authors reviewed representative examples from the survey responses that coincided with specific codes to reach consensus on which codes to apply to the responses. We organized the coding scheme to reflect larger concepts ("domains") and supporting concepts ("themes") within those domains.

Reliability of the Results

One author assigned codes to all essay responses for the questions analyzed. Four additional authors each managed 1 question, ensuring that the responses were independently coded by 2 authors. The authors compared their coded results and used an iterative approach to reach consensus on the final codes. Due to the finite size of the data set and limited number of essay questions used for content analysis, it was not necessary to adjudicate coding differences within each pair of authors or report an inter-rater reliability statistic as the iterative approach enabled the authors to readily resolve differences.

Summative Approach to the Data

We also studied the responses through a summative lens.[13] Specifically, we quantified the number of responses that were self-reported within each domain or theme for each question and created numeric indicators for whether those domains were a source of or a threat to joy, thriving, and effectiveness.

Internal validity of the items within each domain was confirmed using 3 multivariate tests and multiple correspondence analysis: an adjusted likelihood ratio χ^2, Lawley χ^2, and the Doornik-Hansen test for multivariate normality (Table 2). These tests were more sensitive than measures of internal reliability like Cronbach's alpha because the responses were coded into multiple domains and because the domains were cross-compared to test for associations. Tests between the domains into which responses were coded and binary variables used Pearson χ^2 with Sidak-adjusted *P* values to minimize type-I and type-II errors. The alpha-level for all tests was set to 0.05.

RESULTS

The survey response rate was 70.0% (78 out of 112). There was no statistical difference between respondents and survey-eligible PDs based on program or PD characteristics (Table 1). The median number of years the respondents were in their positions was 13 (standard deviation [SD]: 6.5).

We identified and defined 4 domains that brought PDs joy, feeling effective, and sense of thriving in their role: purpose, culture, nature of the work, and achievement or performance (Table 2). We identified 4 domains related to threats: nature of the work, too many responsibilities, culture, and lack of support. We

Table 2 Domains Identified by Program Directors, with Definitions/Examples and Representative Quotes

Domain	Definition/Example	Representative Quotes
	Sources of joy/effectiveness/thriving	
Purpose	Overarching ideas or principles that give the respondent meaning in their work or a sense of mission	*"I feel like I support, challenge, and encourage the growth of young physicians."*
Culture	Institutional or department support that includes resources or "moral" support	*"I feel like I am thriving—I have a lot of autonomy from my chair and a great team of APDs—I don't want another job."*
	Connections or relationships with others including their team of APDs, office staff, core faculty	*"Fortunately for me, I work with some of the best faculty, who have been with me for over 30 years. My Program Director still works with me as a mentor and advisor to our residents. Many of our key faculty have been in the department for over 25 years. It's like a family. . . ."*
Nature of the work	Attributes of the work, including being flexible, interesting, creative, and challenging	*"I think what keeps me going is the drive to continually grow, improve, change, innovate, and challenge myself and my team. My job description stays the same, but my actual role is always evolving. I feel that as long as I continue to learn and be enriched by my residents and colleagues, I will feel that I am thriving. "*
	Content of the work, including relationships with residents, teaching, and recruitment of residents	*"I love taking care of my residents, especially during tough times."*
Achievement or Performance	Program or individual resident outcomes or performance either external (ABIM, ACGME), institutional or departmental	*"Absolutely Yes! I have significantly improved the quality of training through innovation and I also learned a lot from my residents. We also improved our board pass rate significantly and maintained it."*
	Professional development, including personal and professional growth and leadership development	*"I feel effective in most parts of my job. After 14 years, my hospital offered me an executive coach who was remarkably helpful in grappling with areas that I was less effective at."*
	Personal validation and confidence of being technically good at the job; developed the skill set to do the job; managerial, utilitarian perspective	*"It took a while to reach this stage but I think I felt very effective by the time I had done the job at least 5 years. It does take a while. You think you're effective early on, but it's not until you reflect back on those early years that you realize you weren't in total control of everything. Experience takes time."*
		" . . . experience of 25+ years promotes equanimity."
	Feeling valued, respected, or needed in their position	*"I have finally gotten to a point where I feel not only effective, but truly valued and maybe even beloved. It took me at least ten years to feel this way."*
	Threats to joy/effectiveness/thriving	
Nature of the work	Any threat that would fall under defined PD responsibilities; for example, working with ACGME changes or recruitment	*"I have thrived less because more of what I do now is checking boxes, going to meetings, begging for money, and protecting the residents from being the solution to everyone's problems."*
		" . . . Too much administrative work now."
Too many responsibilities	Anything outside of the PD role; too much service time, taking on a role outside of PD	*" . . .more and more administrative work has crept into my role, decreasing my direct contact time with the residents."*
Culture	Instances with culture as a general concept noted a threat	*"Over the past 2 years, we have been dealing with several disgruntled residents. Despite many years' perspective on what a resident should be learning and implementing a multitude of educational innovations with regular resident input, there appears to be a disconnect in expectations."*
Lack of support	Instances where lack of support is noted as a threat, including financial threats	*"I love my faculty and residents, but don't feel supported by administration. Our DIO is viewed as a 'threat' to our program by both residents and faculty."*
Other	Other threats not already defined	*"Residents' expectations and sense of entitlement have had a negative impact on my professional enjoyment as a PD."*
Change over time	How PD feelings change over time	*"I do feel effective, but perhaps less so than I felt ten years ago. This is largely due to hospital economics and 'throughput' concerns which are frequently given a higher priority by hospital administration than are the teaching programs' needs. This has been true at both institutions where I've served as PD, and includes the institution where I now serve as Medicine PD and DIO."*

