Tailoring the Professional Development of Volunteer Clinical Faculty at Regional Medical Campuses: A Needs Analysis and Targeted Interventions

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Abstract

Volunteer Clinical Faculty (VCF) are essential for the education of medical students at most medical schools with regional campuses. Indiana University School of Medicine is the largest medical school in the United States, with over 1400 medical students experiencing part or all of their medical education at 9 campuses (one academic center and 8 regional medical campuses). Given the large number of students learning in the community, we surveyed our VCF in 2016 to better understand their characteristics, reasons for teaching, and professional development needs. Survey participants reported personal enjoyment from teaching as their primary reason for continuing to teach, but time pressure as a limiting factor. They identified faculty development opportunities in areas of efficient teaching, giving feedback, and adapting teaching style for various learners. Interventions were designed to create a unique, state-wide model of both face-to-face and online professional development to ensure the success of our VCF.

Introduction

Volunteer Clinical Faculty (VCF) are essential for the education of students at most medical schools, but they are especially important for those with regional medical campuses (RMCs). This is becoming even more important in medical education with the shift from traditional classroom teaching to an experiential model in which students are introduced to clinical medicine from the start of medical school.[1,2] Accreditation and medical-oversight agencies such as the Association of American Medical Colleges (AAMC) and Liaison Committee on Medical Education (LCME) require outpatient experiences as part of medical training. Additionally, some medical schools have increased their medical school class size (or plan to do so) to address physician shortages. These schools often turn to VCF to fulfill the need for additional physician educators.

Across the nation, recruitment of VCF remains a challenge. In a regional medical campus model, few studies have investigated why physicians become involved in teaching medical students, what motivates involvement, and what unmet needs they have to become more successful as educators. Some have speculated that a personal belief in the importance of education is a strong motivator.[3] Personal satisfaction and opportunity to give back rates at or near the top when VCF are surveyed.[4] Other benefits to VCF include receiving continuing medical education (CME) credit, fulfilling maintenance of certification (MOC) requirements, and receiving financial compensation for their time.[2,4] Particularly with RMCs, research supports the importance of using-evidence based models to develop faculty in the community.[5] Along with benefits, there are also challenges in working with VCF. Both the orientation and training of preceptors remain a particular struggle for medical schools.[6] Many VCF are geographically dispersed, making it difficult for them to frequently access the available faculty development resources of the institution. There remains a lack of evidence supporting which approach would be most efficacious for meeting the ongoing faculty development needs of VCF.[7] Another challenge involves the financial implications for VCF involved in teaching. Though financial incentives or stipends are occasionally available, funds are becoming increasingly difficult to come by in today's healthcare environment. Time is also a frequently-cited barrier to precepting medical students.[2] Hosting students can affect physician productivity, resulting in less time to care for patients, possible decreased income, and potentially increased patient-care responsibilities placed on partners in the practice who may have to see additional patients.

Local Context

As a result of medical school expansion in the 1960s, the first RMCs were developed. Since the call for increased medical school enrollment by the AAMC in 2006, the rate of expansion of RMCs has increased, employing a variety of models for student education and training.[8,9] Indiana University School of Medicine's (IUSM's) expansion has mirrored this national trend.

As the largest medical school in the US with 9 campuses throughout the state, the majority of IUSM's approximately 1400 medical students receive much of their training from VCF. The institution's campuses are situated in both urban and rural areas in 2 different time zones. Nearly half of the students are in Indianapolis, and the remaining students are physically located at 8 RMCs that span the state of Indiana.

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The furthest RMCs are approximately 3 hours (by car) from the main campus in Indianapolis. This geography presents unique challenges to our institution, not only with the number of faculty needed, but also the distance from which we must recruit them.

As IUSM expanded its RMCs and class size, the need for additional VCF was identified. VCF are not recruited centrally. Rather, each of the RMCs recruit VCF and each of the 11 clerkship programs based in Indianapolis also recruit. When hired, each VCF is assigned an academic department and a campus affiliation. While VCF can be used by any campus in the system, most work primarily with one campus.

Appointing VCF is managed centrally through our Faculty Affairs unit and clerkship directors and RMC education personnel work with the Faculty Affairs office to verify credentials and manage the reappointment process. While both the faculty database and student placements are housed in centralized systems, the 2 systems do not interface, such that the faculty affairs unit knows which faculty are appointed, but not if and when the VCF are hosting a learner. As with many medical schools with RMCs, the decentralization and lack of clear "ownership" for VCF issues can create difficulties. However, units in faculty affairs and educational affairs try to work together collegially to help VCF have a seamless experience when working with the university.

