

Caring for Physicians and other Healthcare Professionals: Needs Assessments for eCurricula on Physician and Workplace Health

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Abstract—The quality and sustainability of the healthcare system in Canada is dependent on the healthcare providers within it. If the system is to remain strong, it is critical that those who provide the services within it are strong and healthy. Unfortunately, downsizing in the Canadian healthcare system has led to extremely heavy workloads and high levels of burnout in healthcare providers, which not only affects their own health but also that of the patients they care for. In an attempt to provide support and resources for healthcare providers to improve their own health and well-being, the purpose of this project is to develop two online programs—one for physicians and medical students and one for other healthcare providers—that will (1) provide access to cutting-edge information related to health and wellness, (2) allow the users to evaluate their current fund of knowledge and health status and take action to improve it, and (3) direct the user to online and face-to-face resources and supports. The first step in the project involved identifying the needs of the target users for the two programs. This paper summarises the findings from these needs assessments and provides recommendations for program design and development.

Keywords—physician health, workplace health, needs assessment, eLearning

I. INTRODUCTION

The content of this paper was first presented at the 2009 International Conference on Mobile, Hybrid, and On-line Learning, Cancun, Mexico [1].

The quality and sustainability of the healthcare system in Canada is dependent on the healthcare providers within it. If the system is to remain strong, it is critical that those who provide the services within it are strong and healthy. Unfortunately, downsizing in the Canadian healthcare system has led to extremely heavy workloads for healthcare

providers and high levels of burnout. One study showed that 46% of Canadian physicians are in advanced stages of burnout [2]. Another revealed that many new nurses are leaving their jobs within two years of graduation and have symptoms of burnout, depression, and emotional exhaustion [3]. Dyrbye et al. [4] found an association between burnout and an increased likelihood of suicidal ideation in medical students. These concerns resulting from burnout are not limited to the healthcare providers themselves; the well-being of healthcare providers can also impact patient care and satisfaction. Physician burnout has been associated with lower patient satisfaction outcomes and longer post-discharge recovery time. Further, more days are lost per worker each year in the health sector than for any other occupation in Canada [5]; the average number of days lost due to illness or disability is about double for workers in healthcare than in other sectors. The importance of improving the health of healthcare providers cannot be understated.

According to the CanMEDS 2005 Physician Competency Framework, a key competency of physicians is to demonstrate a commitment to physician health and sustainable practice. This involves “balancing personal and professional priorities to ensure personal health and a sustainable practice; striving to heighten personal and professional awareness and insight; and recognising other professionals in need and respond[ing] appropriately”[6]. Through caring for themselves and their colleagues, physicians are able to demonstrate a commitment to their professional responsibilities [7] [8]. Not only is physicians’ health a health issue but also a professional one.

In Canada, each province has its own provincial physician health program that provides support to

physicians and their families. Further, in efforts to improve medical student and physician health and wellness at the University of Ottawa, the Faculty of Medicine created Canada's first Faculty Wellness Program in 2000. However, despite the efforts of these programs, many healthcare professionals and students seeking access to health and wellness resources and services are not able to access them or do not even know they exist. Clinicians and students are busy individuals and, due to time constraints and geographic location, many are not able to attend professional development programs that relate to health and well-being. Consequently, the purpose of this project is to develop two online programs—one for physicians and medical students that focuses on physician health and one for healthcare providers (including physicians) that focuses on workplace health—that will (1) provide access to cutting-edge information related to health and wellness, (2) allow the users to evaluate their current fund of knowledge and health status and take action to improve it, and (3) direct the user to online and face-to-face resources and supports. The first step in the project involved identifying the needs of the target users for the two programs. This paper summarises the findings from these needs assessments and provides recommendations for program design and development.

II. METHODOLOGY

In order to obtain multiple perspectives to inform the design and development of the programs, interviews were conducted with a sample of end-users of the two programs: physicians and medical students for ePhysicianHealth.com and regulated healthcare providers for eWorkplaceHealth.com. Project stakeholders purposefully sampled individuals in order to obtain a wide variety of perspectives and represent gender, cultural, and occupational diversity. Eleven interviews were conducted in total: Six for the physician health program (five individual interviews and one focus group interview) and five for the workplace health program (three individual interviews and two focus group interviews). A total of 30 individuals were interviewed (13 for physician health and 17 for workplace health; see Table I).