ABIM = American Board of Internal Medicine; ACGME = Accreditation Council for Graduate Medical Education; APD = associate program director; DIO = designated institutional officials; PD = program director.

Table 3 Program Director Responses by Coded Domains

Domains*,†	No. Respondents (Column %)				
	Reasons why PDs continue in role (n = 74)	Things that bring PDs joy and achievement? (n = 78)	Reasons PDs feel they are effective (n = 68)	Reasons PDs feel they are thriving (n = 69)	Reasons PDs strongly considered leaving the position (n = 65)
Purpose	35 (47.3)	37 (47.4)	6 (8.8)	7 (10.1)	18 (27.7)
Culture	17 (23.0)	15 (19.2)	19 (27.9)	18 (26.1)	18 (27.7)
Nature of the work	50 (67.6)	68 (87.2)	12 (17.7)	19 (27.5)	14 (21.5)
Achievement or performance	17 (23.0)	22 (28.2)	37 (54.4)	28 (40.6)	3 (4.6)
Threats	3 (4.1)	14 (18.0)	18 (26.5)	33 (47.8)	61 (93.9)
Change over time	1 (1.4)	32 (41.0)	19 (27.9)	0 (—)	0 (—)

PD = program director.

Multiple responses allowed for each question; total number of responses will exceed number of respondents to each question and total column percentages will exceed 100.

*Multivariate tests for survey responses coded into each "domain" for each survey questions: Adjusted likelihood ratio χ^2 (465 degrees of freedom): 635.41; $P < .001$; Lawley χ^2: (464 degrees of freedom): 610.27; $P < .001$; Doornik-Hansen test for multivariate normality: χ^2: (62 degrees of freedom): 5572.742; $P < .001$.

†Multiple correspondence analysis (Burt/adjusted inertias) for confirmation of internal validity of the items within each "domain:"
Why continue?: Total inertia (TI) = 0.02; 6 dimensions.
Joy and Achievement: TI = 0.02; 7 dimensions.
Feel Effective?: TI = 0.01; 8 dimensions.
Thriving in Role?: TI = 0.02; 8 dimensions.
PD Ledge: TI = 0.02; 6 dimensions.

also identified reasons why PDs felt their effectiveness changed over time.