With this context in mind, we launched a survey of our VCF in 2016 to better understand their demographic characteristics, reasons for teaching, and professional development needs. The purpose of this study was two-fold: 1) to report on the VCF characteristics, reasons for teaching, and development needs and 2) to disseminate the interventions we implemented as we work towards developing a unique model of state-wide faculty development. Our research questions included:

RQ 1: How often and why do VCF teach?

RQ 2: How do VCF connect with the institution? Who do they consider to be their supervisor or their primary point of contact within the institution? How and to what extent do they feel connected to the institution?

RQ 3: What types of faculty development do VCF engage in? What resources of the institution do they access?

RQ 4: What faculty development needs do they have? How would they prefer to engage in faculty development (online, in-person)?

Methods

Survey Development

We developed our VCF survey by consulting literature and existing instruments on teaching competencies and faculty vitality.[11,12] Our survey instrument included 2 components: a core block of questions and 4 randomly assigned sub-surveys. First, the core block of questions included 13 items focused on VCF confidence in teaching competencies (adapted from Smith and Simpson,[10] university resource utilization, perceptions of school leadership, and faculty vitality. Second, all respondents were each randomly assigned to receive one of 4 sub-surveys, consisting of 2-5 questions each. This methodology, called split questionnaire survey design, has been shown to increase response rates and limit fatigue, while still maintaining a high degree of reliability.[13] The sub-surveys included questions on one of the following topics:

A. faculty development needs
B. relevant questions from the Faculty Vitality Survey on perceptions of university leadership and climate[11,12]
C. satisfaction with their role (adapted from Harvard University's COACHE faculty satisfaction survey),[14] and
D. satisfaction with their title and reward mechanisms.

The survey and subsequent distribution process was approved by our institutional review board.

Sample

This study was limited to faculty at Indiana University School of Medicine. In the spring of 2016, we distributed the survey via email to 2625 volunteer faculty using Qualtrics survey software. The email was sent from our general office email account, and the Qualtrics survey software allowed us to send weekly reminders over a period of 6 weeks to those faculty who had not yet responded.

After removing volunteer basic science and research faculty, the final sample consisted of 619 VCF, indicating a response rate of 24%. The majority of our participants were male (72%, n=447), and most held the rank of assistant professor (88.1%, n=545).

Table 1. Participant Demographics

Characteristic	Number (%)
Rank	

Assistant	545 (88.1)
Associate	46 (7.4)
Full	19 (3.1)
Lecturer	9 (1.4)
Gender	
Male	447 (72.2)
Female	172 (27.8)
Degree	
MD	557 (90)
DO	33 (5.3)
Other	29 (4.7)
Race/Ethnicity	
White	479 (77.4)
Asian	100 (16.2)
Hispanic/Latino	18 (2.9)
Black	16 (2.6)
I prefer not to respond	4 (0.6)
Two or More races	2 (0.3)

Although the sub-surveys were evenly distributed to participants randomly, some participants chose not to respond to these questions, thus explaining the variability in the number of respondents across sub-surveys.

Table 2. Response Rates by Survey Section

Survey Section	Number of Responses	(% of sample)
Core Survey: Teaching Competencies, access to university resources, teaching experience and university contacts, Engagement in Professional Development, Sense of Belonging, and Satisfaction (from Faculty Vitality Survey©)	619 (24)	
Sub-Survey A: Faculty Development Needs Assessment	113 (18)	
Sub-Survey B: Perceptions of University Leadership and Climate (from Faculty Vitality Survey©)	130 (21)	
Sub-Survey C: Reasons for Serving as a VCF	125 (20)	
Sub-Survey D: Recognition and Title Preferences	126 (20)	

Results

RQ 1: How often and why do VCF teach?

VCF at IUSM reported regularly supervising learners, with the majority of respondents taking between 1-10 learners per year (69%, n=367). The mean amount of time the VCF had been teaching was 15 years. When asked how long our VCF intended to teach into the future, responses were distributed across the sample with about one-third indicating that they were not sure how long they planned to serve.

