Teaching Moment | Occasion d'enseignement

Mentoring in a digital age

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t the end of her first year of family medicine residency, Sylvia Pillon was considering her future. She wanted advice as she considered her secondyear electives and how they might relate to her career plans. Naturally, she turned to her assigned mentor, Ted Osmun, for input on her questions. However, her mentor was located 100 km away from her clinical placement, making face-to-face meetings hard to arrange, and they were finding it difficult to communicate satisfactorily. They considered the requirements of the mentoring relationship and whether there were alternative ways to communicate effectively.

Importance of mentors

Mentorship has been described as "a dynamic, reciprocal relationship in a work environment between an advanced career incumbent (mentor) and a beginner (protégé), aimed at promoting the development of both."1 Another definition of a mentor is "someone of advanced rank or experience who guides, teaches, and develops a novice."2 Mentoring is seen as facilitating reflection, learning, and collaboration instead of acting as experts in the field.3 Mentors often act as sounding boards for mentees or as role models who provide inspiration.2 Mentorship has been shown to have important influences on personal development, career guidance, career choice, and research productivity.4

Mentorship occurs formally and informally during family medicine training. Formally, in nearly every program a resident is assigned a primary family medicine supervisor who ensures that the resident meets the requirements of the residency program and who acts as the resident's main professional and academic contact. The supervisor often helps guide the resident in his or her future career plans and helps with any conflicts that might arise during training. Informally, residents often will make contact with physicians who have similar career interests or personalities. These informal mentors also provide important support for residents, acting as role models and guides as the residents tailor their career paths. Whether formally assigned or informally chosen, mentors play key roles in the residents' development as they become fully fledged physicians.

One of the issues that often arises with mentorship is finding someone locally with whom the mentee

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can develop a mutually beneficial relationship.4 Family medicine training in Canada is expanding to include more residencies in both academic and community settings. As a result, residents might find themselves, like Sylvia, training far from their assigned or chosen mentors. Conflicting schedules and geographic separation can make it impossible for the residents to access these important people face to face. They must find ways to communicate effectively over distance.

Long-distance mentoring

A survey of mentorship among mentors enrolled in the One-on-One Mentoring Program at the 2004 Society of General Internal Medicine Annual Meeting found that 67% of respondents had participated in long-distance mentoring via e-mail or telephone with a mentee in another community, state, or country.5 Of the mentors surveyed, 79% believed that long-distance mentoring was less effective than on-site mentoring for the mentee.5 The respondents thought that the benefits of longdistance mentoring included its being less demanding and enabling participants to overcome geographic distances.5 Drawbacks included lack of "face time," the need to plan meetings, lack of direct observation, and technical difficulties with e-mail or telephone. 5 Strategies for improving long-distance mentoring included establishing the relationship before long-distance mentoring, meeting in-person occasionally, having clear expectations, and having an engaged mentee.5

To date most of the literature regarding long-distance mentoring has studied either e-mail or telephone communication. E-mail works well for frequent short exchanges and for simple questions and general information but not for giving critical feedback or commenting on each others' knowledge, skills, abilities, attitudes, beliefs, and behaviour.6 The lack of nonverbal communication in e-mail makes it easy to misinterpret meanings and feelings.6 E-mail communication often makes it difficult for a personal relationship to develop trust, respect, and communication, which are necessary for an effective mentor-mentee relationship.7 The telephone allows for some added nonverbal communication, such as tone, pitch, and flow of speech, but it cannot convey facial expression or body language.

In our case, Ted was located 100 km from Sylvia's clinical placement. We had been in contact by e-mail but Sylvia was finding that this communication lacked the spontaneity of conversation and that e-mail conversations often lost the thread of their original concerns. Sylvia had been communicating with her friends

and family using Skype, a type of voice over Internet protocol video conferencing, and wanted to test it as an alternative to communicating by e-mail.