Table 3 cross-compares the percentage of responses coded into 1 or more of the domains derived from open-ended coding: why PDs continue in their roles; aspects of their job that bring them the greatest joy and sense of achievement; feeling effective in the PD role; feeling that they are thriving in the PD role; and an issue(s) brought them to the PD "ledge" whereby they strongly considered leaving their position. All cross-comparisons demonstrated multivariate normality (Doornik-Hansen test) and internal validity (multiple correspondence analysis [Burt/adjusted inertias]) of the items within each domain ($P < .001$).

Among PDs who reported why they continue in their role, the 2 highest domains coded into which responses coded were nature of the work (67.6%; 50 out of 74) and purpose (47.3%; 35 out of 74). Those domains were the 2 highest for respondents who reported job aspects that bring them the greatest joy: nature of the work at 87.2% (68 out of 78) and purpose at 47.4% (37 out of 74), ($P < .001$).

Of PDs who reported why they considered resigning, 93.9% (61 out of 65) coded into the domains of 'threats.' Among PDs whose response described a change over time in the role, 41.0% (32 out of 78) related this change to their sense of joy and achievement. Additionally, 27.9% (19 out of 68) reported a change over time in feeling effective.

Table 4 compares respondents coded as "feeling effective as program director" affirmatively or not/equivocal to those coded as thriving in their role affirmatively or not/equivocal. Of those feeling effective, 57.5% (35 out of 61) are thriving compared to 42.6% who feel effective but are not thriving ($P = .026$); 75% (12 out of 16) of those not feeling effective are also not thriving. The magnitude of impact for each domain is illustrated in the Figure, demonstrating the diminution of achievement and purpose, and the increased magnitude of threats, for those not feeling effective or thriving.

Table 5 reports key resources that PDs described as important to their success.

DISCUSSION

It is important to understand reasons for attrition of medical education leaders.[14] In contrast to prior studies, [3,15,16] this study provides important insights on reasons why PDs remain. We identified 4 domains representing positive attributes of long-standing PDs: purpose, culture, nature of the work, and sense of achievement. We identified threats, which, if mitigated, may promote PD longevity.

The domains of nature of the work (67.6%) and purpose (47.3%) are the most common reasons why PDs continue in their roles. These domains also bring the greatest joy (87.3%, 47.4%, respectively). Nature of the work was defined as job attributes and content, including working with residents. Physicians who spend at least 20% of their time in aspects of work most meaningful to them have lower prevalence of burnout.[17] Connecting work with serving and investing in positive relationships creates work with purpose and fosters long-term job

Table 4 Effective versus Thriving Response Comparison

Feels effective as PD	No. of Respondents (Column %)	No. of Respondents (Column %)	
Feels thriving as PD	Yes (n = 61)	No/Equivocal (n = 16)	*P* Value*
Yes	35 (57.4)	4 (25.0)	**.026**
No/Equivocal	26 (42.6)	12 (75.0)	
Feels effective as PD			
Domains	Yes (n = 52)	No/Equivocal (n = 16)	*P* Value†
Purpose	6 (11.5)	0 (—)	.692
Culture	19 (36.5)	0 (—)	**.030**
Nature	8 (15.4)	4 (25.0)	.964
Achievement or performance	34 (65.4)	3 (18.8)	**.007**
Threats	6 (11.5)	12 (75.0)	**<.001**
Change over Time	13 (25.0)	6 (37.5)	.939
Feels thriving in role as PD			
Domains	Yes (n = 32)	No/Equivocal (n = 37)	*P* Value†
Purpose	5 (15.6)	2 (5.4)	.651
Culture	12 (37.5)	6 (16.2)	.240
Nature of the work	13 (40.6)	6 (16.2)	**.032**
Achievement or performance	20 (62.5)	8 (21.6)	**.003**
Threats	0 (—)	33 (89.2)	**<.001**

PD = program director.

Multiple responses allowed for each question; total number of responses will exceed number of respondents to each question and total column percentages will exceed 100.

*Bivariate test (Fisher Exact).

†Bivariate test with 1 degree of freedom (Sidak-adjusted *P* values).

satisfaction among physicians.[18,19] Ensuring that PDs work with residents and fulfill their purpose in a culture that provides appropriate resources and support are imperative for PD longevity.

