Learner Handover: Who Is It Really For?

Susan Humphrey-Murto, MD, MEd, Lorelei Lingard, PhD, Lara Varpio, PhD, Christopher John Watling, MD, PhD, Shiphra Ginsburg, MD, MEd, PhD, Scott Rauscher, and Kori LaDonna, PhD

Abstract

Purpose

Learner handover is the sharing of information about learners between faculty supervisors. Learner handover can support longitudinal assessment in rotation-based systems, but there are concerns that the practice could bias future assessments or stigmatize struggling learners. Because successful implementation relies on an understanding of existing practices and beliefs, the purpose of this study was to explore how faculty perceive and enact learner handover in the workplace.

Method

Using constructivist grounded theory, 23 semistructured interviews were conducted with faculty from 2 Canadian universities between August and December 2018. Participants were asked to describe their learner handover practices, including learner handover delivered or received about resident and student trainees either within or between clinical rotations. The authors probed to understand why faculty used learner handover and their perceptions of its benefits and risks.

Results

Learner handover occurs both formally and informally and serves multiple purposes for learners and faculty. While participants reported that learner handover was motivated by both learner benefit and patient safety, they primarily described motivations focused on their own needs. Learner handover was used to improve faculty efficiency by focusing teaching and feedback and was perceived as a "self-defense mechanism" when faculty were uncertain about a learner's competence and trustworthiness. Informal learner handover also served social or therapeutic purposes when faculty used these conversations to gossip, vent, or manage insecurities about their assessment of learner performance. Because of its multiple, sometimes unsanctioned purposes, participants recommended being reflective about motivations behind learner handover conversations.

Conclusions

Learners are not the only potential beneficiaries of learner handover; faculty use learner handover to lessen insecurities surrounding entrustment and assessment of learners and to openly share their frustrations. The latter created tensions for faculty needing to share stresses but wanting to act professionally. Formal education policies regarding learner handover should consider faculty perspectives.

Competency-based medical education (CBME) is an outcomes-based approach to the design, implementation, assessment, and evaluation of medical education programs.[1] In CBME, assessment should be continuous and involve multiple low-stakes assessments that are part of a longitudinal program of assessment.[2,3] However, because most programs are organized by discrete rotations, involving different faculty supervisors, there can be a lack of continuity between rotations.

Learner handover, which has also been termed forward feeding or education handover, is one possible solution to this challenge.[4–6] Learner handover, broadly speaking, is the sharing of information about learners between faculty supervisors involved in the education of those learners.[7] Learner handover might occur within a rotation, between rotations, or during a learner's transition from undergraduate medical education (UGME) to postgraduate medical education (PGME). Those in favor believe that learner handover has the ability to build upon previous assessment and feedback, thus allowing for longitudinal observation and growth. Specifically, multiple isolated assessments would then be transformed into a continuum, avoiding time wasted on rediscovering strengths and learning needs already determined by previous assessors.[5,8–11]

Despite these compelling arguments, there has been variable uptake of learner handover within rotations and programs in the United States and Canada. Three national surveys have examined the use of learner handover in the context of struggling learners. In a national survey of U.S. and Canadian internal medicine clerkship directors conducted by Frellsen et al,[7] about half of the directors surveyed routinely shared information about struggling students. However, only 14% of institutions had formal policies, and at the majority of those schools, faculty were specifically prohibited from discussing students with academic difficulties—even with current teachers or other clerkship directors. In a similar study regarding U.S. and Canadian family medicine clerkships, Mims et al[12] found that 57% of clerkship directors stated that they forward feed information about medical students' performance difficulties to others. In the postgraduate setting, DeCastro et al[13] reported that 83% of U.S. family medicine program directors engaged in learner handover. Regardless of uptake, faculty participants

Please see the end of this article for information about the authors.

Correspondence should be addressed to Susan Humphrey-Murto, Ottawa Hospital–Riverside Campus, Department of Medicine, Division of Rheumatology, 1967 Riverside Dr., Ottawa, ON K1H 7W9, Canada; telephone: (613) 737-8899, ext. 81850; email: shumphrey@toh.on.ca; Twitter: @shumphrey_shm.

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in all studies expressed concerns about learner handover causing "self-fulfilling prophecies," stigmatizing a trainee labeled as "struggling" or adding bias to future feedback and assessments.[7,11–14]

These concerns are not completely unfounded. A recent scoping review concluded that information about a learner's previous performance could bias a rater through an assimilation effect resulting in ratings that trend in the same direction as the performance information.[15]

Despite these concerns, there are several organizations examining whether formal learner handover might be useful for easing learners' transition from UGME to PGME training.[6,11]

In sum, the fundamental challenge appears to be that CBME demands educational continuity, but information sharing, whether it be within programs or between stages of training, may bias future assessments. Learner handover is thus a tricky proposition.

Survey literature and anecdotal information suggest that learner handover practices are not uncommon in medical education, but in much of the learner handover research to date, the practice is discussed from the perspectives of formal educational policy and rater cognition. While there is some evidence that learner handover may occur between faculty outside of formal school committees,[7] information on informal learner handover practices is limited. We do not, therefore, know how, when, and why formal and informal learner handover is practiced by faculty or whether it is feasible, ethical, or useful. Understanding these existing, informal practices is critical because they will influence the relevance and successful uptake of emerging policy. While it appears that learner handover aligns well with the move to CBME, the scarcity of literature about it in the medical education discourse impedes our understanding not only about its potential for improving both learner performance and patient safety but also about strategies for its successful implementation.[5,11] Therefore, our purpose was to explore how faculty members perceive and enact learner handover for all levels of learners in the workplace.

Method

Design

We used grounded theory, and we positioned ourselves as doing constructivist work.[16,17] We assembled a research team that included multiple perspectives. The lead author (S.H-M.) is an experienced clinical teacher and medical education leader who has firsthand experience with the challenges of learner handover. Two coauthors from different institutions (S.G., C.J.W.) have extensive experience both supervising learners in the workplace and using qualitative research methods. C.J.W., in his role of postgraduate dean, has written policies on learner assessment that make explicit reference to learner handover. In addition, we had 2 qualitative researchers with extensive experience exploring the social practices of workplace-based clinical learning (L.L., L.V.) and a qualitative researcher with expertise conducting innovative interview studies that draw out participants' insights regarding tacit or taboo practices (K.L.).

Participants and setting

All program directors and clinician teachers at 2 Canadian universities were invited to participate via email from the postgraduate offices at those universities (in August 2018 to potential participants at the University of Ottawa and in October 2018 to those at the University of Western Ontario). A total of 23 faculty members from the University of Ottawa (n = 14) and the University of Western Ontario (n = 9) were interviewed between August 7, 2018, and November 28, 2018.

In the Canadian context, faculty clinicians are involved with education in the workplace for both undergraduate and postgraduate learners. Contact with the learner could be for as little as one day, for example, in an ambulatory clinic, to more longitudinal contact over several years with a resident within one's specialty. The transition to CBME had occurred in anesthesia (2017) and emergency medicine (2018) and was planned for the other specialties in 2019–2020. At the time of the interviews, only one of the institutions involved in this study had a formal policy surrounding learner handover. Learner handover was noted in its postgraduate assessment policy, explicitly allowing the sharing of assessment information as necessary to meet the educational needs of residents or to ensure patient safety.

Faculty participants were from 13 clinical specialties including anesthesia (n = 2), emergency medicine (n = 2), general internal medicine (n = 4), geriatrics (n = 1), endocrinology (n = 1), rheumatology (n = 1), neurology (n = 1), general surgery (n = 3), orthopedics (n = 1), psychiatry (n = 1), obstetrics and gynecology (n = 3), radiology (n = 2), and pathology (n = 1). All were involved with teaching residents and medical students in the clinical workplace. Twelve were current or former program directors (6 from the University of Ottawa, 6 from the University of Western Ontario), 5 had other education responsibilities such as rotation coordinator or sitting as members of education committees, and 6 had no current or past formal education responsibilities. Twelve had some formal education training: a master's degree, PhD, or fellowship in medical education. S.H-M. conducted all interviews, which lasted from 20 to 53 minutes.