TABLE I. PARTICIPANTS' OCCUPATIONS

Physician Health (n = 13)		
Occupation	# of female participants	# of male participants
Family physician	2	0
Medical scientist	1	1
Medical student	4	4
Medical resident	0	1
TOTAL	7	6
Workplace Health (n = 16)		
Dietician	1	0
Family physician	1	0
Hospital management	0	1
Medical administrator	0	1
Nurse	2	0
Occupational therapist	1	0
Pharmacist	1	0
Medical specialist	0	2
Physiotherapist	1	1
Psychologist	1	1
Recreational therapist	1	0
Social worker	1	0
Union leader	1	0
TOTAL	11	6

Interview schedules (Appendixes A and B) were developed by members of the University of Ottawa Faculty Wellness program; subject matter experts in physician and workplace health, healthcare, and workplace learning; and the research team. The interviews lasted 30-60 minutes, were audio-taped with the participants' permission, and took place at a location convenient for the participants. The interviews were transcribed verbatim and the transcripts analysed. In the initial step of the analysis, the transcripts were read and reread and a preliminary list of relevant emergent categories was developed. The researchers read the data until no additional themes or categories emerged. Once the categories reflected "the recurring regularities or patterns in the study" [9] and the researchers were satisfied the themes reflected the views of the participants, the data were assigned to the categories and the findings compiled into a report. Direct quotations were used to preserve the voice of the participants.

III. FINDINGS

The findings for the two programs (ePhysicianHealth.com and eWorkplaceHealth.com) were similar and therefore are presented together. Where differences emerged they are highlighted. Five themes emerged from the data: learner characteristics, privacy, usability, convenience, and content.

A. Learner Characteristics

The interview participants identified a number of characteristics specific to physicians and medical students that should be taken into account when developing the program on physician health. These included (a) physicians are egotistical and therefore there is a need to “appeal to their ego”; (b) physicians and medical students are adult learners that need interaction; (c) physicians and medical students tend to be impatient; (d) physicians and medical students are under enormous pressure; (e) physicians are exposed to the stress of dealing with pain, illness, and death on a daily basis; and (f) physicians and medical students are incredibly short of time and therefore guidelines and/or suggestions (e.g., for living a healthier lifestyle) need to be realistic and practical.

For both programs, participants foresaw a lack of time due to busy schedules and heavy workloads as the biggest potential barrier to healthcare professionals using the programs. One of the two most commonly cited themes in the interviews was that the key information in the programs must be presented in a concise style that takes no more than 10 minutes to cover but that options for delving deeper into the content are included. One physician emphasised, “Short things are powerful, don’t be afraid of being short. I would support short modules and linking to other resources”.

Participants indicated that it would be a problem, situation, or crisis involving themselves, a colleague, a family member, or a patient that they did not have the tools to deal with that would prompt them to visit an online program on physician or workplace health. For example, a medical administrator reported:

What would be motivating me [to use an online program] would be an actual problem. Typically, when I go online it is usually to address an issue.... If I have some problems or my colleagues have some problems and [I] don’t know how to deal with them ... an online module maybe the first place I would go.

Further, one participant pointed out the privacy that can be provided through an online program offers options for physicians and medical students in vulnerable situations. Other participants hoped the program would be a resource they could use with their patients, colleagues, and friends.

Participants agreed that the programs should be online to ensure they are accessible to this busy population and provide a means of accessing resources anonymously. They indicated the target

audiences would all have access to high speed Internet and would possess intermediate to high level computer skills, with the exception perhaps of “older physicians”. One medical student expressed it this way: “Some of the older doctors who do not have a lot of computer experience may have some challenges. Our generation, everything is about computers,... it shouldn’t be a problem”. The participants felt that most users would access the programs from home, while a few said they thought the programs would be accessed from both home and work.

Some physicians noted it would be beneficial to receive CME credits for completing the physician health program and felt this would serve as a motivator to do the programs. However, for students this was not an issue as they would not benefit from this. One physician noted it would be helpful to link the program to the CanMEDS competency roles, which would allow physicians to demonstrate how they are developing competencies within each of the roles.