Table 3. Duration VCF Plan to Serve

	Frequency (%)
Less than 5 years	22 (18)
More than 5, but less than 10 years	24 (19)
More than 10 years	38 (31)
Not Sure	41 (33)

In addition, participants were also asked 2 open-ended questions about their service. First, they were asked to list the top 3 reasons they would continue serving as a VCF and they also were asked the 3 primary reasons they would discontinue teaching. Most frequently, reasons to continue focused on satisfaction/enjoyment from teaching (63%); self-learning/keeping up-to-date (38%); contributing to the educational mission and disseminating knowledge (38%); and a sense of duty/giving back to the medical school (35%). By and large, VCF cited time constraints as the primary reason for discontinuing teaching (47%). Other notable, but less frequent reasons cited included feeling unappreciated (14%); loss of control over/mandates in the curriculum (13%); and bureaucracy/paperwork associated with the position (10%). Figures 1 and 2 illustrate a visualization of the frequency of responses to these questions.

Figure 1. Reasons to continue serving as a VCF.

Figure 2. Reasons to discontinue serving as a VCF.

*These figures are a visualization of the frequency of responses provided by respondents. The size of the word represents how frequently it was expressed as a reason to continue volunteering at IUSM.

RQ 2: How satisfied are VCF with their role?

Using items from the Faculty Vitality Survey,[11,12] we asked VCF to rate their level of satisfaction with the school's leadership, the direction of the institution, and their role within it. About one-third of participants strongly or somewhat agreed that they felt a sense of belonging within the school (see Table 4 for additional frequency details). They were also ambivalent about the level of inclusivity created by school leadership. More frequently, participants did not feel

as if their opinions were routinely solicited by the school. Additionally, there was wide variation among responses to the statement: "My contributions are valued by the leaders at [our institution]." Approximately one-third of our respondents neither agreed nor disagreed with this statement (Table 5 includes frequencies and percentages from all sub-survey questions). Despite these challenges, most of our participants were very or somewhat satisfied with their work (see Table 6).

Table 4. Faculty Vitality Survey Items for All Participants (n=619)

	Frequency (%)				
	Strongly Agree	Somewhat Agree	Neither Agree nor Disagree	Somewhat Disagree	Very Disagree
I feel a sense of belonging at IU School of Medicine	48 (7.8)	176 (28.4)	177 (28.6)	76 (12.3)	37 (6)

Table 5. Faculty Vitality Survey Items (Sub-Survey B, n=130)

	Frequency (%)				
	Strongly Agree	Somewhat Agree	Neither Agree nor Disagree	Somewhat Disagree	Very Disagree
Opportunities for faculty development are offered by IUSM.	16 (12.3)	38 (29.2)	56 (43.1)	14 (10.8)	4 (3.1)
There is a shared vision at IUSM.	13 (10.0)	34 (26.2)	63 (48.5)	10 (7.7)	8 (6.2)
My contributions are valued by the leaders at IUSM.	25 (19.2)	36 (27.7)	43 (33.1)	17 (13.1)	8 (6.2)
Effective strategies to retain productive faculty are employed by leaders at IUSM.	12 (9.2)	19 (14.6)	70 (53.8)	17 (13.1)	10 (7.7)
An inclusive environment is created by the leaders at IUSM.	14 (10.8)	28 (21.5)	63 (48.5)	10 (7.7)	12 (9.2)
Conflict is effectively handled by the leaders at IUSM.	12 (9.2)	12 (9.2)	96 (73.8)	2 (1.5)	4 (3.1)
My opinions are routinely solicited by IUSM.	11 (8.5)	21 (16.1)	52 (40.0)	25 (19.2)	18 (13.8)
I am satisfied with the guidance I receive to improve my work.	11 (8.5)	22 (16.9)	66 (50.8)	17 (13.1)	11 (8.5)

Table 6. Overall Satisfaction with the VCF role (n=619)

	Frequency (%)				
	Very Satisfied	Somewhat Satisfied	Neither Satisfied nor Dissatisfied	Somewhat Dissatisfied	Very Dissatisfied
How satisfied are you with the VCF role?	340 (55)	150 (24)	8 (1.3)	16 (2.6)	1 (0.02)

RQ 3: How confident are they in their teaching abilities? What types of faculty development do VCF engage in? What resources of the institution do they access?