Consistent with our grounded theory methodology, sampling was purposive and theoretical.[16] After considering both the existing literature from survey research and anecdotal information from faculty, we developed a recruitment strategy that facilitated a complete exploration of the multiple factors that seem to influence faculty perspectives about learner handover. All participants were faculty members actively engaged in supervising residents in the workplace. We purposively sampled program directors, both junior and senior faculty, programs that had and had not implemented CBME, and surgical and nonsurgical programs for several reasons. First, program directors not only supervise residents in the workplace but may also have knowledge regarding formal institutional policies about learner handover. Second, junior and senior faculty may have different experiences with learner handover. Third, the consequences of a learner's performance deficiencies may be perceived as more significant in highly technical specialties, such as surgery.[18] Lastly, different medical schools may have different local cultures. Consistent with our grounded theory approach, to determine the final sample size, we continued data collection until theoretical sufficiency was achieved.[19] This study received approval from the institutional ethics review boards of both institutions: the University of Ottawa (Ottawa Health Science

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Network Research Ethics Board) and the University of Western Ontario (Office of Human Research Ethics).

Data collection

One researcher (S.H-M.) conducted all semistructured individual interviews with faculty about their experiences of sharing information about learners at all levels of training within or between rotations, their perceptions of the process of learner handover, and facilitators and barriers to its practice. Participants were asked to describe their learner handover practices, using specific but anonymized examples of delivering or receiving it (see Supplemental Digital Appendix 1 at http://links.lww.com/ACADMED/B42). These descriptions provided a starting point for probing why learner handover was used; its perceived benefits or risks; and how, why, and when faculty engage in such practices. Because the literature suggests affordances and limitations of learner handover such as improved patient safety, stigmatization of struggling learners, and bias, we explored these ideas with participants.

The interviews were conducted either in person or via telephone or Skype and were audiorecorded and transcribed verbatim from August to December 2018.

Data analysis

We analyzed the data using the constant comparison approach customary in grounded theory.[16] We identified thematic categories within our data. As incidents, experiences, and observations were compared, the breadth and characteristics of these categories became defined. We paid particular attention to discrepant examples to ensure that the analysis could account for their occurrence. Respecting grounded theory principles, we used an iterative process, with our analysis occurring alongside and informing our data collection to support theoretical sampling.[19] Four team members (S.H-M., S.R., K.L., L.V.) completed the initial analysis. All members of the research team reviewed select transcripts individually to familiarize ourselves with the data, meeting frequently to discuss preliminary findings and to finalize a list of categories by consensus that was then used to code the entire dataset using NVivo 11 for Windows (QSR International Inc., Burlington, Massachusetts). Once all the data were coded, we held a series of team meetings to theorize about how participants' experiences affect current understanding about learner handover.

Results

We interviewed 23 faculty members from 2 Canadian universities for this study. Through our analysis, we identified 5 broad themes describing how participants perceived and enacted learner handover in the workplace: various forms of learner handover (formal to informal), learner handover benefiting the learner, learner handover hindering the learner through bias, learner handover benefiting patients, and learner handover benefiting faculty.

Various forms of learner handover (formal to informal)

All participants described engaging in learner handover and advocated for it being a valuable educational practice. A common sentiment was that "for the purpose of teaching and feedback, learner handover should absolutely occur" (Participant [P] 5). However, participants' descriptions of learner handover suggest that it takes various forms, from very formal exchanges during clinical competency committee meetings to informal hallway conversations.

Interestingly, patient and learner handover often occurred simultaneously when outgoing and incoming faculty reviewed patient and learner lists in tandem. While these conversations were both structured and informal, and primarily aimed at patient care, learners' strengths and weaknesses were often discussed. The types of learner handover are outlined in Table 1.

Learner handover benefiting the learner

Learner handover for learner benefit was explicitly sanctioned and endorsed by faculty. Participants reported that learner handover was motivated by a desire to benefit the learner because of its ability to inform teaching and feedback, to identify and assist struggling learners, and to make sure learners were on the right trajectory. As one participant explained, learner handover was necessary for both effectiveness and efficiency of teaching and feedback; without learner handover, "you lose a lot of time with the same issues happening block after block" (P8). Learner handover was seen to support individualized learning opportunities by "identify[ing] outliers, particularly on the struggling end, to help them and give them extra time or reiterate the expectations or modify the behavior" (P13). Learner handover was deemed essential when rotation schedules changed so that struggling residents could be matched with appropriate faculty.

One participant noted that learner handover was needed "so that you can design [an] intervention, so that the person who you're asking to help out needs to understand that candidate's specific struggles and so they can focus on that" (P5). Less frequently, learner handover was used to identify high-performing learners and to strategize coaching to enhance their professional development:

> So I've had residents' performance that was strong in the kind of traditional PGY [postgraduate year]-3 role—so I've handed that over, but I've also given some suggestions on how to stretch that person. (P8)

Learner handover hindering the learner through bias

Despite clear support for learner handover, faculty expressed concerns regarding the potential for bias. They worried that learner handover can inappropriately lock expectations in, such as when a resident has "a poor start to residency and then the staff just would never let go, and they couldn't progress" (P6). Such locking in was recognized as problematic in hindsight:

> When [this resident] started, we thought, what a wrong career choice, and then 5 years later, you're looking to figure out how to hire this person here because they've been so great. (P5)

Participants also reported that, by focusing educational efforts on specific areas of need, learner handover could "put somebody under the microscope" (P16) and lead to excessive scrutiny, which may promote misinterpretation of the normal learning course. For instance, one participant described how arriving late for rounds was completely overlooked and excused for one resident who had a reputation for being diligent, but such leniency was not given to a resident previously flagged for lack of professionalism (P6). Another participant agreed:

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Table 1

Representative Quotations From Participants Illustrating Types of Learner Handover[a]

Learner handover type	Context	Example
Formal	Clinical competency committee meetings or formal exchanges to complete end of rotation evaluations	So yes, I think it [learner handover] should [occur]. Yes, in the context of a single rotation where multiple preceptors work with the learner. I think that's very strong and appropriate. (P13)
		So when there's issues … such as professionalism that are coming up as patterns within the assessment program, those get discussed at our competence committee level. And what we try to do is engage the people in our committee, they are the site leads…. Just to gather their opinions about, you know, is this an actual problem that other people have heard or observed and secondly, what are our options to deal with this? So they can come up with a bit more of a plan. (P18)
Structured exchanges	Handing over patients and learners simultaneously when faculty changes	We do patient handover, and they say, "Okay, so who do you have on the team?" "Well, our senior is so-and-so." "How are they doing?" "Great, anything I need to watch for or any type of thing that you've been working with them on or whatever that piece is?" So, we do that fairly standard. (P7)
		Yeah, so it [learner handover] happens frequently because we do 2-week blocks on the … teaching unit. And the way we have it set up on our team is that the person on service … closest to the end of the block is the one who does the evaluation. So, for your 2 weeks … we hand over a list of patients, but we also hand over our evaluation on the medical students and residents. (P8)
Informal	Banter during formal meetings; informal discussions at work-related events, such as retirement dinners; and hallway conversations	Lunch. So, that's, that's common. So we [faculty], we work 8 to 5 in the same place. And frequently we go for lunch together at the hospital, at the cafeteria. So sometimes we're going to … someone is going to bring … well, bring a discussion. I don't like as much … sometimes that happens…. I don't like as much because … because it's a lot of people, and sometimes I don't want to involve everyone in the conversation. (P23)
		Sure. It could be…. Often how it happens, very commonly in surgery, is you would be talking to a surgeon and say, "Who's on your service today, this block?" Or somebody tells you, "Geez. I'm on call tonight." And you ask, "Who's … who are you on call with tonight?" Right? That's … it's one of the informal ways that it happens…. And naturally that could lead up to, "Oh, he or she was on our team last month." And you can then, then, so all of a sudden you feel the liberty to give your perspective on…. (P5)

[a]Participants were 23 faculty from 2 Canadian universities, interviewed in 2018.