B. Privacy

The second of the two most frequently cited themes related to privacy. Participants indicated that participation in the programs needed to be absolutely anonymous and that online programs could offer this anonymity. It was pointed out that learners coming to the site may be in a vulnerable state: “Clinically speaking, people experiencing depression, anxiety disorder, and so on typically feel cornered. Not all of them, but many of them don’t feel that they can reach out to get help” (physician). Another physician noted, “[the online environment] is a controlled atmosphere, less anxiety provoking”.

Participants emphasised there should be no tracking or any way of telling who has logged onto the site: “Confidentiality is a big aspect for everyone in medicine.... When something is on the computer, everyone can access it. Ten years down the road, 20 years down the road, the leak can happen. There is always a concern” (physician). A nurse further explained, “Confidentiality would be key. Employees need to feel confident that if they do access the information on managing workplace stress, [it] is not somehow coming back to their employer”. Consequently, not having a login name and password was preferred by the participants interviewed.

Online anonymity was not the only privacy concern voiced by the participants. Those talking about the workplace health program were concerned about finding a private physical space to access the

program. An occupation therapist noted, “If a computer is in a common space, people could look over your shoulders”. That said, many felt they would not have time to access the program at work as many healthcare professionals are busy caring for patients during the day and do not have access to a computer. One physician suggested that the backing of the department might be beneficial to give healthcare professionals time to access the program. Another participant suggested having more computers that healthcare staff could access: “Our staff in the hospital would tell you that they need access to computers and the Internet” (medical administrator).

C. Usability

Another oft-cited theme that emerged from the interviews related to usability and having easy access to the programs. Participants suggested the names of the programs and the URLs should be easy to remember and flagged in prominent places. A couple of physicians pointed out that the program is not just about wellness but also illness and cautioned that in order to attract the intended audience, the title of the program should reflect this: “I wouldn’t call it ‘the wellness site’ or ‘physician wellness’. It is not only about wellness, but also about recognising some problems too. You need to catch those people who are not well” (physician). Participants advocated advertising the programs in renowned journals, professional magazines, online media, and newsletters. Using key words that would make the programs appear at the top of a Google search was also mentioned, as was having links to the programs on websites the target audience visit often (e.g., Faculty of Medicine homepages, Canadian Medical Association). Participants indicated the programs should be free of charge with no need to login.

Participants noted the programs need to be appealing to the eye and easy to use and navigate, with minimal scrolling and moving from one page to another. A few participants highlighted the importance of having programs that did not require long wait times for components to download. Although some participants expressed interest in seeing the use of cutting edge technology in the programs, the majority appeared to prefer ease and speed over “bells and whistles” that may complicate the use of the programs due to downloading, uploading, or slow Internet speed. One medical student summed it up as follows:

It definitely would help when there are things on the website you could click on or interact [with].

Sometimes computers load stuff slowly [though]. You won’t want anything that is slow. I would like to not have to download too much.

Participants did not feel there would be much need for technical support. One student suggested: “Maybe include an instruction sheet about how to use the website and [provide] contact information [for] when you have problems. I don’t think we need much support”.

D. Convenience

Several participants said they wanted a program at their fingertips that provided a “one stop”, just-in-time resource for healthcare professionals needing help or information at any time of day or night. One medical student pointed out the importance of “having all the information in one spot. You don’t have to look in all different places, you know the information you are looking for is reliable”. Another reiterated the convenience of “knowing that it is a trusted source. This is not something like a Google search [where] you don’t know whether the information is valid or not, or some other information [that is] just very general and doesn’t really help”. The convenience of such a program is especially relevant for healthcare professionals who may not feel comfortable broaching these topics with family members or colleagues due to the sensitivity of the issue.

E. Content

Participants provided great insight into the content for the programs. Their responses can be categorised into five sub-themes: engaging, depth and breadth, organisation and delivery, topics, and cultural sensitivity.