We set out to explore whether video conferencing might allow residents and their mentors both verbal and nonverbal communication while they were separated geographically.6

E-mentoring options

E-mentoring can be described as "a computer mediated, mutually beneficial relationship between a mentor and a protégé which provides learning, advising, encouraging, promoting, and modeling that is boundaryless, egalitarian, and qualitatively different than face-to-face mentoring."7 Telephone and e-mail are tools that can be used in e-mentoring; video conferencing is another. The benefits of e-mentoring include flexibility of scheduling, overcoming geographic distance, and facilitating access.7 Drawbacks include the requirements of access to the Internet, technical skills, coordination of meeting times, difficulty establishing rapport, and, with e-mail communications, privacy and confidentiality issues.7

Online interactions allow mentoring relationships that might not otherwise be available.8 They allow more frequent and convenient contact than is available through in-person meetings,8 but can lack spontaneity and face-to-face interaction and observation, and can be complicated by technical difficulties with computers and telephones.8 Setting up a long-distance mentorship requires planning and is often facilitated by having the initial meeting or first few meetings in person.9

Video conferencing using Skype offers potential solutions to some of these problems. Skype allows people at a distance to communicate with both audio and video modalities over the Internet with no cost and little technical prowess. To be able to conduct residency mentoring during off-service rotations via video conference from any location with an Internet connection, allowing the resident and the mentor the benefits of meeting face to face while being separated geographically, is very appealing.

Mentoring by Skype

To assess Skype's viability as an alternative mode to mentoring in person during residency, we undertook a pilot project. We conducted mentoring sessions over Skype and in person, and recorded our qualitative assessments of the sessions.

Resident perspective (Sylvia). As a resident, I am always pressed for time, and meeting my mentor online significantly eased some of this burden. One of the great aspects of using Skype was that we could accomplish my mentoring sessions despite the fact that I was doing a rotation nearly 100 km from my

home-base. The program was simple to set up, and there was no cost to me as my laptop has a built-in Web camera and microphone. The ability to see each other face to face made communication much easier and I felt more connected than using the phone or e-mails. Another benefit was the flexibility in scheduling, as we could pick a time that was convenient for both of us.

The main issue that we had during the sessions was that the connection became slow and cut out at times. This required us to sign out and then restart the connection, which wasted time and interrupted the flow of the session. Although not an issue in my case, there could be some cost associated with implementing the program if you did not have a Web camera, speakers, or microphone.

Mentor's perspective (Ted). I work in a rural program; as such, the residents I mentor are often miles away. I suspect that preceptors in urban areas have similar difficulties, if not with distance, then with the time it takes to travel in cities. Programs such as Skype provide the opportunity to meet in real time and face to face. While there was a certain artificiality with Skype, I found it to be a reasonable alternative to meeting physically. It certainly is better than telephone or e-mail, where one misses out on the myriad communications used when talking face to face. Using Skype, I was surprised how much more "real" the meetings were than telephone conversations. Despite this, I still think it preferable to be physically present for the first meeting. One small problem that could be addressed with improved organization was accessing the university's required mentoring form as I was Skyping from home. As a result of our work schedules, we were Skyping after hours, which intruded into our personal time. As well, there are still some rural areas with poor Internet access, making Skyping impossible.

While the quality of the transmission can vary from day to day, this is a minor problem and usually can be corrected by disconnecting and trying again. Using Skype is extremely efficient and its ease of use likely will increase the frequency of meetings. I plan to use it much more in the future.

Conclusion

Mentoring is considered to benefit both the mentor and the mentee and is becoming a requirement of family medicine programs. The distributed nature of family medicine programs can make arranging meetings difficult and inefficient. For those mentors and mentees who are at a great distance from each other, using Skype is a reasonable alternative to face-toface meetings and superior to telephone or e-mail communication.

Teaching Moment

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Competing interests

None declared

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TEACHING TIPS

- Setting up a long-distance mentorship requires planning. Telephone and e-mail communications are often not well suited to the types of discussions residents and their mentors need to have. Video conferencing using Skype is a reasonable alternative to face-to-face meetings.
- If possible, establish a working relationship in person before beginning meetings by Skype. Ideally, the first meeting between the mentor and mentee should be in person. Meeting face to face helps to establish the relationship, because meeting over video can feel artificial.
- Have a set agenda for the meeting, just as you would for a formal meeting, but also allow time for free discussion.

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