> … every little mistake that they [learners] make will be interpreted as an egregious error rather than [the] normal learning process that you would give the benefit of [the doubt] … for somebody else. (P16)

Furthermore, participants worried that learner handover could create a self-fulfilling prophecy in which residents perceived as weak are excluded from learning opportunities, thus falling further and further behind their peers. Some clinical learning contexts were seen as more prone to this form of learner handover–initiated bias: Participants described how weak residents in surgical specialties might be given less opportunity to operate semi-independently, and in medical services, they may have restricted opportunity to supervise junior learners. Finally, learner handover could affect a learner's ultimate career, which may not be appropriate in retrospect:

> I unsuccessfully fired a resident who went on to graduate as an excellent resident. Yeah. Good example of "put somebody under the microscope because, you know, some early concerns; let's not let this fester," and basically [I] fired him, lost on appeal. And brought him back, remediation, and he graduated last year. Amazing…. I gave him his diploma. I said, I publicly apologized. When I'm wrong, I'm wrong. (P16)

Learner handover benefiting patients

Learner handover for the purpose of patient safety was also clearly supported. Across the interviews, participants were unequivocal that the benefits of learner handover to patient care "override" (P17) or "trump" (P22) any potential detriment to the trainee. They saw learner handover as fulfilling their need to know which residents they could trust to have the knowledge, skills, honesty, and self-awareness to ask for help to provide safe and effective patient care. When they experienced a resident as not trustworthy, they felt an obligation to disclose this information to their colleagues to avoid potentially devastating consequences to the patient. One participant asserted the following:

> I absolutely think that if we have people who are not making the grade, we have a responsibility to let people know, because it's dangerous if we don't…. Somebody could die. (P1)

Weak residents were perceived as a vulnerability in the clinical team that threatened the faculty member's position as ultimately responsible for ensuring safe patient care:

> If you've identified a resident who is clearly struggling with regards to data acquisition and interpretation and may not be forthright in that limitation, that is … a recipe for bad things to happen to [the] next staff person because the staff relies a lot upon the data they get from the house staff. (P3)

Learner handover benefiting faculty

In addition to the sanctioned purposes of learner handover for learner benefit and patient safety, faculty also described motivations more focused on their own needs. Learner handover improved faculty members' efficiency in their teaching roles by focusing their attention on learners' needs and priming their feedback. By directing the next faculty member's efforts to areas requiring attention or to tasks already mastered that did not require observing, learner handover offered a means to select and prioritize rare educational resources in a busy clinical workplace:

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> As the numbers of learners increase, your amount of available time for each learner goes down and especially as the number of patients increase, that also impacts that, right? So you want to get the best value for your money in terms of "if I have this much time, who am I going to give it to, and how do I decide how to do that, and if I have to select some people, how am I going to do that?" (P1)

Learner handover was also described as fulfilling the purpose of a "self-defense mechanism" (P1), especially in situations where there was limited time to get to know the trainee. As one participant explained, when "you're on call with someone, you've got to know if you can trust that person. So that information being handed over is partly just self-defense" (P1).

Without such information, faculty felt exposed, such as when they were on call or when patient demands were high. On call, faculty may not have the opportunity to see patients in a timely fashion and may have to rely on the trainee's assessment to make important decisions, in effect "[trusting] them to be your eyes and ears and hands." (P10)

In these ways, learner handover was seen to inoculate faculty from harm.

In addition to such inoculation, learner handover also seemed to fulfill a number of other purposes. First, participants described using the learner handover exchange to verify or ensure that what they had observed was congruent with what others were observing. They would engage in learner handover because they had concerns about the resident but, possessing limited data, felt the need to check in with "one of the other colleagues and say, … 'Are you seeing the same thing?'" (P2). They would also use learner handover in lieu of official documentation, managing the tension between having concerns about a resident and not wanting to formally report those concerns. As one participant explained, when faculty members ask each other about learners:

> Usually if they're asking it's because they already have a concern and so they just want to know if … and again that kind of comes back to that … that uncertainty and fear whether it's that, you know, one-off, or they don't want to miss something that is concerning but they also don't want to overcall. (P8)

Second, some participants described using learner handover as a vehicle for sharing their angst surrounding the act of entrusting learners:

> "So, I'm on call tonight. I'm on with this resident. Have you worked with him yet?" And you'll … [say] good or bad. Or the next day you'll see someone on Monday, "How was your call?" "Oh, it was brutal. I was on with a junior today. Oh, they just … they didn't get anything. I had to like double, triple check everything, you know. I had to come in. I had to sign off within an hour of them doing it." (P21)

Finally, participants also described using learner handover for social or therapeutic purposes. Participants expressed concern that learner handover loses its benefit for patients and learners when it "veers straight into gossip territory" (P9) or when it is used by faculty members to vent frustrations:

> If you're just offloading … that's where things get messy I think, because many of my colleagues are also my friends. So, there are circumstances in which I'm needing to vent about that [learner] who challenged me on everything. I was like "ah, this needs a venting session." But the challenge is that they're also colleagues, and they also work with these individuals. So, I can't very well ask them [to] compartmentalize. [I can't say], "Forget this." But I think that those are probably opportunities where it's maybe not always in the learner's best interest. (P10)

Given the multiple purposes learner handover could serve, participants cautioned that faculty should be mindful and reflective about the motivation behind their learner handover conversations. In particular, they reflected that faculty should think about the potential tension that "learner handover is meant to help the resident, but often I think it's to help staff" (P6). Because of this, the spirit in which learner handover is done mattered significantly:

> … it's more how you do it than whether it should be done at all. I guess, what's the purpose of doing it? So, if the purpose is just to vent, then maybe that's not really a legitimate reason to do it, and maybe you should vent to someone who doesn't know the resident or learner…. Otherwise I think that if it's done … where the motives are to help your colleague so that your colleague has, you know, a better shift and it helps the patients, it helps the department. And you know, essentially helps the residents too. Like, "I noticed the resident was having some trouble with this. If you have a chance, you could work on this with them…." I don't think that it's inherently a bad thing at all. (P20)

Discussion

In this study, we sought to explore how faculty understand and enact learner handover of UGME and PGME trainees, either within or between clinical rotations. Despite the proposed benefits of learner handover for longitudinal assessment in the context of CBME, implementation has been variable. Recently, however, formal learner handover tools have been developed to smooth transition from UGME to PGME.[6,11] In addition to these formal processes, our findings resonate with DeCastro and colleagues' definition of learner handover as a process of information sharing about learners outside of formal committees.[13] In their study, 50% of information shared was through "informal conversations" and focused on professionalism and clinical performance. Our study further helps define different levels of formality: from very formal learner handover—such as information shared during competence committees—to structured exchanges between faculty members during patient handover, to more informal discussions. Our study also sheds light on how learner handover is used informally, raising questions about who actually benefits when the practice is used in this manner.

Whether formal or informal, our participants described that the act of sharing information about the learner between faculty members was not a simple exchange of information but rather a complex process with multiple goals. The sanctioned activities described by our participants were not surprising and echoed previous literature, suggesting that learner handover is used to identify and assist the struggling learner by directing teaching and feedback.[7,11] It should come as no surprise that academic faculty are looking to use their time more efficiently. With ever-increasing clinical and administrative workloads, less time for teaching means that faculty want to maximize the time they spend with the learner[20,21]; getting to know the learner faster through learner handover appears to help improve faculty members' teaching efficiency by focusing on an identified area of need.

Consistent with previous research, patient safety was also perceived as a notable justification for learner handover activities.[7,11] To ensure patient

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safety, faculty participants felt an obligation to share information about underperforming residents. Presumably, knowing a resident was weak would increase the level of supervision, but it's unclear whether increased supervision actually leads to improved patient safety.[22] Entrustment has taken on increased importance in CBME and is defined as assigning responsibility for the care of a patient to a learner.[23] Interestingly, our participants found learner handover useful for entrustment decisions despite evidence that, in a previous study, supervisors were ambivalent about using it for this purpose.[24] Arguably, learner handover may be more important in time-pressured environments where "swift trust" is required.[24]

While faculty participants' learner- and patient-centered uses of learner handover resonate with the literature, our research expands understanding by suggesting that learner handover may be used in unsanctioned ways that primarily benefit faculty. For instance, faculty participants described using it as an outlet to vent or to share their anxieties surrounding the act of entrusting learners. Sometimes venting was perceived as gossip. In addition, faculty seemed to use learner handover to manage their insecurities surrounding their assessment of a trainee's performance. While previous research suggests that assessors often doubt their own judgment or ability when evaluating failing students,[25] we were struck by how frequently faculty used informal learner handover to confirm that their assessment of a resident was congruent with what others were observing.