1) *Engaging*: Participants emphasised the content in the programs should be concise, relevant, practical, and up-to-date. The content needs to be interesting and capture the users’ attention in the first five minutes. One physician commented: “It’s got to have a very attractive lure with a very sharp hook or we won’t stay online for very long”. Another physician suggested this could be achieved by “tell[ing] me something I don’t know.... Give me a point of view I hadn’t thought about. Put me in someone else’s shoes”. Many participants stressed the importance of respecting their current knowledge and not talking down to the user. One physiotherapist explained:

We are educated and we are educators. We know that to keep our stress down we have to eat right

and get some exercise. Tell us something we don't know, something new, new findings we should be aware of, good resources.... Don't talk down to me.

Ensuring it is “really focused, high quality, [with] good evidence-based [content]” would further work to ensure the program was engaging (physician). Indeed, participants highlighted the importance of involving experts in the content development to add credibility.

2) *Depth and Breadth*: The depth and breadth of the content included in the programs is an important consideration. One group of participants referred to a program that some of their colleagues had taken that was perceived as “a waste of their time”:

They did a little questionnaire, ‘Are you depressed?’ or something like that. [They were then given] bits and pieces of information that they could look at. It wasn't sophisticated enough. The information was at such a superficial level that if you pick up any of the magazines at the grocery store, you would have exactly the same information on diet, weight loss, and exercise. People are looking for something that can actually make a difference. (occupational therapist)

Although there was a strong preference for relevant content presented in concise sections, participants agreed that the opportunity to go in-depth and learn more about topics should be an option. Time is an important consideration for the target audiences of these programs. Two participants said they would spend a maximum of 30 minutes on the resource and one physician said she would spend up to an hour. A medical student provided this insight:

If it is just looking for information during lunch time, 10 minutes would definitely be max. But if you are looking for information for more serious issues, trying to learn something to resolve a growing problem for yourself, then you should spend 20 or 30 minutes or a longer time for in-depth information. But not 2 hours.

Participants suggested links to support groups and resources were essential. In particular, participants wanted guidance on where to go for more help. One physician commented the physician health program should provide information on “where to send their colleagues in the situation that they want to help but not take on the problem [themselves]” (physician). Similarly, a medical student suggested, “[Provide] links to help. For

example, if you are a medical student [in a specific town or city] here are places/people you can turn to, here are faculty and departments you can go to”. One physician suggested including information on Code 99, which helps physicians find their own primary care doctor.

3) *Organisation and Delivery*: In terms of organising content, the following suggestions were provided by the participants: (1) use a table of contents to make finding information fast and easy; (2) provide “need to know” information followed by resources for those who “want to know” information in more depth; (3) be objective oriented; (4) use point form and key phrases and words; (5) organise the content into ten minute segments; (6) provide an abstract that covers the main ideas; and (7) send emails notifying of updated information in a headline format.

Participants also talked about how they would like to see the content presented. Some expressed that they wanted to be engaged in interactive activities using cutting edge technology: “Show off up-front that you have some magic tricks to ‘wow’ the [user]” (physician). Others indicated they preferred content that was presented in straightforward text that required little or no downloading nor complex technology to access. These participants wanted something that they could read or easily print either for themselves or their patients; they were looking for “a quick link to information” (physiotherapist). A few suggested interactive activities and multimedia would be nice but should be optional. A physician explained: “Sometimes I just want to skim knowledge, other times I may want to listen to a podcast or watch a video”. Most participants indicated that time would be an issue if they had to complete interactive activities.

Participants' ideas regarding what kind of features and activities the programs should include spanned the full spectrum of pedagogical strategies:

I envision those online learning tools, [such as] check boxes, clicking on things, filling the blanks may be appreciated by some people. Multiple choice, rearranging things. For example, [if] someone is mean to me in 10 different ways, how do I rearrange them and target the most important things? (physician)

Other approaches suggested by participants included problem-based learning rather than a didactic approach; reflective exercises—“some of the more intangible values are often best assessed by reflection” (physician); quizzes—though some

physicians did not want quizzes; Powerpoint slide presentations; flowcharts; graphics and diagrams that demonstrate key points—“sometimes difficult things can be conveyed in a way that it is more visual” (physician); cartoons; audio and video; and role playing—“say one has a certain type of situation, how to deal with this situation, how others reacted” (medical student).

The form of content presentation that all participants were receptive to was short video vignettes portraying stories of colleagues who had overcome similar problems that they might face. One medical student suggested: “two or three minute vignettes for, not a serious problem but sort of a moderate range problem, that could maybe have the individual experience some revelation about the a minor change they can make”. Case studies, success stories, and testimonials were also mentioned by participants.