In addition to understanding what brings PDs joy and meaning, our study informs why PDs feel effective and are thriving (Table 4). It follows that a sense of achievement was most frequently cited by both PDs who feel *effective* compared to those who do not (65.4% vs 18.8%, *P* = .007) and PDs who are *thriving*, compared to those who are not (62.5% vs 21.6%, *P* = .003). But, beyond achievement, nature of the work was also associated with PDs thriving. We found it is possible that PDs may feel effective without thriving but unlikely that PDs will thrive without feeling effective (Table 4, *P* = .026). PDs who find joy in their work, choose to stay in the role, and are also thriving all identify nature of their work as a reason.

Improved understanding of PD challenges may inform opportunities for retention. We asked PDs what "brought them to the ledge" with purposefully vague language to minimize response bias. Respondents shared important insights, with almost all (93.9%) coded as threats. These multifactorial threats spanned many domains and were similar to previously identified domains of PD burnout:[12] nature of the work, excessive responsibilities, culture, and lack of support (Table 3). The multitude of threats identified highlights the diversity and multiplicity of demands and tensions for PDs, including protecting and mentoring residents, supporting trainee professional and personal growth, ensuring accreditation requirements are met, managing their own clinical productivity, resource negotiation with hospital and departmental leaders, and balancing professional and personal responsibilities.

Our study adds to existing literature on PD job satisfaction.[12,15] For example, dissatisfied PDs are 2.5 times more likely to change jobs than satisfied PDs.[16] Shorter PD job duration is associated with increased administrative "hassles," long work hours, dissatisfaction with promotion opportunities, and concerns about resources.[20] The long-standing PDs in our study report a dynamic evolution, or "change," to their joy and achievement (41%) and their effectiveness (27.9%), which has not been previously reported. It is essential for PDs to remain in the role long enough to

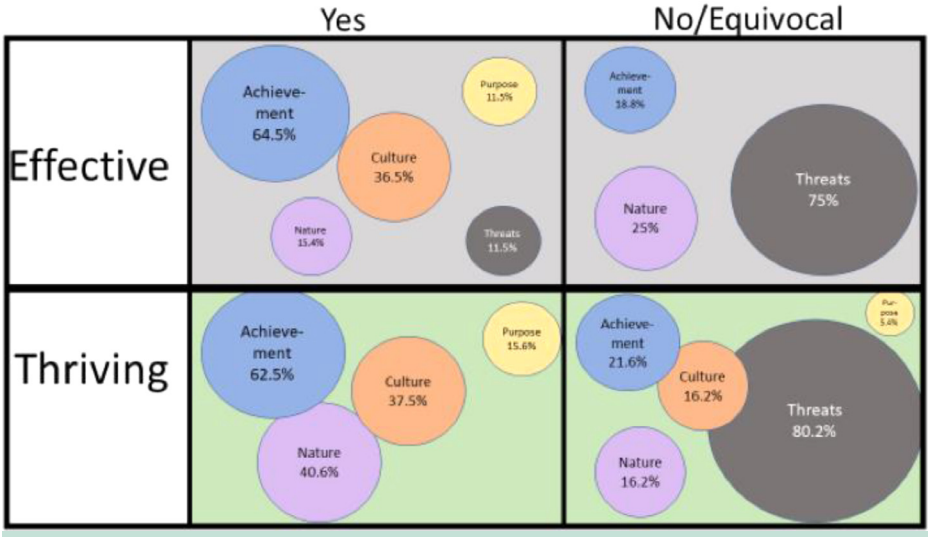

Figure Magnitude of domains related to program directors feeling effective and thriving.