Thus, faculty participants identified several potential reasons to engage in learner handover, but under conditions of polymotivation, they were left conflicted as to whether they perceived the practice to be positive or negative.[26] On the positive side, participants perceived that learner handover offered opportunities for growth for the resident and ensured adequate supervision for both the resident and patients, thus fulfilling an obligation to their colleagues by disclosing this information. On the other hand, faculty expressed concerns that learner handover could lead to unfair bias, particularly if it was used primarily to gossip or to share their frustrations. Thus, there appeared to be tension between faculty members needing a space to share their stresses and struggles and their mandate to act professionally. Physician burnout is on the rise, and learner handover might be perceived as a legitimate opportunity to seek peer support.[27] Such benefits to faculty may, however, have considerable costs for learners. Specifically, gossiping about learners, particularly at social events, may breach confidentiality, create bias, and raise concerns about professionalism and ethics. Participants wrestled with these tensions and rationalized this dilemma by questioning their own motives. In other words, what was motivating them to engage in learner handover? Who was it for? Participants deemed learner handover acceptable that was legitimately done for the learner or to protect patients by facilitating entrustment decisions. But participants regarded learner handover used to complain as an unacceptable practice.

In sum, learner handover may simultaneously benefit the learner, the patient, and the faculty. Knowing the learner better enables faculty members to focus teaching and feedback on learners' strengths and weaknesses and determine the appropriate level of supervision required to ensure patient safety, all the while improving faculty efficiency and reducing faculty anxiety surrounding entrustment decisions.

Limitations

This study was completed in a Canadian context, so it may not reflect an international perspective. Additionally, by not exploring the learners' perspective, our study does not fully capture how learner handover is conceptualized, practiced, and taken up. Since we identified that faculty often use learner handover in ways that may be unhelpful—perhaps even detrimental—to learners, our forthcoming research will examine learners' perceptions about the impact of learner handover on their learning and professional development. Our participants more commonly described providing learner handover, not the usefulness of receiving learner handover information from faculty colleagues or the accuracy of such information. Future research should explore how faculty members both vet the information they receive and use it to inform their teaching and practice.

Our findings about the use of learner handover to support faculty in making difficult entrustment decisions may suggest that this element of entrustment—or the leap of faith supervisors are required to make—has perhaps not received sufficient attention.

Conclusions

For participants, learner handover was complex because it served both sanctioned and unsanctioned purposes. While learner handover may support the longitudinal assessment essential for learners' professional development,[2,3] we have added a new perspective to our understanding about learner handover by suggesting that it may also benefit the well-being of faculty members. Indeed, learner handover may serve as a mechanism enabling faculty to lessen any anxiety they have surrounding learner entrustment for patient care, to seek reassurance about their self-doubts regarding assessment, and to openly share their struggles and frustrations—conversations sometimes perceived as taboo within medicine. We suggest that formal educational policies and learner handover tools need to both recognize the multiple motivations faculty have for engaging in learner handover and consider the risks and benefits of this practice for both learners and faculty.

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S. Humphrey-Murto is associate professor, Department of Medicine and Department of Innovation in Medical Education, University of Ottawa, Ottawa, Ontario, Canada.

L. Lingard is founding director and senior scientist, Center for Education Research and Innovation, London, Ontario, Canada, and professor, Department of Medicine and Faculty of Education, University of Western Ontario, London, Ontario, Canada.

L. Varpio is professor and associate director of research, Department of Medicine, Uniformed Services University of the Health Sciences, Bethesda, Maryland.

C.J. Watling is associate dean, Postgraduate Medical Education, Schulich School of Medicine and Dentistry, and professor, Departments of Clinical Neurological Sciences and Oncology, University of Western Ontario, London, Ontario, Canada.

S. Ginsburg is professor of medicine, Department of Medicine, Faculty of Medicine, University of Toronto, Toronto, Ontario, Canada, scientist, Wilson Centre for Research in Education, University Health Network, University of Toronto, Toronto, Ontario, Canada, and Canada Research Chair in Health Professions Education.

S. Rauscher is a project assistant, Department of Innovation in Medical Education, Research Support Unit, University of Ottawa, Ottawa, Ontario, Canada.

K. LaDonna is assistant professor, Department of Innovation in Medical Education and Department of Medicine, University of Ottawa, Ottawa, Ontario, Canada.

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The Decline in Community Preceptor Teaching Activity: Exploring the Perspectives of Pediatricians Who No Longer Teach Medical Students

Caroline R. Paul, MD, Chad Vercio, MD, Rebecca Tenney-Soeiro, MD, MSEd, Chris Peltier, MD, Michael S. Ryan, MD, MEHP, Elizabeth R. Van Opstal, MD, Anton Alerte, MD, Cynthia Christy, MD, Julie L. Kantor, William A. Mills Jr, MD, MPH, Patricia B. Patterson, MD, Jean Petershack, MD, Andrew Wai, MD, MPH, and Gary L. Beck Dallaghan, PhD

Abstract

Purpose
Difficulty in recruiting and retaining community preceptors for medical student education has been described in the literature. Yet little, if any, information is known about community outpatient preceptors who have stopped or decreased teaching time with students. This study aimed to examine these preceptors' perspectives about this phenomenon.

Method
Using a phenomenology framework, this multi-institutional qualitative study used semistructured interviews with community pediatric preceptors who had stopped or reduced teaching time with medical students. Interviews were conducted between October 2017 and January 2018 and transcribed verbatim. Interviews explored factors for engaging in teaching, or decreasing or ceasing teaching, that would enable future teaching. An initial code book was developed and refined as data were analyzed to generate themes.

Results
Twenty-seven community pediatricians affiliated with 10 institutions participated. Thirty-seven codes resulted in 4 organizing themes: evolution of health care, personal barriers, educational system, and ideal situations to recruit and retain preceptors, each with subthemes.

Conclusions
From the viewpoints of physicians who had decreased or stopped teaching students, this study more deeply explores previously described reasons contributing to the decline of community preceptors, adds newly described barriers, and offers strategies to help counter this phenomenon based on preceptors' perceptions. These findings appear to be manifestations of deeper issues including the professional identify of clinical educators. Understanding the barriers and strategies and how they relate to preceptors themselves should better inform education leaders to more effectively halt the decline of community precepting and enhance the clinical precepting environment for medical students.

Clinical experiences with community preceptors offer medical students invaluable opportunities to learn critical elements of primary care medicine, including the continuity of care, the business aspects of the profession, and the management of chronic disease over time in direct patient care settings.[1,2] Medical institutions and their leaders rely on community preceptors to teach their medical students.[3] However, recruiting and retaining community preceptors has become increasingly difficult due to many factors including increased class sizes and competition throughout health professions programs.[2–5] In a recent report sponsored by medicine, nursing, and physician assistant programs, at least 80% of institutional leaders across programs expressed concern regarding the adequacy in the number of clinical training sites, with particular difficulty in pediatrics and obstetrics–gynecology specialties.[4]

This "crisis" has led researchers to study suggested strategies for overcoming identified barriers for retaining clinical preceptors. Barriers such as new legal requirements and time associated with the incorporation of the electronic medical record (EMR) have emerged in the literature.[5] Some proposed solutions include offering preceptors a variety of benefits such as direct financial compensation, tax incentives, and considerations for offering continuing medical education.[5,6]

In a recent multi-institutional study, we explored reasons why community pediatricians remained motivated to teach medical students. Some identified reasons included internal motivation to share enthusiasm, developing longitudinal relationships with learners, and external rewards such as recognition and educational credit.[7] While studies such as this are helpful in identifying the reasons why physicians choose to precept medical students, our first study[7] and other recent studies[3,8,9] have left gaps in understanding those factors that influence a preceptor's decision to stop or reduce their teaching time.

A single-institution quantitative study found that physicians who decline to precept students may respond to different motivators than those who chose to precept students.[8] Such findings suggest that strategies different from those already described in the literature may be needed to increase the number of community preceptors. Another quantitative study highlighted the reliance of departmental chairs on community preceptors for primary

Please see the end of this article for information about the authors.