Several participants indicated that self-assessment exercises would be helpful, as would checklists that would allow them to identify warning signs and symptoms. One nurse said she would like self-assessment activities that would allow her to diagnose her problem and then provide solutions to solve it: “I can see some self-assessment questionnaire. For me, if I am feeling obsessively anxious then I would like to have something that tells me, ‘Yes, you are anxious and you need this and you can benefit from this’”. Self-assessments would also be an effective way of providing feedback on learning. One physician noted, “[Physicians] like getting feedback. They like to feel they have mastered [something] and then go on”. Another noted, “Personally, I like real time feedback. Keeping track of how things are going”. A medical student suggested that whether or not you provide feedback and what kind of feedback you provide depends on how the resource is being used: “If you use it for self-help or assessment of somebody else, you may not want any feedback. If you are doing it for learning purposes, to get educated, that is different”.

Although many participants acknowledged the benefits of having online discussions in the programs, participants recognised that there would be too many issues related to physician or patient confidentiality to include them. One physician reflected, “We could have an area for discussion or blog type post or using a wiki where things could be updated by the users. [But you would need to] take into consideration confidentiality; the question is how it could work?”.

4) *Topics*: A variety of topics were suggested for inclusion in the two programs. For the physician health program, four areas related to health emerged: mental, emotional, professional, and physical health. The most common topics mentioned by participants were mental health issues such as depression, suicide, stress, anxiety, burnout, and substance abuse. The second most popular topics mentioned related to emotional health issues and included family management, relationship management, issues associated with different minorities, sexual orientation, the transgender community, culture and gender, emotional intelligence, family illness, and living or working with chronic illness.

Professional health was also deemed extremely important by participants. This category included topics such as disruptive behaviour, time management, financial planning and managing debt, physician-patient boundary issues, choosing a residency and getting through it, legal issues, conflict resolution, and support for international medical graduates to help them transition into the Canadian culture and ensure professionalism. One physician summed up the types of content she would be looking for in the program:

Not only diagnostic categories but some life management categories, such as how do I manage time?... How do I manage if there is too much work? How do I cope with the stress of family members when I am juggling three jobs? How do I cope with my crazy teenagers? What if I only have 20 minutes to exercise?... In the end, the management category is practical,... not just the illness but the wellness side is helpful.

Physical health issues, although not mentioned as frequently, were also deemed important by several participants. Topics included fitness, relaxation techniques, heart disease, and blood pressure.

Several of the topics suggested by participants for the workplace health program were the same as those identified by participants for the physician health program: stress, physical and mental health, time management, conflict resolution, professionalism, teamwork/relationships, and disruptive behaviour. Additional topics identified for inclusion were bullying, flu vaccine, fatigue management, dealing with the loss of a patient, care for the caregiver, manners, etiquette for sending email, how to run a committee, working in an interprofessional team, pandemic preparedness, and compassion.

Interview participants for the workplace health program were asked what factors in their work life most influenced their mental and physical health. Workload, environment, and relationships were the three factors that emerged. Workload was the most commonly cited stressor. The number of patients the healthcare providers had to see in a day meant that sometimes they were not able to give all the patients the time and attention they wanted to and this was a source of stress for them. Moreover, they noted that not having the autonomy to be able to decide when to eat lunch, when to go on vacation, or when to be able to go to the bathroom affected their health.

The physical environment (e.g., lighting, ventilation, mould, infection control, having an office window, and access to adequate bathrooms) was identified as a cause of workplace stress for many healthcare providers interviewed. One medical administrator stated:

The type of space you have, whether you have access to external light, clean air, and water [affects your stress level]. We have a number of older facilities and we have facilities that are going through transition, renovation, and whatnot, so that certainly has an impact on [the staff's] stress level.

Relationships in the workplace clearly affect health. All participants discussed how their immediate supervisor, colleagues, and the people they work with have a significant impact on their workplace health. Much of the stress identified appeared to be related to the organisation's administration and management style and policies (e.g., slowing the hiring process to reduce the deficit, establishing policies regarding absenteeism, not being recognised for the contributions made in the workplace). One nurse felt that workplace conflict is one of the highest stressors.

