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Annual Meeting

PROCEEDINGS REPORT

2023

CE News
Articles, Updates and Resources

SACME 2023 Annual Meeting Proceedings Report

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CE News Special Report, Summer 2023

The 2023 SACME Annual Meeting Proceedings Report

From the Chief Editor…

Dear Readers,

Welcome to the *2023 SACME Annual Meeting Proceedings Report*. It is with extreme gratitude that once again the vast majority of our abstract authors agreed to participate in our 3rd annual report by forwarding us your updated abstracts and posters. The *CE News* editorial team has worked diligently to create a well-formatted, easy to use reference report that we hope you will share with other co-workers at your home institutions who may have professional interest in CPD.

This report serves two purposes: It gives our beginning as well as our experienced researchers an opportunity to showcase their scholarship to a larger audience beyond those who attended the annual meeting in Nashville in person or virtually. It also provides a valuable contribution to the SACME historic archive of educational resources. The benefits of an up-to-date, comprehensive archive for an educational society is paramount, in our opinion. It reinforces our SACME traditions and captures our legacy in a unique way for posterity. For these reasons, we offer this report. With the continued support of the SACME leadership and contributing member scholars, we hope to bring you this annual report for years to come.

To use the report, simply follow the Table of Contents to seek out an abstract or plenary session article of interest. The report is indexed according to the day and time the session was presented at the annual meeting and as listed in the final version of the annual meeting agenda.

I want to give a special note of thanks to Courtney Fowler, our SACME virtual content and marketing specialist, who developed both the creative design and layout for this report. Without her talent and determination, this report would not have been possible.

We hope you enjoy reviewing the report. Your suggestions on how to improve the report in future years are encouraged. Please contact the Editor with your thoughts and comments. Wishing our readers a very pleasant and scholarly year ahead!

Respectfully,

Robert

G. Robert Dantuono, MHA
Chief Editor, *CE News*

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Introduction

The 2023 Society for Academic Continuing Medical Education held its first Multichannel Annual Meeting, March 15–17, 2023, in Nashville, Tennessee, and virtually online. The theme for this year's conference was **"Inspiring and Igniting the CPD Imagination."** This theme was discussed in a series of panel presentations, workshops and interactive discussions, many of which suggested new collaborations and models to enhance the value of CME/CPD for our organizations, our learners, and to improve patient care.

The learning objectives for this meeting were to:

- Develop strategies to establish collaborations at a systems-based level that integrate and enhance the value of CME/CPD for the institution;
- Employ innovative strategies for interprofessional and team-based education;
- Employ concepts of inclusiveness, diversity, equity, and accessibility (IDEA) in CME/CPD planning and delivery.
- Utilize technology to enhance learning and teaching more effectively.

The Annual Meeting featured a varied curriculum and teaching formats:

- Keynote speakers and panelists
- Small-group workshops
- Short research and best practices presentations and posters
- Networking opportunities
- Social engagement in-person and virtually

This all-encompassing meeting was the result of the dedicated expertise of the Program Committee chair, Tym Peters, along with the talented members of the committee. Once again, there was a *Call for Abstracts* which went out to the SACME membership last summer and was organized by Asha Maharaj. As in past years, the agenda included oral research and best practice abstracts and posters. A special thank you goes to Joyce Fried, FSACME and others among the SACME leadership for their creative talents in the planning and selection of this year's distinguished Keynote speaker, plenary session topics and inspiring panelists.

We are happy to announce the 2023 abstract and poster winners. Congratulations to these talented SACME members for their exemplary work and research scholarship:

- **Best Poster**: Mary Turco, EdD, FSCAME
- **Best Abstract in the 'Best Practices' Category**: Melissa Kelly, PhD
- **Best Research Abstract:** Morgan Paton, PhD & Sanjeev Sockalingam, MD (tied)
- **Best 'Early Career' Research Oral Abstract:** Kenya Costa-Dookhan, BScH, MSc
- **Best IDEA Report**: Edeline Mitton, MEd

In the report that follows, we provide our members with summaries of all plenary sessions, the oral and research abstracts presented at the meeting, and selected poster presentations. The CE News editorial staff are delighted with the large number of members who have participated in the 2023 report by sending us their updated abstracts. The SACME leadership also wishes to congratulate these members on their extraordinary work to advance the CME/CPD profession.