Correspondence should be addressed to Caroline R. Paul, Department of Pediatrics, University of Wisconsin School of Medicine and Public Health, Madison, WI 53593; telephone: (608) 265-7740; email: crpaul@wisc.edu.

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care and ambulatory teaching and also described reasons for the decrease in preceptor teaching.[3]

While such quantitative studies list some systemic and institution-related reasons for the decline in community preceptors, questions still remain as to why the preceptor has decided to stop teaching. In a quantitative manner, May and colleagues assessed the motivation underpinning why German family medicine physicians taught medical students.[9] However, the nature of quantitative studies hinders a fuller understanding of how the identified strategies and barriers may relate to a deep psychological construct that would provide insight into why a preceptor stops teaching students. To our knowledge, no study, including our first one, has addressed how fundamental social and psychological constructs may interplay with identified barriers and strategies. Questions still remain as to why indeed the community preceptor has decided to stop teaching.

Building on our earlier work,[7] we aimed to explore these reasons from the perspective of the preceptors themselves. Therefore, this study explored the perspectives of community pediatricians who specifically had reduced or eliminated their interactions with medical students. Using a constructivist framework, we conducted a phenomenological study to add deeper and broader context to the reasons underlying the decline of community preceptor teaching.

Method

Based on the community preceptor issues identified, we selected phenomenology as the philosophical framework most appropriate to guide our multi-institutional study.[10] We recruited pediatric community preceptors from geographically diverse institutions to explore commonality regardless of the type or location of the preceptor's institution. The sites selected for recruitment of participants were based on group consensus from lead investigators in the Council on Medical Student Education in Pediatrics (COMSEP) Research and Scholarship Collaborative and included sites participating in our initial study[7] and institutions where the decline of clinical preceptors has been explicitly noted.

The majority of the research team were pediatric faculty with responsibility for the administration of the medical student clerkship. All of us were members of the COMSEP Research and Scholarship Collaborative. Each of us, with the assistance of clerkship administrators, identified potential participants. All participants were community pediatricians, with a wide range of clinical experience. Pediatricians considered for inclusion were volunteer or adjunct faculty, had completely stopped or decreased the amount of time spent teaching medical students, and had no significant and direct financial relationship with the investigator's medical school. We initially contacted participants by phone, email, or in person. Each of our home institutions obtained institutional review board approval.

Standards defined by Creswell for phenomenological research, which suggested interviewing a minimum of 5 to 25 participants, determined sample size.[10] Therefore, we sought to complete interviews with between 3 and 5 participants at each institution. As the study progressed, we recognized that the sensitive nature of our research question negatively influenced recruitment at some sites, and we were unable to achieve the preferred number of participants. The responses from participants, regardless of the number of interviews, were comparable across all institutions, thus allowing us to collectively analyze the data.

We conducted semistructured interviews between October 2017 and January 2018 using the interview guide in Supplemental Digital Appendix 1, available at http://links.lww.com/ACADMED/A736. We knew the participants who we interviewed. Interview questions were created through a process of reaching group consensus, pilot testing, and using some questions from our previous study.[7] Peer-reviewed work also guided the content of the questions.[2–5,7] Content domains included demographic data: length of time in practice, length of time teaching students, gender, type of practice and ownership, number of partners, nurse practitioners and physician assistants, and the number of other preceptors. Thematic content queries covered concepts such as "value or inspiration in teaching," "least enjoyable aspects of teaching," "reasons for leaving or reducing teaching," and "possible benefits or changes that could change their desire to teach."

We interviewed all participants by phone. The length of interviews varied between 30 and 45 minutes; all interviews were audio-recorded and transcribed verbatim. Interview transcripts were assigned a random identification number and collated into a single document for review and coding. The analysis included all of the interview transcripts. Three of us (C.R.P, C.V., A.A.) independently read a sample of the transcripts to develop the initial code book. For the code book, we used themes and codes from our previous study,[7] with codes added or removed as appropriate. The initial code book included 21 codes. Three teams each consisting of 3 investigators divided the remaining transcripts to code, which resulted in 8 transcripts for each team. Members of each team independently coded the transcripts and then discussed differences in opinion to come to a consensus. Teams identified additional codes as they analyzed the transcripts. Once each team completed their coding, all investigators reviewed all of the transcripts and verified the codes. We all discussed coding disagreement through email and conference calls to come to a consensus. This iterative process resulted in a final code book with 37 codes.

We discussed the final interpretation of the meaning of identified codes and preliminary themes and recognized that some of the preliminary themes were closely aligned in meaning. Through consensus agreement, we identified 4 final organizing themes.

Results

Twenty-seven participants (16 women and 11 men) from 10 institutions were interviewed. Four institutions were unable to interview any clinical preceptors despite several attempts for successful recruitment. The number of years precepting before completely stopping or decreasing the amount of time spent teaching ranged between 1 year and 36 years, with 22 of the 27 participants

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having precepted for more than 5 years. The ownership of the clinical practice of the preceptors varied from single physician ownership to partner ownership to health care or university system ownership. The number of pediatricians in each practice group ranged between 1 and 16, with most practices including more than 5 physicians and some practices also incorporating advanced practice providers.

Through the iterative process of analyzing the codes and themes, 4 organizing themes were finally selected: evolution of health care, personal barriers, educational system, and ideal situations to recruit and retain preceptors. Table 1 identifies the 3 organizing themes related to barriers for participating as a preceptor. Consistent patterns in theme generation were noted across institutions. We do not provide attributions to the participants due to the purview and constraints of our institutional review boards.

Evolution of health care

Community preceptors identified multiple changes in the health care system that affected their ability to continue precepting medical students. The widespread adoption of the EMR was one of the most significant changes in health care in the period during which many of the preceptors stopped precepting and arose as one of the primary themes in the evolution of health care. Until very recently, charting by medical students was prohibited to meet coding and billing requirements. These rules precluded students from assisting in documentation and negatively affected preceptor productivity. EMR implementation had significantly affected provider efficiency, leaving these preceptors with less time to accommodate the added burden of educating students.[8] One participant commented:

> Patients and documentation requirements have gone way up. [The] EMR has slowed the process down in many ways. There's more time checking boxes and more time record taking and tasks that we now have to complete. When I had a student, I would probably chart for three to four hours a night to finish up all the things I didn't do because I was talking to the students, rather than documenting my charts, so it would really slow you down.

Participants also felt pressure for time in the clinical setting to generate sufficient revenue and relative value units (RVUs). They noted that their salary was negatively affected by precepting students and therefore felt they could not continue to carry this financial loss:

> Having students slows you down, going from 15 patients to 10 patients per half day which impacts your bottom line.

Of the participants who received compensation for teaching students, none felt that this was adequate reimbursement for the effect on their generation of RVUs:

> It's like a pittance. I don't remember how much it is, maybe a couple hundred dollars. . . . It's a token.

Finally, participants noted that they did not have sufficient support in their practice to precept students. This ranged from a general lack of financial support for precepting students to other providers in the practice being unwilling to precept students to a single provider being unable to precept a student full-time:

> I cut back secondary to part time hours . . . and there was the inability to find a partner that would help with the students.

Personal barriers

Based on the literature, precepting students increases the amount of time a provider spends per patient and adds time to the overall workday.[9,10] This was noted by a participant:

> It takes at least an hour of extra time per day to devote to them the time they need. This usually means leaving later from work or not giving them the time they deserve in being taught.

In some instances, for our participants, this led to conflicts over work–life balance, with preceptors feeling that they had to choose between their family or precepting medical students. Given this sense of conflict, preceptors would choose to prioritize their family:

> I was willing to chart at home, but it was just that hour or so that I was just getting so far behind that it was more of a deterrent. To do three more hours at home and miss family time and really other than getting the satisfaction of teaching out of it—you get nothing out of it.

Participants also noted that they had a finite amount of cognitive energy and that students could add to the chaos of a practice, resulting in unexpected consequences:

> Specific situation—I made a clinical error in busy winter months. Reflected on the chaos of practice and felt that out of concern for patients, patients come first, I needed to back away from taking students.

Participants also felt that precepting students created stress, which could originate from many areas, either related to the workplace and maintaining efficiency or additive to stress they were already undergoing in their personal lives. At times, they felt pulled between their patients and families and educating students:

> Least enjoyed the time pressure. Had to give time to the patient and parent, but also the student. I felt stressed about meeting all these needs.