5) *Cultural Sensitivity*: Participants indicated the programs need to be sensitive to gender and cultural issues. One physician said:

Building something to reach everyone is a challenge. I hope there are a lot of sensitivities to this issue. Maybe the speakers could represent different cultural, religious, and gender groups. People who feel ostracised are likely people who would feel depressed and anxious. Chances are people from different cultures may want the least intrusive way to deal with this online.

Participants pointed out the importance of being sensitive in the materials and resources chosen. One

medical student suggested: "If you give out links to articles and those articles always concern white middle-age men that may be a problem. You need variety in the links and examples so that it concerns different genders, cultures, and backgrounds". Similarly, a physician stated: "We have to be really sensitive to the context, the scenario, the vignette, the name chosen. Make sure different culture issues are covered".

Recognising the two official languages of Canada, participants suggested the programs should be bilingual; though they acknowledged the cost of this and thought this could come in a later phase. One physician noted, "It would be interesting to have culturally sensitive vignettes in both official languages".

IV. CONCLUSIONS

It was clearly apparent from the needs assessment for ePhysicianHealth.com and eWorkplaceHealth.com that the needs for the two programs are very similar. Three possible explanations for the similarities are: (1) the content in both programs will be very similar as it will address the health of healthcare providers; (2) the target audience for both programs is busy adult healthcare professionals; and (3) interview participants for eWorkplaceHealth.com included physicians so the views of physicians were obtained for both programs. However, the other healthcare providers (i.e., nurses, physiotherapists, occupational therapists, psychologists, recreational therapists, social workers, and medical administrators) had similar perspectives to those of the physicians with regards to what they felt they and their colleagues wanted and needed with regards to the online programs.

The two most common findings for the two programs that were voiced loud and clear were (1) that the information must be presented in a concise style that takes no more than 10 minutes to cover with the option of delving deeper into the content if desired and (2) individuals' participation in the programs must be anonymous. Other key findings were that the programs needed to be easy to find and access; be easy to use; and contain evidence-based, meaningful, practical content.

V. RECOMMENDATIONS

The following is a summary of the recommendations for the design and delivery of the two programs:

- Present content in a concise style that takes no more than 10 minutes to cover
- Provide optional exercises, resources, and activities for learners who want to delve deeper into concepts
- Ensure there is no way of tracking who is using the programs so users are anonymous
- Provide the necessary content in one convenient location
- Minimise scrolling and page turning
- Ensure the programs are easy to use
- Provide options for users to partake in more complex and sophisticated activities
- Include evidence-based, meaningful, practical content
- Make use of videos vignettes
- Provide links to support groups and resources
- Ensure it is easy to print documents for personal use or for use with colleagues or patients
- Ensure gender and culture sensitivity
- Select a URL that is easy to remember
- Tag the programs to ensure they are easy to find through a Google search
- Advertise the programs in renowned journals, professional magazines, online media, and newsletters
- Link the content in the physician health program to the CanMEDS competencies

<http://www.statcan.gc.ca/pub/71-211-x/71-211-x2009000-eng.pdf>

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APPENDIX A

Interview Schedule for ePhysicianHealth.com

We understand that you are very busy and we really appreciate you taking the time to be interviewed today. In this interview we hope to obtain information that will be used to guide the development of an e-Curriculum in Physician Health in the Faculty of Medicine at the University of Ottawa. The purpose of the program is to provide medical students and physicians with convenient and private access to relevant learning resources that will address issues such as mental and physical health, disease prevention, health promotion, and self-care. It is part of the project's vision that users have access to high quality, cutting edge, and practical learning resources and sources of support anytime, particularly in a time of reflection and/or crisis.

The information you provide in this interview will be shared with the program development team and used to inform program development.

Structure

1. If you wanted or needed information on physician health including topics such as substance abuse, depression, or anxiety either to help yourself or to help others, what would motivate you to access an online learning resource?
2. What characteristics should this program have?
3. Are there specific things that should be considered when designing such an online program for physicians and medical students to ensure that it will address their needs and meet their expectations. If so, what are they?
4. Do physicians and medical students have specific learning characteristics that need to be considered when designing an online program to ensure that it will address their needs and meet their expectations? If so, what are they?
5. What types of learning strategies do you think should be used in this program?
6. What ethical issues need to be considered when designing this program?
7. Are there gender, cultural, or other issues that need to be considered?
8. What type of feedback, if any, would you want about your learning progress during such a program?
9. What type of interactivity would you want in such a program?

