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GROUNDWORK



## Getting Better Together: A Website Review of Peer Coaching Initiatives for Medical Educators

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### ABSTRACT

*Phenomenon:* Peer coaching is a form of faculty development in which medical educators collegially work together to improve their teaching. Benefits include use of evidence-based teaching practices, promotion of collegial discussions, and reflection within the workplace teaching context. Some faculty developers have expertise in designing and offering peer coaching initiatives for medical educators. However, because of a paucity of reporting on these initiatives in the literature, this specialized knowledge is not readily accessible to the health professions education community. This gap hinders practice advancement and creates barriers for new initiative implementation. *Approach:* The authors conducted a website review to identify, examine, and conceptually map characteristics of peer coaching initiatives at Association of American Medical Colleges–accredited medical schools. Forty-five initiatives were included that maintained publicly accessible websites, performed direct observation of teaching with feedback, and had a stated purpose of improving teaching. Data collection included details related to initiative purpose, structure, participation, observation of teaching, feedback, and support of learning. *Findings:* Most initiatives were voluntary and provided formative feedback with the sole purpose of improving teaching. Nearly all used a three-phase process with a preobservation meeting for goal setting, direct observation of teaching, and a postobservation meeting with feedback. Many initiatives required peer coach training and expertise. Reflection, collaboration, confidentiality, and use of an observation instrument were frequently mentioned. *Insights:* This website review provides faculty developers with a knowledge synthesis of how present-day peer coaching initiatives are structured and enacted—laying a foundation to collaborate, build best practices, and identify areas for future research. These findings enable faculty developers to learn from and build upon others' examples. Future research should explore whether there is an ideal coaching model and location for peer coaching within the higher level organization. In addition, researchers should seek to build consensus on initiative characteristics that enhance participation and foster teaching effectiveness.



### KEYWORDS


peer coach; observation; teaching; feedback; reflection

### Phenomenon

Peer coaching initiatives are important components of comprehensive faculty development programs for medical educators.<sup>1</sup> They encourage use of evidence-based teaching practices, promote collegial discussions, and encourage reflection within the workplace teaching context.<sup>2–4</sup> Peer coaching is a faculty development approach that commonly includes direct observation of teaching, feedback, reflection, and collaboration with peers.<sup>5</sup> It is distinct from summative peer review, which is a performance evaluation associated with quality assurance and promotion and tenure.<sup>6</sup>

Although traditional faculty development initiatives are criticized for failure to improve instruction, peer coaching facilitates the transfer of knowledge and skills into workplace teaching practice.<sup>7,8</sup> It creates a sense of inquiry regarding pedagogic practices and promotes collaborative reflection on teaching performance.<sup>9,10</sup> In medical education, the literature provides evidence that peer coaching improves teacher satisfaction, confidence, collegiality, and skill transfer to the teaching environment.<sup>4,11–14</sup> In the educational literature, peer coaching leads to improved knowledge, skills, and attitudes toward teaching.<sup>15–18</sup> A recent meta-analysis also demonstrated improved instructional and achievement outcomes.<sup>8</sup>

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Some faculty developers have expertise designing and implementing peer coaching initiatives for medical educators; however, there is a paucity of reporting on this process. The published literature discusses educational outcomes of individual initiatives, observation instrument validation, and surveys of attitudes and perceived barriers to peer coaching.<sup>4,11,19–22</sup> However, it does not provide a knowledge synthesis of current initiative characteristics. In addition, two Twelve Tips papers provide recommendations for peer observation and peer feedback, but they are limited to personal experience and a narrative literature review.<sup>23,24</sup> This gap hinders the advancement of peer coaching as a faculty development technique and creates barriers to initiative implementation and optimization.

This article aims to provide a knowledge synthesis of present-day peer coaching initiatives for medical educators as they are described on medical school websites. By identifying, examining, and conceptually mapping common characteristics across multiple initiatives, we provide examples to support initiative design, implementation, and future research. We intend for this article to generate conversations and collaboration on best practices of peer coaching for medical educators. In this way, faculty developers interested in peer coaching can learn from the examples of others and get better together.