Educational system

Preceptors also cited changes in the educational system that influenced their decision to completely stop or decrease the amount of time spent teaching students. Some preceptors highlighted the changing relationship between academic medical centers and the community physician where a lack of connectedness led to a decreased sense of obligation:

> I could tell you from talking with lots of other preceptors, that there was a lot of disenchantment. I think the preceptors used to be more of a valued part of their community and part of medical center. Unfortunately, the folks that don't work in the university have certainly become more detached to the university and feel less and less a part of it and feel less indebted to the university. There's really no other benefit one way or another.

Other participants discussed a change in the preceptor–student dynamic where the preceptor perceived students were only with them because it was a required rotation. Disinterested students led to preceptors becoming disengaged in teaching and precepting:

> [Preceptor] noted that she doesn't think medical students are as appreciative or engaged as they used to be . . . they complain about more and are less thankful. Some students, especially those who are interested in pediatrics, are engaged and thankful. But others are not. They take less initiative with patients.

Curricular transformations are occurring in many medical schools across the United States. The changes being made may have unintended consequences. For

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Table 1

Themes and Quotes From Community Preceptors: Barriers to Preceptor Teaching, From a Multi-Institutional Study of 27 Pediatrician Preceptors and Reasons for Ceasing or Decreasing Teaching Time, 2017–2018

Organizing themes and subthemes	Exemplar quotes
Evolution of health care	
EMR	• They just keep throwing things at you, now you have to put in all of your own orders and your own labs, and when we started in 2001, the workload was very different. My nurse could put in my orders and I could keep working. Now I have to do all that work and I have to be a coding specialist and I have to be a documentation specialist. I feel like I have to do 4 jobs compared to the job I started with in 2001.
Student unable to provide value with EMR	• You get to the point where you get too busy . . . they honestly become a hindrance.
Time limits (EMR/RVUs)	• I think unfortunately patients, because of the high deductible insurance, patients are putting more and more into every visit. . . . They want this done or that done; increase their bang for their buck. Totally changed the market, so now our visits are markedly more compressed as far as what a patient wants done.
Lack of support by preceptor's practice	• I can only mention for my partners and I think it is a time issue, they all look at it as it's a lot of work.
Personal barriers	
Work–life balance	• Lot of stress currently balancing home and work. Have been dealing with some feelings of professional burnout. • I think that I've had to learn to say no, and know what my limits are as a person now with 2 young children at home, so I think as my children get older, and the stress of being a mother and being a doctor is a little more balanced, I think I will start again.
Inadequate time to teach	• I felt more like I was on a treadmill with students; terrible time crunch.
General stress related to teaching	• The estimated FTE awarded [for] teaching underestimates what is needed to teach well. I felt very rushed, very stressful. • They would come with more and more requirements, more of these things that they were supposed to be doing, but it was rarely communicated to the preceptors . . . and the expectations were really unrealistic.
Educational system	
Disconnect with the larger academic institution	• The only thing would be if the department had a more formal relationship with my organization then maybe there would be more of a push from above to lighten the schedule to take students. • Be aware that the lifestyle of clinicians as we are [is] now disconnected from the hospital. • I don't think we've heard this too much before, but how really in private practice you don't feel part of the university community like you used to, right? We don't go to Grand Rounds . . . to Morning Report anymore; we don't round in the hospital anymore; we have hospitalists; we don't see newborns—there are hospitalists. We are very detached at this point.
Changes in the physician–student relationship	• The occasional student who clearly did not care about pediatrics . . . one time a student fell asleep in the room while I was talking to family. • Least enjoy the disengaged medical student.
Clerkship time decreased	• I stopped teaching since the length of the rotation has shortened. It is a choppy experience and very disjointed; I cannot teach anymore since I don't know my students. • The only reason I stopped was the time because they cut it to 2 weeks. I don't think that's enough, especially for me. I just didn't feel like I could give them enough time in those 2 weeks to give them all the information . . . or wanted to give them or the experience I wanted to give them.
Inadequate compensation or other benefits	• Received some payment. The payment didn't adequately cover the time spent teaching. • Money is [a] nice bonus, but doesn't offset lost revenue in office, but does make it more enticing. CME was, I don't know, not much help. • The paperwork we filled out to get paid makes it not worth getting paid. It's inefficient and I'm not sure we even get paid in the end. If so, it's so delayed that you can't even tell. I'm sure the school has a perception they are paying, but the infrastructure is abysmal and it doesn't work.
Need clear expectations from school	• Give clear expectations to the teachers. • The thing that I least enjoy is each year they would come with more and more requirements, more of these things that they were supposed to be doing, and the expectations were really unrealistic.

Abbreviations: EMR indicates electronic medical record; RVU, relative value unit; FTE, full-time equivalent; CME, continuing medical education.

instance, some participants noted that they were not able to teach as effectively because the shortened length of the clerkship lessened the longitudinal learning experience and impaired preceptors' ability to teach the students as they were once able to:

> The only reason I stopped was the time because they cut it to 2 weeks. I don't think that's enough, especially for me. I just didn't feel like I could give them enough time in those 2 weeks to give them all the information I felt like I could give them or wanted to give them or the experience I wanted to give them.

Preceptors expressed concerns over a lack of recognition or acknowledgment of their efforts. Whether compensation consisted of financial gain or continuing medical education credits, most preceptors thought that these factors were insufficient to overcome the

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financial and time realities in their clinic:

> I have stopped teaching because I won't get paid the same and the human element is disappearing.

Participants desired clear direction from the clerkship with regard to goals and objectives, novel education techniques, and strategies to keep students engaged. However, they also wanted to ensure that these goals and teaching methods were realistic in the community practice setting:

> Let me know what the clerkship goals are because I'm flying blind on a lot of it. They come in and say "This is what I need to learn" or whatever, but what I need to teach is not necessarily clear. . . . So an expectation of seeing x-number of x-type of patients is probably unrealistic. You got to take what is there.
>
> I haven't got a lot of experience with the new clerkship, but the goals that they came in with, were totally pediatric inappropriate.

Ideal situations to recruit and retain preceptors

We asked participants what recommendations they had to recruit and retain community preceptors; these responses are summarized in Table 2. Some reported that the clerkship could do nothing to retain them because cessation of teaching was related to personal circumstances. For those who did offer recommendations, 5 subthemes emerged from the data: compensation/benefits, personal relationships, good communication, faculty development, and preparation of students.

Compensation/benefits. Participants felt that current monetary compensation models were inadequate due to an unrealistic concept of the actual time required to precept medical students and that this discrepancy needed to be addressed before some would consider a return to precepting:

> To work on compensation as best they can because it's just a very, very busy milieu to throw extra work into.

Several other forms of compensation were identified:

> I mean, I precept, what, a month and change out of the year and I get to use the library resources year-round. . . .
>
> That would be expensive for the practice otherwise.
>
> If they give me a scribe to do my notes, then I would teach again.
>
> There was a contract . . . if you signed the . . . contract, your kids could go to [university] for free and then of course you took students . . . at least that was a benefit and that was offered. That is a huge benefit.
>
> MOC part 4 credit would entice lots of people.

Develop personal relationships. The development of personal relationships and personal communication was a key factor for participants. Many felt disconnected from the clerkship office and academic faculty. They reported that individualized strategies such as a personal phone call or visit would reestablish this sense of connectedness. They were also interested to know about the students who would be coming to their site:

> I think personally either calling these preceptors, or personally going to see these preceptors. . . . I think a personal approach to each office would be helpful, because it helped me to start doing it.
>
> I think that the only thing would be a little bit more helpful, is to get a little more background who they are, in some ways, so that you don't have to spend time learning about who they are, that's just my personal preference. I like to know the people that I am working with.

Related to the need for more personal relationships was a desire for recognition of the preceptors' efforts. Recognition could be as simple as meaningful comments from the clerkship or from the students:

> The last few years we've gotten back some little blurbs that the students have written about their experiences here and the majority of those are positive. Those probably mean more than anything else, than the university has done, so definitely continuing to do that would be important too . . . that is probably the best motivator for me!