If You Do What You've Always Done You'll Always Get What You've Always Got: Toward More Purposeful, Intentional and Collaborative Alignment of CPD in Healthcare

Speaker: David W. Price, MD, Senior Advisor to the President and CEO, American Board of Family Medicine

Reported by: Robert D'Antuono, MHA

The opening of the session featured David Price, a national thought leader in the field of CME/CPD for many years. A highly skilled speaker, Dr. Price posed some 'inspiring and igniting' questions to the audience. He began by raising a series of questions, the answers to which remain unclear and in need of more discussion: "Are we there yet?" Is CME/CPD moving forward and if so, where are we going?" Dr. Price indicated he doesn't know if 'we are there yet'. To paraphrase Hamilton (the Broadway show), Dr. Price said we should 'listen more and talk less' about selling ourselves and help to further the organization. More about this in a moment…

In his previous job as a CME/CPD director and associate dean, Dr. Price shifted his frame of reference from 'ours' (the CME office) to those of the institutional leaders namely, the CEO, CMO and CQO, and began to attend hospital quality committee meetings, among other institutional meetings, etc., to get to know what his customers needed most from the CME/CPD office. With this information, he could better understand how to align and collaborate the CME/CPD process with the needs of the rest of the organization. He concluded from this outreach efforts that CME accreditation work is the 'tail, and not the dog'. The dog is to change clinical practice and to improve quality of patient care by aligning and collaborating with these institutional leaders in a very direct way.

The CME/CPD community today is still not good at designing CME/CPD interventions that serve to better the health of communities. A simple CME/CPD program isn't enough when trying to improve complex health system problems. We need new and better tools than just the standard medical education, 'one and done' type approach. Most CME/CPD focuses on knowledge of the medical expert and is not explicitly aligned with the health enterprise challenges of today.

Health systems science has the tools and models to design more elegant CME/CPD interventions. "We need longitudinal learning", stated Price. "Learning that is truly interprofessional; explicitly and intentionally linked to performance." It is made possible by the mutual and multifaceted collaboration among experts and departments. It is both spiraling and reinforced learning. PDSA projects are an example of "spiraling" education and learning. It's iterative and must be repeated to achieve a result. We must always try to understand the patient's perspective. Patients are important to the process of resolving more complex health issues.

As mentioned, in CME/CPD today there is far too much "one and done" education. Regularly scheduled series, Tumor Boards for example, are typically one-off educational meetings. They are not longitudinal. They rarely provide repetition; they are not multi-modal, sequenced or spiraling. "Repetition is key to adult learning" stated Dr. Price. The answer is to partner for longitudinal CPD programs in health systems. Planning of these activities begins with data: a

process outcome metric, cost of care data, interprofessional team performance, and knowledge deficits. It identifies gaps and unwanted variation in care which need improvement. Simplistically, it is learning that follows the 'What, How and How to do the How', says Price. It is learning that is contextual, conditional and procedural.

Dr. Price went on to explain the **RE-AIM** model, frequently used in public health settings and research studies, as a useful construct for designing CME/CPD interventions. RE-AIM is a framework to guide the planning and evaluation of programs according to the 5 key RE-AIM outcomes: Reach, Effectiveness, Adoption, Implementation, and Maintenance. All this change is not simple to implement. An initial first step is how to reframe your work and find an opportunity to try one of these change models suggested here.

The final point discussed was evaluation. Price suggested a new model called 'realist evaluation'. A realist process of evaluation attempts to unpack the unknown in terms of longitudinal context, mechanisms, processes, barriers, outcomes (what changed?) and contribution analysis. The ultimate goal is to understand CPD's contribution to a positive change and allow the stakeholders to recognize this contribution.

Many of the concepts Dr. Price spoke about in his lecture are discussed more fully in the published discussion paper: *Systems-Integrated CME: The Implementation and Outcomes Imperative for Continuing Medical Education in the Learning Health Enterprise, David W. Price, MD, David A. Davis, MD, and Gary L. Filerman, PhD, October 4, 2021, Perspectives, National Academy of Medicine.* We encourage you to read it. It's dense but fascinating, so multiple readings are encouraged.