## Approach

We surmised that medical schools commonly use websites to promote and describe faculty development offerings, including peer coaching, as this was our experience within our own institution. We examined publicly accessible websites, as opposed to conducting individual interviews, as initiative information was readily accessible and allowed us to make comparisons across many schools. We defined peer coaching initiatives as faculty development activities designed to improve teaching through observation of teaching and associated feedback. We kept our definition broad because the literature did not provide a precise definition of a peer coaching initiative. In addition, there was definitional overlap with terms like *peer observation of teaching*, *peer review*, *peer evaluation*, and *consultation on teaching*.<sup>25</sup>

We conducted the website review from December 2017 through March 2018. The primary investigator (AB) identified 166 North American medical schools from the Association of American of Medical Colleges' member directory. Medical schools were located within the United States and Canada. To

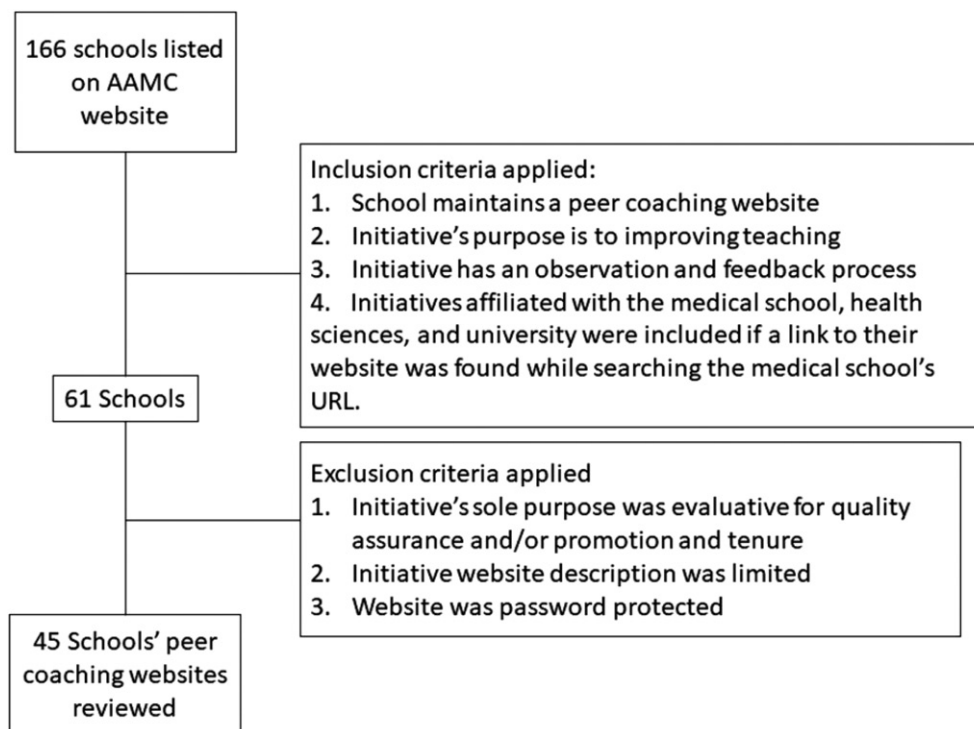
identify peer coaching initiatives, she Googled each school's URL in conjunction with the terms "peer coaching," "faculty development," "faculty affairs," "peer review," "peer observation," "peer evaluation," and "consultation" in consecutive order until information was found. For example, she typed the following search strategy: "faculty development" site: medical-schoolurl.edu. If after these search iterations AB identified no information on peer coaching, the institution was excluded. If an initiative was identified, AB applied our inclusion and exclusion criteria (see Figure 1). We included peer coaching initiatives affiliated with universities and the health sciences only if we were directed to their websites from the medical school URL, and they provided peer coaching to medical educators.

Forty-five peer coaching initiatives were included in our website review. We identified, examined, and conceptually mapped key characteristics. For each initiative, we categorized website information under the following themes: basic demographic information, initiative purpose, organizational structure, participation details, observation process, and feedback process. Based on a review of the higher education literature, we determined that within peer coaching, learning is supported through collaboration and reflection.<sup>3,10</sup> Thus, we specifically searched for examples of these concepts by closely reading each website's content and searching it (using Ctrl-F) for the terms: reflection OR shared OR exchange OR collaboration OR collegial. Finally, a recent systematic review of faculty development initiatives in medical education challenged future practice and research to promote workplace learning and foster community development.<sup>26</sup> Therefore, we searched for evidence of communities of practice within each website by closely reading and searching for the terms: community; community AND practice; community AND learner; community AND educator.