Good communication. Participants also desired early and meaningful communication regarding potential clerkship changes that may affect them. Given the already busy situations preceptors found themselves in, any modifications could shape their interest in continuing to precept. Specifically, preceptors identified that communication regarding directives, expectations, and curricular tools such as online resources would aid in their real-time teaching:

> Giving some directions as to expectations of both students and preceptors (so we are all on the same page).
>
> Send a schedule of grand rounds so that preceptors could attend and plan on what topics they want to go to. Give more information about curriculum such as OSCEs and access to Computer-Assisted Learning in Pediatrics cases.

Preceptors also expressed interest in feedback and concrete appreciation for things that they reported to the clerkship:

> Not receiving communication back from the school of medicine when he reported a very significant professionalism concern about a student in writing and over the phone and would have appreciated a response thanking him for reporting this issue.

Faculty development. Preceptors wanted to become more successful, innovative teachers. They also desired to learn how to improve their efficiency and how to use students effectively in actual clinical settings:

> Updates on how to teach more effectively and new ways of teaching. Sharing that knowledge in a more organized way, I've met with the clerkship director to talk about this but coming to the office and being involved in that experience would be cool.
>
> I need a model for how to do it. . . . And so I'd like to learn how to structure my day with them so we can all get out of it what we need to get out of it.

Target and prepare students. Preceptors expressed interest in working with students who were actively engaged in learning at their clinic, who were prepared for direct patient care in the community setting, who recognized this as a privilege, and who were ready to help their preceptor:

> If I could have students interested in pediatrics, I would think about precepting again.
>
> Tell students how they can be helpful to their preceptor: making sure to get medications and doses and how to do that if the parent doesn't know the medication.
>
> If students were to come, it would be helpful to have some sort of orientation so they know why they are there, what it means to work in an office, how to be useful, how to get something out of the experience.

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Table 2

Themes and Quotes from Community Preceptors: Ideal Situations to Recruit and Retain Community Preceptors, From a Multi-Institutional Study of 27 Pediatrician Preceptors and Reasons for Ceasing or Decreasing Teaching Time, 2017–2018

Subthemes	Exemplar quotes
Compensation and benefits, greater recognition (stipend, EVU, CME)	• I want to be adequately compensated. Otherwise, I have to drop my students so I can see more patients to make more income since things have changed so much. • Make it worth the time it takes. You'd have to offset the entire cost I lose when taking them on. Certainly, monetary compensation as you would with other faculty members. • Gives me access to the library stuff, which I prize. . . . So, I value the fact that I can use their library resources. • One thing that would make this so much easier is if people got CME credit for this. I know I have heard people talk about that before, if there was that sort of educational benefit to it I guarantee you would get more people. • Considering finding a way to entice those of us close to retirement to work with students after retirement. • Teaching is no longer one of my quality measures; push to try to get this added back in. • Be mindful that it really is a time commitment for people and that it does require giving up something, whether that is personal time or feeling like you are not spending as much time with your patients or just to realize that some kind of sacrifice is involved. • School of Medicine could have respect for titles and demonstrate value to the community doctors. Create the idea that community doctors are respectable and not country bumpkins. • Nothing. I don't know that there is anything that they could change, it's just where I am in life.
Prepare and target students	• I know [it is] not always possible but would like to have more students who are interested in going into pediatrics. • It's different if it's an established relationship with someone I know who is invested. If it's someone I know who shadowed me as a college student and they [not the medical school/department] contact me, I'm sure I would take them, because the student has made the investment and we have a connection. • If students were to come, it would be helpful to have some sort of orientation so they know why they are there, what it means to work in an office, how to be useful, how to get something out of the experience. • Let clinic be a priority for the students; not just the hospital.
Personal relationships	• I guess the personal parts are probably your best bet. I've been thinking about trying to bail out for a number of years, and I always get this very personal call from somebody, and they sort of gently twist my arm and push the right buttons, so that personal touch . . . when you get that phone call from some of the physicians saying they need help—it's hard to say no. • Keep reaching out and know that often we want to do more, but just aren't able at all times. • I think that the only thing would be a little bit more helpful, is to get a little more background who they are, in some ways, so that you don't have to spend time learning about who they are, that's just my personal preference. I like to know the people that I am working with. • More interaction and expression of appreciation directly. I've never talked to the clerkship director personally or received a personal note from her. Offer to have lunch together, something to make it known that what you're doing is appreciated. If you get correspondence from a preceptor then make sure to respond to it and let them know that the School of Medicine or clerkship appreciated this. Send thank you notes.
Good communication	• Give clear expectations to the teachers; everyone has a way of teaching; we need to have expectations. • Giving some directions as to expectations of both students and preceptors (so we are all on the same page). • Not receiving communication back from the school of medicine when he reported a very significant professionalism concern about a student in writing and over the phone and would have appreciated a response thanking him for reporting this issue. • Please reflect more on what we do and pay attention to our one-on-one relationships with the student.
Faculty development	• Updates on how to teach more effectively and new ways of teaching. Sharing that knowledge in a more organized way, I've met with the clerkship director to talk about this but coming to the office and being involved in that experience would be cool. • Give clear expectations to the teachers; everyone has a way of teaching. • I know the university sends you things saying how you can have students in your office and be more efficient and how you can integrate students . . . but we have a unique practice . . . so I don't know how to make the process more efficient. • Suggest ways that students can be more helpful and engaged while working with preceptors.

Abbreviations: EVU indicates educational value unit; CME, continuing medical education.

Discussion

The need for community precepting for medical students prevails. Recruiting and retaining these community preceptors has become increasingly difficult. Researchers are trying to identify and develop strategies to overcome these barriers so that students continue to benefit from clinical education in the community.[3–5,8,11] Studies have examined reasons why some physicians continue to work with students despite perceived barriers.[4,5,8,11] In this study, we explored these barriers and strategies more extensively and identified new themes regarding the cessation of or decrease in preceptors' teaching time. We had previously described *why* preceptors decide to teach medical students.[7] This study is the first, to our knowledge, to explore perspectives from the "other side"; namely, those who have stopped or decreased the amount of time spent teaching.

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While our interviews were designed to investigate the "negative" reasons, some of our findings bear striking similarity to our previous exploration of pediatricians who *continued* to work with students.[7] For example, in both populations, pediatricians identified factors such as a sense of giving back, clinic group practice, and enjoyment of teaching that provided initial motivation to teach the next generation of physicians. Similarly, some reasons identified for eliminating or decreasing teaching time mirrored our first study group's reported negative aspects of teaching, including time constraints, the impact of the EMR on workload, work–life balance, and communication between the medical school and the preceptor. Finally, preceptors in this study offered recommendations to improve their recruitment and retention. Some of these proposals (e.g., increasing compensation, recognition, and improved communication from the medical school) were remarkably similar to those offered by preceptors who have continued to work with students.

With such mirroring between the group of preceptors who continue to teach despite the self-identified barriers and the group of preceptors who have stopped teaching because of these barriers, in an interpretivist approach, we can now consider those intrinsic factors that influence the decision to completely stop or decrease the amount of time spent teaching. What are social and psychological constructs including that of identity as a clinical educator that may influence this phenomenon?

Professional identity of clinician–educators

The concept of clinician–educator identity formation was well described in a recent scoping review.[12] Cantillon and colleagues highlighted the tension that clinician–educators encounter when balancing teaching responsibilities with other responsibilities intrinsic to their professional and personal roles and responsibilities (e.g., providers of patient care, parents to their own children). Additionally, organizational and institutional factors contribute to the meaning afforded by their teaching roles. As a consequence of both individual and institutional considerations, clinician–educators must choose between competing priorities. Many choose to prioritize clinical roles over teaching roles due to perceived or realized social benefits afforded by those pursuits.[13]

Clinical preceptors in our study did not specifically use the words "identity as a teacher" to describe their reluctance to continue teaching students. However, these concepts were articulated in less direct ways. As one preceptor put it: "I don't know that there's anything that can be done, it's just *where I am in life*." For some preceptors, "where I am" likely refers to how one is coping with different competing identities, and which identity prevails when making decisions about which opportunities to pursue.