Table 5 Self-Reported Resources that Program Directors Identified as Critical to Their Success

Q16: How have you used key institutional/departmental supports to be effective?
Q17: How have you used your at-work team (e.g., APDs, program coordinator, chiefs) to be effective?
Q19: In times when you have not had the support needed to be effective, what was your solution? Consider the following groups in your response: GMEC/DIO, Chair, Hospital Leadership, internal or external mentors, APDIM or other external organizations.
Support from chiefs of hospital, GME leadership, and especially the department chair, including financial support and emotional security knowing the educational mission is valued
ACGME requirements for the program and CLER visits for the institution
Faculty development offerings by AAMC and other developmental training and coaching for the PD
Cultivating effective relationships with leadership with regular communication about the training program
Support for chief medical residents
A team of Associate Program Directors, Program Coordinators, and faculty that have clear roles and responsibilities
APDIM and other organizations that provide external mentorship
Internal Mentorship and like-minded leaders

AAMC = Association of American Medical Colleges; ACGME = Accreditation Council for Graduate Medical Education; APDIM = Association of Program Directors in Internal Medicine; CLER = Clinical Learning Environment Review; DIO = designated institutional officials; GME = graduate medical education; GMEC = graduate medical education committee; PD = program director.

experience the unique challenges and responsibilities of the position and develop confidence managing them. Our study participants were the most experienced PDs, with a mean tenure of 13 years. Discovering their continued threats underscores the importance of supporting novice PDs with resources and mentorship (Table 5). Early PDs experience the same threats, without the confidence and skills gained from experience.

Our study has several limitations. We chose to survey PDs who had been in their position for at least 10 years, which may not capture stressors inherent to early-career PDs. Additionally, the survey respondents may represent programs and institutions whose environments are more favorable for promoting longevity. Only internal medicine programs were included; thus, the results may not be representative of other specialties. However, we speculate that there is overlap in the PD role across specialties. As our survey data collection was not iterative we were not able to apply traditional qualitative analysis methodologies such as grounded theory[21] and instead agreed upon content analysis, which allows for analysis of written reflections.[22] Nevertheless, the domains identified in our study remain important and can serve as a springboard to future study of factors that contribute to PD longevity.

CONCLUSIONS

We identified domains that promote and threaten PD retention. Nature of the work is associated with long-standing PDs continuing in their role, finding joy in their work, and promoting a sense of thriving. Long-standing PDs find purpose in working with residents. PDs who do not feel effective or thriving consistently describe threats. PDs can use the results of this study to self-reflect on the domains identified, consider how they shape their own feelings of joy, effectiveness, and thriving, and how these feelings change over time. Academic medicine leadership should prioritize mitigation of the identified threats, as PD retention remains a major area of concern across graduate medical education.

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SUPPLEMENTARY DATA

Supplementary data to this article can be found online at https://doi.org/10.1016/j.amjmed.2021.09.001.

APPENDIX

Survey Instrument: Factors of Resilience and Sustainability of Long-Term IM PDs

Start of Block: Landing Page

Q1

Factors of Resilience and Sustainability of Long-Term Internal Medicine Residency Program Directors

The purpose of this survey is to collect qualitative data from long-term program directors to identify personal, programmatic, and institutional themes that encourage resilience. The analysis will be used by a subcommittee of the APDIM Council to inform the Council's goal of developing a toolkit for program directors to encourage resilience and the long-term goal of publishing the results in peer-reviewed medical education journals, to better inform the graduate medical education community. **Upon submitting your final responses, you will receive a copy of your individual survey results by email.**

This survey should take **approximately 15 minutes to complete**. Your data will be collected using Secure Socket Layer encryption. **Please use the survey "BACK" button to return to a previous page (NOT your browser's "back" button).** If necessary, **you may pause and return to the survey later** by closing your browser and clicking on the survey URL in your invitational email message, when you are ready to resume. To ensure that your responses are saved on the page for which you last entered data, simply click "NEXT" before closing your browser. **Please complete this survey by 11:00 PM Eastern Time on Thursday, February 28, 2019.**

You have been invited to participate because you are an internal medicine residency program director whose program is an APDIM member as of August 2018, and because you have held your program director position entering your tenth year or more. **Participation is voluntary.** Refusal to participate will not affect your or your program's APDIM membership. It is your right not to answer any questions that you do not wish to answer. This study and its protocol (Number: 19-AAIM-105) were submitted to Pearl IRB (registered with the U.S. Department of Health and Human Services Office for Human Research Protections as IRB00007772) for exemption determination in accordance with FDA 21 CFR 56.104 and DHHS 45 CFR 46.101 regulations, and have been deemed **exempt** under 45 CFR 46.101(b) category 2.