AB initially extracted data for each included initiative. Two coinvestigators (HM and LM) subsequently reviewed the data and briefly summarized their overall impressions of the initiatives. Finally, AB reviewed each initiative again to ensure data consistency and alignment with overall impressions. For areas of disagreement, all investigators met and discussed concerns until consensus was reached. Results were tallied and reported using descriptive statistics.

## Findings

We identified 45 websites of peer coaching initiatives affiliated with U.S. and Canadian medical schools.



**Figure 1.** Inclusion and exclusion criteria.

Supplemental Table 1 provides detailed information for each initiative, including links to initiative websites and several observation instruments. Note that some links may no longer be active, as schools frequently update their websites.

### **Initiative purpose**

Thirty-four initiatives had only one stated purpose: to improve educators' teaching practice. Ten initiatives had the secondary purpose to evaluate teachers on their performance and support decisions on promotion and tenure. Documentation from the Courage to Teach peer review process at Ohio State University College of Medicine was available to support promotion and tenure. In contrast, the University of Arizona College of Medicine campuses at Phoenix and Tucson had two separate protocols, one to improve educators' teaching skills through formative feedback and one to provide a teaching evaluation for annual review. One initiative, Coaching for Teaching Excellence at Perelman School of Medicine, was designed to identify struggling educators and remediate them.

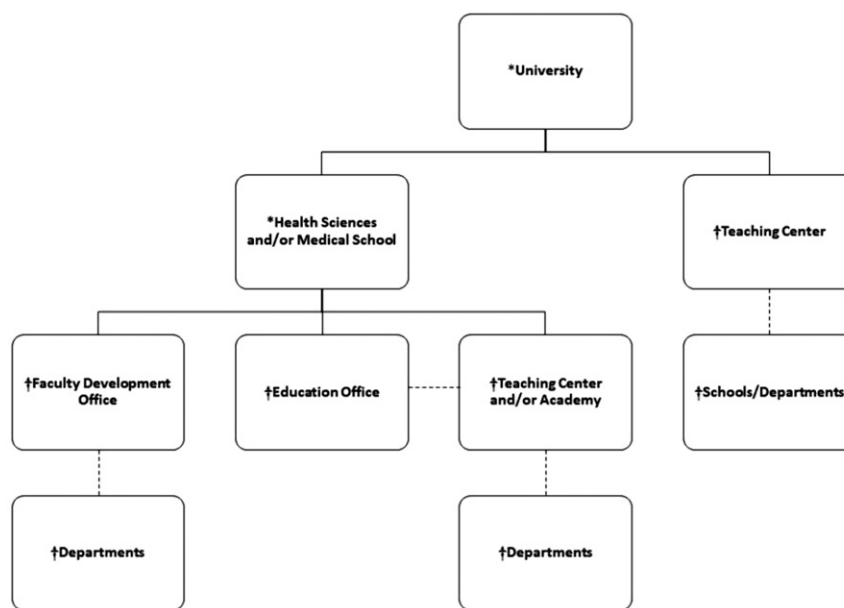
### **Organizational characteristics**

Organizational structure included the highest level of organizational affiliation (university, health sciences, medical school) and the initiative location within the

higher level organization. These characteristics imply potential support relationships like funding, manpower, advertising, and space allocation (see Figure 2). Although we were unable to determine a direct reporting structure based on the information available on each website, in general, 28 peer coaching initiatives were directly affiliated with the medical school, 12 with the university, and five with the health sciences.

Sixteen initiatives were located within a faculty development office, 12 within a teaching academy, and 10 within a teaching center. For example, the initiative at Virginia Tech Carilion School of Medicine is housed within the Teaching Excellence Academy for Collaborative Healthcare. Four initiatives were located within a teaching center or faculty development office but supported individual initiatives located within schools and/or departments. For simplicity, we categorized them as department-level initiatives. An example was the Peer Coaching, Observation, and Mentoring initiative at McMaster University Faculty of Health Sciences. This initiative aids schools and departments interested in developing and launching peer observation and coaching initiatives. It provides a website tool kit, training resources, and a certificate program for observers.

Most peer coaching initiatives described themselves as programs ( $n = 22$ ) or consultation services ( $n = 15$ ). The four initiatives that provided support to schools or departments were categorized separately. Peer



Key:

\*Peer coaching initiatives may be affiliated with the university, health sciences, and/or medical school.