Smith and Simpson's teaching confidence scale[10] was used better understand our VCF's level of confidence with a variety of teaching skills and tasks, including providing feedback, modifying instruction, and communicating professional values. This instrument uses a 4-point scale from "very confident" to "not at all confident," with the sentence stem: "Please rate your confidence with the following teaching tasks." Generally, our VCF were confident in their abilities to perform most teaching tasks, with percent responding "very confident" ranging from 70.3% ("Communicate important values inherent to the profession") to 40.7% ("Accommodate different learners by using a variety of teaching methods"). However, participants showed the most variability in the aforementioned item regarding accommodating different learners.

Table 7. VCF Confidence in Teaching Tasks (adapted from Smith and Simpson)[10] (n=619)

Item	Very Confident	Somewhat Confident	Not Very Confident	Not at All Confident
Provide helpful feedback to learners	412 (66.6)	94 (15.2)	6 (1.0)	0 (0)
Use learner feedback to modify instructional approaches	323 (52.2)	172 (27.8)	15 (2.4)	2 (0.3)
Communicate expectations to learners	351 (56.7)	148 (23.9)	11 (1.8)	0 (0.0)
Demonstrate a general belief that all students are capable of learning	429 (69.3)	78 (12.6)	2 (0.3)	1 (0.2)
Encourage collaboration among learners	364 (58.8)	136 (22.0)	9 (1.5)	0 (0.0)
Be accessible to learners	390 (63.0)	112 (18/1)	7 (1.1)	3 (0.5)
Match varying teaching methods with specific instructional objectives	254 (41.0)	224 (36.2)	28 (4.5)	3 (0.5)
Accommodate different learners by using a variety of teaching methods	252 (40.7)	213 (34.4)	43 (6.9)	3 (0.5)
Present material that is sequenced appropriately for learners	283 (45.7)	198 (32.0)	28 (4.5)	0 (0.0)
Enhance motivation of learners by demonstrating relevance to future needs	392 (63.3)	109 (17.6)	9 (1.5)	0 (0.0)
Manage the learning environment so that maximum learning will result	269 (43.5)	211 (34.1)	25 (4.0)	5 (0.8)
Manage the instructional process in a timely manner	283 (45.7)	205 (33.1)	21 (3.4)	2 (0.3)
Communicate important values inherent to the profession	435 (70.3)	74 (12.0)	2 (0.3)	0 (0.0)
Build confidence in learners by helping them to successfully meet learning objectives	350 (56.5)	154 (24.9)	6 (1.0)	0 (0.0)
Deal appropriately with issues that relate to various aspects of diversity	315 (50.9)	164 (26.5)	29 (4.7)	1 (0.2)
Project a sense of warmth toward learners	408 (65.9)	92 (14.9)	10 (1.6)	0 (0.0)
Advise students of career opportunities in the discipline or profession	412 (66.6)	86 (13.9)	10 (1.6)	0 (0.0)

We asked our participants a number of questions regarding the types of professional development activities they participate in. In particular, we were interested in the number of faculty development activities they engaged in within the past year across 4 areas: teaching and learning, leadership, diversity and inclusion, and career management. VCF reported participating in diversity and inclusion related activities least frequently (n=127, 20%) of these faculty development categories. Over half of our VCF participated in 0 faculty development programs regarding diversity and inclusion (56%) and career management (55%). However, about 45% of VCF had participated in at least one teaching and learning-related faculty development program within the last year (n=277). When asked to what extent they were engaged in faculty development activities in comparison to

other professionals in the field, most respondents reported only "some" (n=108, 17%) or "very little" (n=255, 41%) engagement.

Volunteer faculty at IU (both clinical and basic science) do have access to a number of resources within the institution, including an IU email address, free continuing medical education opportunities, access to the library, and free or discounted software. Anecdotally, we had heard that many of our VCF were unaware of these resources; so, we used this survey instrument as a way to learn more. Of the VCF who responded to the survey, about one-third had heard of just "a few" of these services and products. Additionally, 71% said they had used "none" or just "a few" of these resources.

RQ 4: What faculty development needs do they have? How would they prefer to engage in faculty development (online, in-person)?

When the VCF were asked what they believed their top needs were for faculty development, teaching in a busy practice, active learning, and teaching using case studies were the top 3 identified needs. Topics with which they indicated the least interest included teaching in a laboratory, team-based learning, and teaching on rounds. Table 4 details the frequency each topic was selected by survey respondents; up to 3 selections could be made by each respondent.