Wednesday, March 15: Concurrent Best Practices Abstract Session (Block 1): Evolving Teaching and Learning Environments plus Inspirations

Abstract Title

A Novel Approach for Further Aligning Continuing Education with Quality Improvement Goals: The CPD Outcomes Strategy Workshop

Study Team
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Institution: Vanderbilt University Medical Center

Purpose/Problem Statement/Scope of Inquiry

Documenting evidence of learner performance improvement, quality improvement and impact on patient care is increasingly important in continuing education. However, this can be challenging within a large complex organization with numerous stakeholders. We describe a novel approach for bringing stakeholders together to further align continuing education with institutional quality improvement goals and outcomes.

Approach(es)/Research Method(s)/Educational Design

In November 2021, the CPD office began exploring ways to partner with other departments/offices to develop a collaborative approach to further link CME interventions to

quality improvement outcomes. The institutional Strategy and Innovation Office (SIO) was then engaged to develop a CPD Outcomes Strategy Workshop. The workshop aim was to bring key stakeholders together to explore strategies and solutions for further aligning continuing education with quality improvement goals and outcomes.

Evaluation/Outcomes/Discussion

Twenty-three stakeholders participated in the 4-hour Strategy Center workshop. Participants included physician and nursing educators, a senior dean, quality improvement leaders, and members of informatics, data analytics, research, and business services. An icebreaker activity was followed by a small team breakout to explore the readiness of measuring outcomes for learner performance, healthcare quality improvement, and patient/community health projects. The group then transformed problems into solvable questions starting with "how might we…". To capitalize on the captive audience, a deeper dive was undertaken to brainstorm solutions around cultivating CPD partnerships and coordinating collective resources to measure outcomes.

Key Learnings for CME/CPD Practice

A post-workshop debriefing supported the added value of the CPD Outcomes Strategy Workshop, which served as a catalyst to increase visibility of the CPD office, strengthen partnerships between CPD and other offices/departments, and increase collaborative efforts to design projects/learning activities linked to outcomes. A long-term action item is to create an environment where the CPD team partners with educators early during the project/activity planning phase to identify measurable outcomes.

Abstract Title

Multimodal Approach to Equipping Pathologists for a New Era of HER2 Classification in Breast Cancer

Study Team

Melissa Kelly, PhD[1], Joseph Kim, MD, MPH, MBA[2], Kellie Beumer[1], Jim Mortimer[3], Kevin Obholz, PhD[3]

Institutions

[1]American Society for Clinical Pathology, Chicago, IL; [2]Q Synthesis LLC, Langhorne, PA; [3]Clinical Care Options, Reston, VA

Purpose/Problem Statement/Scope of Inquiry

For decades, breast cancer histology has been classified as HER2+ (positive) or HER2- (negative) based on the pathologic assessment of HER2 expression. However, emerging research has shown promise in the 40-50% of all breast cancers expressing low levels of HER2[i]; but in which HER2 expression does not reach the threshold to be classified as HER2+. Therefore, a new "HER2-low" classification would require a revolutionary shift in the pathologic testing, treating, and clinical management of breast cancer, including identifying patients who would likely benefit from next-generation HER2-targeted therapies once they are approved

(Note: on Aug 2022, the FDA approved trastuzumab deruxtecan for adult patients with advanced HER2-low breast cancer.)

To address the educational needs in this area, the American Society for Clinical Pathology (ASCP) collaborated with Q Synthesis and Clinical Care Options (CCO) to develop a comprehensive, multimodal education program focused on HER2-low breast cancer, funded by independent medical education grants from AstraZeneca Pharmaceuticals and Daiichi Sankyo, Inc. The aims of this program were to equip pathologists and other members of the interprofessional cancer care team with the knowledge and skills needed to conduct evidence-based HER2 testing in accordance with clinical practice guidelines for patients with breast cancer. The overarching goal was to ensure that learners were aware of the science and clinical data behind emerging treatments for patients with HER2-low breast cancer, and to support the identification, dissemination, and implementation of best practices in HER2 testing, documentation, and communication.

Approach(es)/Research Method(s)/Educational Design

The innovative educational program designed to address the educational needs and clinical gaps around adherence to clinical practice guidelines related to HER2 testing, including anticipated changes that would be needed as emerging treatments for HER2-low breast cancer become approved, was multimodal and comprised the following components:

- 2 CME Virtual Tumor Boards, with recordings on ASCP's website and YouTube channel
- 2 CME Podcasts, providing convenient learning opportunities while on the go
- CME Q&A Style Twitter chat, facilitating networking and discussion on HER2-low
- CME Trailblazers Collaborative Learning Exchange, with peer-to-peer discussions enabling cohorts to address potential HER2-low implementation challenges
- Downloadable Slideset, allowing users to teach their peers (e.g., in tumor boards)
- CME Pathology Implementation Guide, helping pathologists prepare for change
- ClinicalThought™ Communication to Oncologists, a commentary leveraging peer-to-peer education that encouraged oncologists to talk to pathologists about HER2-low breast cancer

While the online education deepened scientific knowledge, downloadable tools reinforced lessons learned, supported practice change, and encouraged learners to share education and resources with interdisciplinary colleagues.