†Peer coaching initiatives are situated within these locations.

--The dashed lines represent potential support relationships.

**Figure 2.** Organizational structure.

coaching was a membership requirement for Georgetown University Medical Center's Teaching Academy for the Health Sciences. Meanwhile, three initiatives did not fit into a defined category. For example, Harvard School of Medicine had an Interest Group in Peer Observation of Teaching situated within its teaching academy.

### Participation

Participation characteristics included whether participation was voluntary or required, what type of medical educator was eligible to participate, peer coach expertise, and training requirements (see Table 1). Most initiatives were voluntary ( $n=33$ ), but several required certain types of educators to participate or offered both voluntary and required options for participation. For example, the University of Florida College of Medicine at Jacksonville's initiative required all new teaching faculty to participate. Similarly, the University of New Mexico School of Medicine's initiative required educators to participate if they were earning a teaching certificate. Meanwhile, Indiana University School of Medicine's Peer Review of Teaching program paired voluntary participation with formative feedback to improve teaching and required participation with summative evaluation for promotion and tenure.

**Table 1.** Characteristics of participation

Category	Characteristic	No. of Schools (% of 45)
Was participation described as voluntary or required?	Voluntary	33 (73%)
	Both (voluntary and required components)	6 (13%)
	Required	3 (7%)
What type of medical educator was eligible to participate?	Not specified on website	3 (7%)
	Teaching faculty	35 (78%)
	Restricted eligibility	5 (11%)
	Teaching faculty and other	4 (9%)
Was the peer coach considered an expert or true peer?	Not specified on website	1 (2%)
	Expert	26 (58%)
	Not specified on website	10 (22%)
	Both (expert and true peer)	5 (11%)
Was the peer coach trained?	True peer	4 (9%)
	Trained	35 (78%)
	Not specified on website	6 (13%)
	Both (trained and untrained)	4 (9%)

Most initiatives invited all teaching faculty to participate ( $n=35$ ), but several initiatives also invited graduate students, postdoctoral students, residents, and/or academic leadership ( $n=4$ ). For example, the University of Michigan Peer Review of Teaching program provided additional consultation on leadership roles to department chairs, associate deans, and faculty committees. Five initiatives restricted eligibility to a specific type of medical educator. For example, the Faculty of Medicine and Dentistry Peer Consultation for Teaching Program at the University of Alberta focused only on clinical teachers.



**Table 2.** The observation process

Category	Characteristic	No. of Schools (% of 45)
Was there a preobservation meeting?	Yes	30 (67%)
	Not specified on website	15 (33%)
What was the observation setting?	Classroom	35 (78%)
	Clinical	20 (44%)
	Not specified on website	10 (22%)
	Online	5 (11%)
What type of observation instrument was used?	Not specified on website	27 (60%)
	Generic form	7 (16%)
	Specific form based on observation location	6 (13%)
	Modifiable form based on observed educators' needs	3 (7%)
	Specific and modifiable forms	2 (4%)
How many observations were required or allowed?	Not specified on website	32 (71%)
	One	4 (9%)
	Two	3 (7%)
	Multiple	4 (9%)
	Other	2 (4%)

Many initiatives ( $n=26$ ) considered their peer coaches to be “expert” educators. The term *expert* referred to a coach with many years of teaching experience, or a coach who had undergone extensive training in peer observation and feedback. Four initiatives used “true peers” as coaches. A true peer referred to an educator with similar training and teaching responsibilities to the observed educator. These initiatives allowed educators to participate in the roles of both the peer coach and observed educator. Finally, five initiatives included both expert educators and true peers. For example, the Peer Evaluation of Teaching program at the University of Arizona College of Medicine Tucson specified that true peers could provide formative peer coaching but summative evaluation required expert peer coaches.

Thirty-five initiative websites mentioned peer coach training. Several initiative websites provided training details, which included workshop attendance and/or completion of online modules. Finally, several initiatives required peer coaches to complete a teaching certificate program. For example, the Teaching Consult Service: Peer Assessments of Teaching initiative at George Washington University School of Medicine and Health Sciences utilized graduates of the Master Teacher Leadership Development Program.