Table 8. Top needs for faculty development, as indicated by participating VCF.

Item	Frequency
Active learning	41
Bedside teaching	25
Case studies	36
Setting clear expectations for learners	33
Competency-based education	28
Discussing difficult and/or controversial issues	27
Effective explanations	24
Evaluating learners	37
Giving effective feedback	28
The path to promotion (to Volunteer Associate/Full Professor)	23
Problem-Based Learning (PBL)	31
Small group teaching	28
Strategies to deal with difficult learners	25
Teaching in a busy medical practice	63
Teaching in a laboratory	1
Teaching on rounds	13
Team-Based Learning (TBL)	12
Time management	17
Using humor in instruction	25
Using technology in teaching	26
Writing educational goals and objectives	15

In terms of the delivery mechanism for faculty development, receiving an electronic newsletter, participating in live webinars, and engaging in locally held faculty development events were preferred. One-on-one mentoring, receiving a hard-copy manual, and online discussion boards were the least preferred methods for faculty development delivery.

Discussion

The education of medical students is dependent upon clinical faculty in every region where medical students are located. Following a decade of expansions of medical schools, the overall number of VCF associated with regional medical campuses and their professional development needs have increased. Like community-based medical schools where community hospitals partner with the medical school as the clinical teaching site rather than a traditional academic teaching hospital,[15] IUSM's RMCs have partnered with community hospitals and physicians to offer clinical experiences to the medical students.

Although our survey results indicated that our VCF were relatively satisfied with their roles, we were concerned that approximately one-third of these critical faculty were not confident they would continue. Indiana University School of Medicine is the only allopathic school in the state; as such, it is critical that we continue to engage our students in community-based education. Time is a critical factor for VCF, so these results helped us to make the case for additional resources to make the teaching process as easy and enjoyable as possible for VCF.

Interventions

In response to the data from our survey, IUSM implemented several interventions including programs that were tailored to meet the specific needs of regional campus VCF and designed to reward them for their contributions to the medical education mission of the school. Ultimately, our goal was to maximize the rewarding aspects of the VCF role and minimize the challenges experienced by these critical faculty. Four new assistant dean positions jointly funded by the educational affairs and faculty development units were created to direct and implement faculty development targeted to VCF. Each assistant dean had between .2 and .4 FTE to accommodate their work. Each assistant dean serves as a liaison for 2 campuses, tailoring faculty development resources to the regional context. The goal was set to have 2 face-to-face faculty development workshops at each campus annually.

The assistant dean team developed a traveling curriculum (Table 9) and shared it with each RMC. This allowed each campus to choose topics appropriate to their local needs, and we offered these onsite when requested. The traveling curriculum took into account the top needs that faculty had identified through the survey, as well as topics that were timely at the medical school as a whole or within the strategic goals of the medical school. Since active learning was identified as a need by faculty, all sessions were designed to incorporate the principles of active adult learning to demonstrate how these concepts can be incorporated into all teaching in which our VCF are involved.

Table 9. Traveling curriculum topics for onsite faculty development workshops at RMCs.

Diversity
LGBT Healthcare Disparities 101
Safe Space Training
Multicultural Competence 101
Unconscious Bias: How this can Affect Patient Care and Work Environment
Health Disparities in Indiana
Evaluation and Feedback
Providing Effective Feedback to Learners
Evaluation of Learners
Meaningful Written Evaluations of Learners
Evaluation Training incorporating the Milestones
RIME (Reporter-Interpreter-Manager-Educator) Framework for Sub-Internships
Personal Development
Promotion of Volunteer Clinical Faculty and "What do I get besides satisfaction?
Benefits for Volunteer Faculty
Medical Library Resources and Literature Searching for the Community Physician Scholar
Writing and Publishing for Volunteer Faculty – It's not that Hard!
Biostatistics and Research for Community Physicians
Teaching Strategies
Clinical Teaching Strategies (1-minute preceptor, SNAPPS, SPIT, Horizontal Learning, Just-In-Time-Teaching, Aunt Minnie)
Teaching Millennials Effective and Interactive Didactics
How to Teach a Learner with a Different Learning Style
Active Learning: Team-Based/Problem-Based Learning
Skill Set Differentiation for 3rd and 4th year Students
Other
Unprofessionalism/Mistreatment of Learners
Peer Review of Teaching Workshop
Specialty-specific topic requests (i.e., teaching in the OR)