The Trailblazers collaborative learning exchange, facilitated by Q Synthesis LLC, provided a forum for learners to create, implement, and evaluate action learning projects in their own institutions to improve HER2 testing and prepare for necessary changes as a HER2-low therapy emerged. Through case studies and facilitated virtual discussions, participants learned from each other, honed their leadership skills, and helped disseminate and implement best practices in HER2 testing. ASCP posed summaries of learners' action learning projects on its website to inspire others to undertake improvements in their institutions.
The ClinicalThought™ expert commentary, developed by Clinical Care Options, helped to share information about HER2-low breast cancer to an extensive network of medical oncologists and other cancer clinicians. This e-blast updated learners on the emerging HER2-low breast cancer treatment, urging oncologists to encourage their pathology colleagues to follow appropriate HER2 testing guidelines and participate in ASCP's education on HER2-low breast cancer.

Thus, this multimodal approach provided opportunities for participants to engage with experts and their peers, across a variety of delivery formats. Plus, the range of modalities helped address a recognized challenge faced by clinicians in trying to stay abreast of rapidly emerging clinical evidence.

Evaluation/Outcomes/Discussion

The results of the program evaluation showed that the educational activities engaged the target audiences and supported the identification, dissemination, and implementation of best practices in HER2 testing, documentation, and communication. There were more than 2,000 unique learners who completed at least one educational activity, and there were more than 13,000 interactions via social media (e.g., tweets/retweets, pageviews, downloads/listens, and ClinicalThought™ opens/views), implying that the participants shared their learning with their colleagues and other members of the multidisciplinary cancer care team. Feedback from the learners also echoed how they planned to apply their knowledge/skills to improving how they discussed HER2 test results with the cancer care team, both extending the reach of the education and supporting the program goals around effective communication among pathologists, oncologists, and other key members of the cancer care team to improve the quality of care for patients with breast cancer.

Feedback from the learners, as well as assessment results, also showed other areas where the education increased knowledge, skills, and confidence. For example, learners described how the education increased their understanding of the science of HER2-low and the corresponding clinical implications, and the results of pre- and posttests from the virtual tumor boards showed a statistically significant increase in overall foundational and scientific knowledge, 21%, $t(1520) = 29.9$, $p < 0.01$, $\eta^2 = 0.4$.

Toward the goal of increasing knowledge and skills for appropriately conducting HER2 testing in accordance with clinical practice guidelines, the evaluation highlighted impact in several areas, as summarized in the table below. For example, participants reported that the education had increased their understanding of when to utilize specific testing methods (such as ISH) and how to interpret the results, and knowledge tests showed that their understanding of how to perform IHC scoring also increased.

The outcomes also showed how the learners applied what they learned to their practice, including changes that they made and/or performance improvements. Examples included changes in diagnostic practices, expanding the use of molecular testing, and improving the coordination of patient care.

For the participants in the Pathology Trailblazers activity, there were tangible improvements in patient care, as the participants implemented the projects they had designed in their institutions and tracked the outcomes. Furthermore, the participants demonstrated leadership by implementing changes in laboratory workflows to improve diagnostic accuracy, educating colleagues about clinical updates, and improving communication and reporting to facilitate treatment planning for eligible patients.

Examples of Knowledge/ Confidence Gain	Examples of Practice Change and Performance Improvement
Targeted Knowledge/Skills:	

Adherence to HER2 testing guidelines to appropriately conduct immunohistochemistry (IHC) and in situ hybridization (ISH) testing, reporting, and tracking:
Knowledge of factors that impact HER2 IHC performance:
Ability to utilize ISH testing in breast cancer cases in accordance with guidelines
Ability to score HER2 levels accordance with guidelines
Improved communication and coordination among the cancer care team members