### The observation process

Characteristics of the observation process included documentation of a preobservation meeting, details of the observation process, use of an observation instrument, and number of observations required or allowed (see Table 2). Most initiatives had a preobservation meeting that occurred prior to the direct observation

**Table 3.** The feedback process

Category	Characteristic	No. of Schools (% of 45)
What were the implications of feedback?	Formative	32 (71%)
	Both (formative and summative)	6 (13%)
	Formative, but may also use as documentation for dossier/promotion requirements	3 (7%)
	Not specified on website	3 (7%)
Was confidentiality mentioned on the website?	Summative	1 (2%)
	No	28 (62%)
Was there a postobservation meeting?	Yes	17 (38%)
	Not specified on website	35 (78%)
In what format was feedback given?	Yes	10 (22%)
	Both (oral and written)	24 (53%)
	Not specified on website	14 (31%)
	Oral	7 (16%)

( $n=30$ ). This meeting typically occurred in person and lasted 30–60 minutes. During the meeting, the observed educator and the peer coach identified focus areas for the observation and set teaching goals. The meeting was also used to discuss the observation process, the observation instrument, and the feedback process.

Most initiatives did not provide a detailed description of the observation process on their websites. For initiatives that provided details, the observation period lasted 50–90 minutes. Two initiatives mentioned that the observer should be unobtrusive, and one mentioned being discrete. Three initiatives discussed videotaping the observation for review during the feedback session. Finally, several initiatives offered to review additional materials. For example, the Formative Peer Review of Teaching Program through the University of British Columbia provided feedback on teaching materials, the philosophy of teaching statement, teaching portfolios, and student course comments. Eighteen initiatives reported use of an observation instrument. Table 2 provides details related to these instruments.

Several initiatives specified the number of observations required or allowed for each participant. Two schools had specific observation requirements and were categorized as Other. For example, the University of Arizona College of Medicine at Tucson's Peer Evaluation of Teaching program required two or more observations for summative evaluation but did not specify the number of formative observations required. On the other hand, Mercer University School of Medicine's Tutor Development Program required one observation every 3 years.

### The feedback process

For the feedback process, we reported on the implications of feedback, whether feedback was confidential,

if there was a separate postobservation meeting to provide feedback, and in what form feedback was given (see [Table 3](#)). Although formative feedback was most common, the University of Central Florida College of Medicine Peer Evaluation program provided summative feedback only. Seventeen schools stressed the importance of confidentiality related to the feedback process. Providing feedback during a postobservation meeting in both oral and written form ( $n = 24$ ) was most common. Finally, several schools provided feedback from additional sources. For example, the Teaching Observation by Peers program at the University of Arkansas for Medical Sciences offered the observed educator optional feedback from a student focus group.

### **How learning is supported**

Evidence of reflection and collaboration was collected as prior research demonstrated a learning benefit.<sup>9,10</sup> In addition, we identified initiatives that sought to create communities of practice. Twenty-two initiatives mentioned reflection, 16 collaboration, and seven communities of practice. An example was the Peer Coaching Program on Teaching and Mentoring at Stanford University School of Medicine. The initiative website mentions encouraging reflection and creating a community of educators.

Several initiatives provided examples of how they engaged the medical educator and peer coach in reflection and collaboration. Activities included guided self-reflection exercises, developmental action plans, and follow-up sessions. For example, the University of Colorado School of Medicine iTeach Peer Mentoring for Faculty initiative required the observed educator to complete a self-reflection on his or her teaching and review it with a mentor (coach) during the pre-meeting. In contrast, the Instructional Consultation Program at Texas A&M Health Science Center College of Medicine had participants complete a post-observation reflective summary. This initiative also had the peer coach work with the instructor on a developmental action plan and offered ongoing follow-up meetings to track the educator's progress.

### **Insights**

Many of the identified peer coaching initiatives were located within an office of faculty development, teaching academy, or teaching center. These entities consolidate faculty development resources and teaching expertise creating ease of access to materials for

medical educators. In addition, they recognize and reward teaching, which is a factor that may motivate educators to participate.<sup>27</sup> Nevertheless, within these locations a peer coaching initiative may become impersonal and lost in the vast array of available faculty development initiatives.<sup>9</sup> Blackwell argued that peer coaching initiatives in higher education should be located at the department level to give educators a sense of ownership through program development and implementation.<sup>9</sup> Pierce et al.<sup>4</sup> provided an example of department-level implementation. Within our review, several schools promoted peer coaching at the department level while providing higher level institutional support with training and materials. Future research should explore whether there is a preferred location for peer coaching within the higher level organization, or whether it should be context dependent.