Online and asynchronous faculty development resources were made available to VCF to support their teaching development, including purchase of an institutional subscription to TeachingPhysician.org.[15] Teaching Physician is an online resource that connects community physicians to just-in-time resources which include videos, practical clinical teaching tips, and links to further information if needed. Teaching Physician offers CME to physicians through the Academy of Family Physicians, and specific topics are able to be sent in email format with a direct link to specific topics. These resources are promoted to VCF by the assistant deans and via electronic newsletter, and we ensure that all development includes continuing medical education (CME) credit to incent participation.

All of our RMCs employ staff-level education coordinators who recruit VCF, manage communication, and work to retain them. Our survey results indicated that our VCF often communicated most frequently with the staff members. Given their important link directly with VCF, we have developed an emphasis on coordinator professional development. Professional development sessions have been offered to the coordinators during our annual clerkship summits, mid-year retreats, and periodically during monthly meetings. Additionally, the assistant deans make themselves available to the RMC education coordinators via email to answer any questions or brainstorm ideas as to how to better facilitate VCF development.

These strategies have helped us increase the number of academic clinical departments who formally recognize the teaching excellence of VCF during their annual faculty award ceremony has increased. Additionally, the assistant deans are helping to increase the number of VCF seek promotion.

Collaboration among assistant deans with the regional campus faculty and administrators allows for improved communication between the medical school and the VCF. The intent of the 4 assistant dean positions created at IUSM for VCF teaching development outreach was to signal to the entire campus that all faculty are valued and in need of support to be successful. After 18 months of the dean roles being assumed, this intervention is proving to be a model that is slowly but surely giving VCF increased attention that they deserve.

There are many reports of faculty development programs designed to improve the quality of teaching by faculty members and to address what is identified as a concern by over 80% of medical and allied health school deans.[16] Though effective in increasing faculty satisfaction and confidence and widely available at all medical schools, these types of programs often do not reach VCF who are not located at the academic medical center.[4,17]

There are few published reports of formalized programs designed specifically to address the specific needs of VCF. The University of Nevada Reno School of Medicine developed a liaison for their community faculty in partnership with their Office for Community Faculty (OCF).[18] The liaison serves as a resource between their VCF and the library resources needed. Part of their motivation for establishing this program was to serve the VCF, to improve access to educational and clinical care resources, and to better communicate with their VCF. This liaison, however, was focused on a partnership between the VCF, the OCF, and their medical library.[18] The model at IUSM differs from the model at the University of Nevada Reno School of Medicine in that the assistant dean model utilizes faculty members and these members serve as an access point for VCF for all resources and benefits at IUSM. They are also involved in the faculty development of the VCF affiliated with the medical school.

Though still evolving, the IUSM model of assistant deans dedicated to the faculty development and well-being of VCF is one model for addressing the needs identified by VCF at our regional campuses. Direct outreach and asynchronous learning has been the initial focus, and now development of IUSM-specific asynchronous short modules is the next step identified for addressing the needs of these faculty members. Other initiatives include support and encouragement for promotion of VCF (nearly 90% of our current VCF are at the assistant professor rank). With overall satisfaction of VCF high, we hope to continue to recruit and retain the best VCF possible while giving them the support needed to function in the changing health care environment in which they practice.

The education of medical students is dependent upon clinical faculty in every region where medical students are located. Following a decade of expansions of medical schools, the overall number of VCF associated with regional medical campuses and their professional development needs have increased. Like community-based medical schools where community hospitals partner with the medical school as the

clinical teaching site rather than a traditional academic teaching hospital, IUSM's RMCs have partnered with community hospitals and physicians to offer clinical experiences to the medical students.[14]

While the questions on the survey of VCF were written specifically for IUSM, literature suggests that the challenges faced by our faculty are not unique.[5,6] Although our survey results indicated that our VCF were relatively satisfied with their roles, we were concerned that approximately one-third of these critical faculty were not confident they would continue. Indiana University School of Medicine is the only allopathic school in the state; as such, it is critical that we continue to engage our students in community-based education. Time is a critical factor for VCF, so these results helped us and may help other institutions to make the case for additional resources to make the teaching process as easy and enjoyable as possible for VCF.

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