Furthering the notion of whether clinician–educators prioritize teaching over another competing interest is the concept of self-determination theory. Ryan and Deci have described the motivational processes that drive the natural growth and behaviors of learners *and* teachers in their personal and professional pursuits. Individuals are driven by 3 psychological needs: the need for autonomy, competence, and relatedness.[13] Ten Cate and colleagues have suggested that modern medical education programs may unintentionally inhibit the stimulation of the 3 psychological needs underpinned by self-determination theory. For instance, the student-centeredness of curricula, while valuable for students, indirectly comes at a cost to the teacher's perceived autonomy. In addition, regulations provided by accrediting bodies and the lack of a supportive educational community may serve as inhibitors when clinician–educators consider their motivation to teach over other responsibilities.[14]

Furthermore, decisions regarding teaching may be complicated by symptoms of burnout. Burnout has recently received much recognition in the medical literature.[15,16] Our preceptors' narratives echoed the literature's varied definitions of burnout. Freudenberg, one of the first to describe the symptoms of exhaustion professionally, defined burnout as "state of mental and physical exhaustion caused by one's professional life."[17] More recently, Maslach described burnout as a syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment that can occur among individuals who work with people in some capacity. However, one may see burnout more generally as "a state of exhaustion in which one is cynical about the value of one's occupation and doubtful of one's capacity to perform."[18]

In our study, some preceptors used the word "burnout" specifically: "been dealing with some feelings of professional *burnout*." Others described symptoms of burnout when describing frustration with the EMR, work–life balance, the silo effect of community teaching separated from the large medical school enterprise, dramatic change in clerkship time given widespread curriculum transformation, and the subtle or frank decreases in compensation, which all relate to our themes of evolution of health care, personal barriers, and the educational system. The variables that appeared to contribute to burnout were not unique to this population of clinical preceptors. This observation is consistent with that in literature suggesting that burnout is related to both external stressors and the individual's resilience, goals, and motivation.[19]

Solutions

Collectively, factors associated with clinician–educators' identity as teachers combined with symptoms of burnout may influence decisions to completely stop or decrease the amount of time spent teaching students. Solutions to counteract these issues must therefore consider how to foster educator identity and self-determination in busy clinicians while simultaneously mitigating symptoms of burnout. Fortunately, literature suggests that identities are malleable[20] and that symptoms of burnout can be reduced.[21]

Improving teaching identity requires focus on the individual and the organizational and institutional structures in which the individual works.[12] Self-determination theory suggests we should identify methods for improving preceptors' motivation to teach by focusing on their needs for autonomy, competence, and relatedness. When describing methods to motivate classroom-based medical educators, Ten Cate and colleagues suggest allowing for flexibility in determining the instructional method for teaching, allowing the teacher some degree of autonomy with respect to content, and creating a sense of community with other teachers.[14] The same concepts could be used to improve upon preceptor motivation in the community setting. Community preceptors enjoy sharing

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their knowledge and experience regarding the practical, psychosocial, and business aspects of medical care.[1,22] In comparison, they often feel inundated with requirements for midrotation feedback, formal evaluations, and encounter documentation.[5,7] While some of these issues are unavoidable due to accreditation standards, departments and institutions should consider, when possible, the burden placed on preceptors and the harm that this may pose to their autonomy.

One practical change involves the EMR, the presence of which appeared throughout participating preceptors' remarks. While its impact on medical education is relatively recent, this impact is definitive and significant.[11,23–26] A targeted approach to changing the EMR's impact on student teaching can result in short- and long-term consequences in medical education. Many medical schools have already adopted the recent change in the Centers for Medicaid Services guidelines to allow students opportunities to document in university-based health care systems. Specific attention to the EMR in the community preceptor's clinic could help negate this unintended consequence of changes in health care.

Another practical change involves the detachment that community preceptors feel from the large academic medical school. This issue relates to identity formation or "relatedness" and is a major contributor toward burnout.[15,19,20] Our findings richly exemplify this disconnect. Participating preceptors offered solutions for remediating this gap through developing relationships between institutions and practices. Supporting a preceptor's identity as a teacher and not just a clinician through training, time for connecting with others of a like mind, and cultural recognition of the benefits a teacher brings to the medical community would be of benefit. This may be challenging for academic institutions to accomplish if they do not have much to offer large, nonacademic practices. In that case, one possible solution would be for academic institutions to increase the size of their own primary care faculty to accommodate students.

Additionally, it appears that curriculum evolution affecting clerkship duration has significantly affected the preceptor's teaching experience. Medical schools are attempting to transform how they teach to better reflect the realities of health care delivery. An unintended consequence is that this may have alienated community preceptors who have enjoyed teaching but feel that they cannot adequately do their job in the shorter durations imposed by curriculum reforms. Solutions may include faculty development for teaching effectively in a shorter period. However, more sustainable solutions may require a reconsideration of the curricula. Longer relationships with preceptors through longitudinal integrated clerkships may foster more connection between the preceptor, learner, and institution[27] and may serve to invigorate community preceptors.

Limitations

Although qualitative studies are not dependent on a specific sample size, one limitation of our study was the difficulty to recruit participants, especially at some institutions. The challenge of recruiting clinical preceptors may have been related to the nature of our study question as it asked participants to disclose a negative aspect of their profession. Yet, we noted that participating preceptors did have shared experiences that contributed to developing a framework that described the phenomenon related to the decline in community preceptor teaching. Another limitation was that our study, using an interpretivist, phenomenological framework, aimed to examine shared experiences from multiple institutions. This type of approach does not lend itself to examining differences between institutions or differences of the perspectives of clinical preceptors at different institutions. Institutional differences may lend to other discoveries that perhaps are specific to certain demographic features. Future studies are needed to better appreciate these targeted differences to identify the best approach to retain each potentially unique population of clinical preceptors. A final limitation was that our study included only pediatricians. However, findings such as concerns with the EMR, the feeling of being disconnected from large academic centers, and work–life balance do affect very many community-based physicians, and thus our findings likely traverse specialty lines.

Conclusions

Contributing to the literature regarding the decline in community preceptor teaching, our qualitative phenomenological study presents a novel viewpoint of preceptors who have completely stopped or decreased the amount of time spent teaching medical students. Specifically, our findings call for better recognition of the teaching identity of community preceptors, application of self-determination theory to foster that identity, and recognition and management of burnout to prevent further decline in community preceptor teaching and to optimize training for our medical students. We recommend the development of targeted materials and strategies, many actually offered by our own preceptors, for education leaders to guide further recruitment and retention efforts. Solutions to this crisis may require specific interventions beyond compensation, awards, and other recognition to enhance the teaching identity of community preceptors and their motivation to educate and inspire the next generation of physicians.

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C.R. Paul is associate professor of pediatrics, University of Wisconsin School of Medicine and Public Health, Madison, Wisconsin.

C. Vercio is assistant professor of pediatrics, Loma Linda University School of Medicine, Loma Linda, California.

R. Tenney-Soeiro is associate professor of clinical pediatrics, University of Pennsylvania Perelman School of Medicine, Philadelphia, Pennsylvania.

C. Peltier is associate professor of clinical pediatrics, University of Cincinnati College of Medicine, Cincinnati, Ohio.

M.S. Ryan is associate professor of pediatrics and assistant dean for clinical medical education, Virginia Commonwealth University School of Medicine, Richmond, Virginia.

E.R. Van Opstal is assistant professor of pediatrics and internal medicine, Rush Medical College, Chicago, Illinois.

A. Alerte is professor of pediatrics, University of Connecticut Health Center, Hartford, Connecticut.

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C. Christy is professor of pediatrics, University of Rochester School of Medicine and Dentistry, Rochester, New York.

J.L. Kantor is associate clerkship director, International University College of Medicine, Miami, Florida.

W.A. Mills Jr is associate professor of pediatrics, University of North Carolina School of Medicine, Chapel Hill, North Carolina.

P.B. Patterson is assistant professor of pediatrics, Tufts University School of Medicine, Boston, Massachusetts, and Maine Medical Center, Portland, Maine.

J. Petershack is professor of pediatrics, The Long School of Medicine at UT Health San Antonio, San Antonio, Texas.

A. Wai is assistant professor of pediatrics and internal medicine, Loma Linda University School of Medicine, Loma Linda, California.

G.L. Beck Dallaghan is director of educational scholarship, University of North Carolina School of Medicine, Chapel Hill, North Carolina; ORCID: https://orcid.org/0000-0002-8539-6969.

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