Nearly all peer coaching initiatives followed a three-phase process for peer observation similar to the one proposed by Martin and Double,<sup>10</sup> which consists of a preobservation meeting, direct observation, and a postobservation meeting with feedback. This model defines and moderates interactions between the peer coach and participating educator. It also promotes reflection and supports ongoing collaboration.<sup>10</sup> Although this may be an optimal model, it is time consuming, as it requires three separate meetings and a 2- to 3-hour time commitment. Several studies identified that time constraints were considered a significant barrier to participation.<sup>11,19,21</sup> To address these barriers, some institutions have implemented creative solutions. For example, Stanford's initiative has options for video coaching and phone meetings. A recent meta-analysis on the effectiveness of workplace coaching found blended techniques such as these as effective as face-to-face methods, but further research is needed.<sup>28</sup>

Most initiatives were voluntary and provided formative feedback. Many initiative websites also mentioned the importance of confidentiality. The literature provides some evidence as to why these characteristics are important. In one survey, General Practice teachers were skeptical of peer coaching initiatives with competing aims of teacher development and quality assurance as they feared scrutiny.<sup>19</sup> To overcome fears of evaluation, another study successfully promoted formative feedback and collegiality.<sup>12</sup> Offering voluntary participation may provide similar reassurance.<sup>29</sup> Likewise, several researchers have identified confidentiality as one of the most important characteristics for fostering trust of peer coaching.<sup>29,30</sup> Future research should examine if using a confidential

process to provide formative feedback improves participation rates for voluntary peer coaching initiatives.

When peer coaching was originally introduced to medical education, institutions followed a reciprocal coaching model.<sup>31</sup> However, most of the initiative websites we reviewed followed an instructional coaching model. Reciprocal coaching pairs educators of equal status and each assumes the role of the peer coach and observed educator. Educators share teaching experiences and collaborate, usually repeatedly over a specified time frame.<sup>2</sup> Meanwhile, instructional coaching uses educational experts who coach participants on research-based teaching practices and their implementation.<sup>2</sup> Although important, this model requires extensive training and organizational support.<sup>32</sup> Several authors in the educational literature argue that teachers derive different benefits from reciprocal and instructional peer coaching models, and an ideal initiative would contain both.<sup>2,32</sup> Our search strategy identified initiatives affiliated with higher level organizations, which may explain the tendency toward instructional coaching. These contexts are more likely to have organizational support. Future research should explore reciprocal coaching initiatives at the department level and determine whether there is an ideal coaching model for medical educators. A comprehensive program evaluation of a peer coaching initiative by Garcia et al.<sup>11</sup> provides an example of how this may be accomplished.

Finally, this review indicates that many present-day initiatives are attempting to incorporate reflection and collaboration into their design. Furthermore, several initiatives are aiming to foster communities of practice for medical educators. Based on literature from higher education and medical education, these characteristics have been shown to support learning, including that which occurs in the workplace.<sup>9,10,26</sup> Thus, we suggest that these initiatives provide faculty developers examples of peer coaching that warrant replication.

### Limitations

Our website review has several limitations. First, it is possible not all peer coaching initiatives have a web presence, and thus we may have inadvertently excluded initiatives advertised locally through word of mouth, e-mail, posters, and so on. Second, our results are based on our interpretation of the information presented on each website, which may not accurately reflect current initiative practices due to misinterpretation or outdated information. Third, we limited our website review to Association of American of Medical

Colleges–accredited medical schools. The common characteristics we identified may not apply to institutions outside of North America. Finally, it was not possible to assess the quality of the initiatives based on website review. We had no means to assess instructional outcomes or student achievement outcomes.

### Conclusion

In this website review, we provide a knowledge synthesis of present-day peer coaching initiatives to enable faculty developers to learn from and build upon others' examples. A recent systematic review of faculty development initiatives in medical education challenged future practice and research to promote workplace learning, foster community development, and secure institutional support.<sup>26</sup> Our findings suggest that peer coaching initiatives are accepting this challenge. Nevertheless, peer coaching for medical educators remains understudied as a form of faculty development. Future research should explore whether there is preferred location within the higher level organization to situate these initiatives and whether there is an ideal coaching model. In addition, researchers should build consensus on initiative characteristics that enhance participation and foster teaching effectiveness.

### Disclaimer

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