Content

1. What content would you like to see covered in this learning resource? What top three to five topics would you like to see included? What would you use?
2. What learning needs do you feel should be covered?
3. Are there language issues that should be considered when designing this course?

Media

1. Do you (or do you think other physicians and medical students) have any concerns about learning online/doing an online program? If so, what are they? Probe: ask specifically about confidentiality and privacy in a follow-up question.
2. What type and amount of interaction would you like to have (or think other physicians and medical students would like to have) with the material online?
3. Where do you see yourself (and colleagues) working online? (Home, at work, or somewhere else)?
4. What is the ideal amount of time that you (and/or your colleagues) would spend working on the program at one time?
5. Would you have access to high speed Internet?
6. What types of tools would you like to see used? (e.g., communication, game-based activities, reflection activities, self-assessment)
7. What level of computer experience would this target audience have?

Service

1. What support do you feel you and/or your colleagues need in order to make the online learning program successful?
2. What benefits could this program offer you if you were to engage in it?
3. Do you have any other comments that may help in the design and delivery of the program?
4. Would this program be of interest as an elective for undergraduate training? Could it supplement existing curricular activities?
5. For physicians only: How important is it to earn CME credits for a program such as this?

Thank you for your time!

APPENDIX B

Interview Schedule for eWorkplaceHealth.com

We understand that you are very busy and we really appreciate you taking the time to be interviewed today. In this interview we hope to obtain information that will be used to guide the development of an e-Curriculum in Workplace Health for the Champlain LHIN. The purpose of the program is to provide all health professionals with convenient and private access to relevant learning resources. The resource will provide an introduction to workplace health and useful information and tips to help you take care of yourself, your colleagues, and function more effectively in the workplace. It is part of the project's vision that users have access to high quality, cutting edge, and practical learning resources anytime, particularly in a time of reflection and/or crisis.

The information you provide in this interview will be shared with the program development team and used to inform the design, delivery, and evaluation of this learning resource.

Structure

1. What are the factors in your work life that most influence your mental and physical health?
2. If you wanted or needed information on workplace health, including topics such as how to take care of yourself, take care of your colleagues, and function more effectively in the workplace, what would motivate you to access an online learning resource?
3. What characteristics should this program have?
4. Are there specific things that should be considered when designing such an online program for health professionals to ensure that it will address their needs and meet their expectations. If so, what are they?
5. Do health professionals have specific learning characteristics that need to be considered when designing an online program to ensure that it will address their needs and meet their expectations? If so, what are they?
6. What types of learning strategies do you think should be used in this program?
7. What ethical issues need to be considered when designing this program?
8. Are there gender, cultural, or other issues that need to be considered?

9. What type of feedback, if any, would you want about your learning progress during such a program?
10. What type of interactivity would you want in such a program?
11. To what extent do the conditions of your work influence your health?

Content

1. What content would you like to see covered in this learning resource? What top three to five topics would you like to see included?
2. What learning needs do you feel should be covered?
3. Are there language issues that should be considered when designing this course?

Media

1. Do you (or do you think other health professionals) have any concerns about accessing an online resource? If so what are they? Probe: ask specifically about confidentiality and privacy in a follow up question.
2. Where do you see yourself (and colleagues) working online? (Home, at work, or somewhere else)?
3. What is the ideal amount of time that you (and/or your colleagues) would spend working on the online resource at one time?
4. Do you have access to high speed Internet?
5. What types of tools/activities would you like to see used? (game-based activities, reflection activities, self-assessment)
6. What level of computer experience would this target audience have?

Service

1. What support do you feel you and/or your colleagues need in order to make the online resource successful?
2. What benefits could this program offer you if you were to engage in it?
3. Do you have any other comments that may help in the design and delivery of the resource?
4. Would this program be of interest as an elective for undergraduate/prelicensure training? Could it supplement existing curricular activities?

Thank you for your time!