If you encounter technical problems, please **contact** Alliance for Academic Internal Medicine Surveys staff at surveys@im.org or 703-341-4540. If you feel that your rights as a participant in this study have not been upheld, please contact Pearl IRB at info@pearlirb.com or 317-602-5917.

Thank you for helping to enhance your profession!

Q2 ***By clicking below, you acknowledge that your participation is voluntary.***

☐ *Click "PROCEED" (below) to begin.*

End of Block: Landing Page

Start of Block: Demographics

Q3

Demographics

Q4 **In what year were you born?** ***Enter as four digits.***

_____

Q5 **What is your gender?**

○ Female
○ Male
○ Other
○ Prefer not to answer

Q6 **What is your current relationship status?**

○ Married
○ In a relationship; not married
○ Not in a relationship
○ Prefer not to answer

Q7 **Do you have children?**

○ Yes
○ No
○ I am expecting/My partner or spouse is expecting
○ Prefer not to answer

Q8 **Have you previously served as an associate program director (APD) at your current institution or elsewhere?**

○ Yes
○ No

Display This Question:
If Q8 = Yes

Q9 **For how many years did you serve as an APD?** ***Enter numerals only.***

_____

Q10 **What is your specialty, subspecialty, or career designation?** ***Check all that apply.***

☐ Allergy/Immunology
☐ Cardiology
☐ Critical Care Medicine
☐ Emergency Medicine
☐ Endocrinology
☐ Gastroenterology
☐ General Internal Medicine: ambulatory only
☐ General Internal Medicine: hospital and ambulatory
☐ Geriatrics
☐ Hematology
☐ Hospice and Palliative Care

☐ Hospitalist: General Internal Medicine
☐ Hospitalist: Subspecialty
☐ Infectious Diseases
☐ Medicine - Pediatrics
☐ Nephrology
☐ Oncology
☐ Preventive/Occupational Medicine
☐ Pulmonology
☐ Rheumatology
☐ Sleep Medicine
☐ Other (please specify): _____

End of Block: Demographics

Start of Block: Qualitative Questions

Q11

Your Role and Experiences as a Residency Program Director

Q12 **Why do you continue in your role as program director (PD)?**

_____

Q13

What parts of your job as a program director bring you the greatest joy and sense of achievement? How has this changed over time?

_____

Q14

In general, do you feel effective in your role as program director (PD)? Please explain why or why not.

If you do feel effective, how long did it take to feel that way?

_____

Q15

In general, do you feel you are thriving in your role as PD? Please explain why or why not. If you are thriving, what allows you to thrive?

_____

Q16 **How have you used key institutional/ departmental supports to be effective?**

_____

Q17 **How have you used your at-work team (e.g., APDs, program coordinator, chiefs) to be effective?**

_____

Q18 **As a program director, what are the major challenges to your mental and physical health as they relate to your job? How successful would you consider your personal coping skills?**

_____

Q19 **In times when you have not had the support needed to be effective, what was your solution?** ***Consider the following groups in your response: GMEC/ DIO, Chair, Hospital Leadership, internal or external mentors, APDIM or other external organizations.***

_____

Q20

What sort of issues brought you to the program director (PD) "ledge" (where you strongly considered leaving the position)? What brought you back (i.e., what made you stay in the position despite feeling strongly that you might leave the position?)?

_____

Q21 **What advice would you share with new PDs as they begin the journey?**

_____

Q22

We have just one more question. Please click "Next" to proceed.

End of Block: Qualitative Questions

Start of Block: End of Survey

Q23 **Please share any final comments that you think are important about sustaining yourself in the program director role.**

_____

Q24

On behalf of the ADPIM Council, thank you for providing these valuable responses. Upon submitting your responses, you will receive a copy of them via email.

Please click "SUBMIT" to complete the survey.

End of Block: End of Survey

APDIM = Association of Program Directors in Internal Medicine; DIO = designated institutional official; GMEC = graduate medical education committee; IM = internal medicine; PD = program director.