Self-reported increase in understanding of when to utilize ISH testing (82%, n = 28) 33% increase in posttest respondents' ability to identify factors that affect test results (n = 588) Self-reported increase in confidence in the ability to score HER2 levels via IHC 23% increase in posttest respondents' ability to recognize examples of correct IHC scoring (n = 509)	Participants in Pathology Trailblazers acted on opportunities to improve IHC scoring practices, such as: Performed an internal IHC concordance study; focused on lower HER2 expression Conducted an IHC audit and feedback session to review how pathologists scored slides Refined how pathologists interpreted IHC results by reviewing proficiency testing and assessing interobserver concordance Validated and implemented quantitative digital image analysis Participants formed a multidisciplinary coalition to improve care planning/coordination for breast cancer

Targeted Knowledge/Skills:
Preparation of laboratories and interdisciplinary teams for changes that will be needed as HER2-low therapies become approved:
Understanding of the science and emerging evidence of HER2-low breast cancer
Preparing for HER2-low breast cancer identification, tracking, and reporting
Updating laboratory procedures
Applying leadership principles in engaging the cancer care team
Improved communication and coordination among the cancer care team members

Self-reported increase in understanding of the importance of HER2 testing (82%, n=84) Self-reported increase in confidence in diagnostic ability (64%, n=74) Self-reported increase in knowledge of targeted therapies (82%, n = 95) Self-reported increase in confidence in updating laboratory processes (54%, n=63) 24% increase in posttest respondents' recognition of the treatment implications of HER2-low (n = 247)	Participants in Pathology Trailblazers demonstrated leadership growth and increased awareness about HER2-low among staff and colleagues: Gave presentations around the science of HER2-low Gave staff updates about HER2-low Taught residents, fellows, and colleagues about the evolving landscape of HER2 classification Participants improved diagnostics, reporting, and multidisciplinary communication: Explored HER2 IHC testing and interpretation for other types of tumors Revised reporting practices to indicate the IHC score in HER2 results Dialogued with oncologists about reclassifying previous HER2-negative cases

Thus, the evaluation utilized a range of data sources (including self-reports, knowledge tests, workflow documentation, and patient/chart reviews) to show how the education addressed the educational needs and clinical gaps underlying the project and supported the program goal to advance knowledge, competence, and performance in diagnosing and managing HER2-low breast cancer. The evaluation also highlights a successful approach to build knowledge that learners can not only use for individual learning but also help promote group learning and the sharing of best practices.

Key Learnings for CME/CPD Practice

This type of multimodal educational approach can help guide others seeking to design a similar program to maximize reach to the target audience and rapidly disseminate education and resources. The formats of the educational activities also provided built-in mechanisms for replicating and scaling the education. For example, repurposing audio, video, and slides from the live virtual tumor boards enabled the dissemination of low-cost, enduring material via recorded videos and podcasts. Twitter chats can easily be scaled, due to their low development costs and effort, and can help support a stronger social media impetus for faster dissemination of data from medical conferences and changes to clinical practice guidelines.

Abstract Title

Impact of Continuing Education on Confidence Related to Diversity, Equity, and Inclusion: Self-assessment by Different Groups of Professionals

Study Team

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Institution: University of Wisconsin School of Medicine and Public Health

Purpose/Problem Statement/Scope of Inquiry

The University of Wisconsin-Madison jointly accredited continuing education (CE) program contributes to the institution's efforts to foster inclusive learning and clinical environments by implementing a diversity, equity, and inclusion (DEI) toolkit for CE and measuring DEI-related baseline attitudes and toolkit impact. In the 2022 annual evaluation survey of participants in our CE program, we included new questions that allowed us to analyze the self-reported impact of recent CE activities on DEI confidence among different groups of professionals.

We share the position of the Association of American Medical Colleges and others that building competence in DEI is a journey and not a destination. Understanding the perceptions and realities of healthcare professionals on this collective journey is important to providing high-quality interprofessional CE.

Approach(es)/Research Method(s)/Educational Design

Survey participants rated, using a 5-point scale from 1=very low to 5=very high, their confidence in being able to provide care that addresses the diverse needs, preferences, and concerns of people of different identity groups – before and after participating in the activity. Follow-up questions invited explanations of the rating and suggestions for improvement.

We grouped and analyzed responses from 1) physicians; 2) nurse practitioners (NPs) and physician assistants (PAs); 3) pharmacists; 4) registered nurses (RNs); 5) social workers; and 6) psychologists. Average rating/difference across responses was used for respondents who evaluated more than one educational activity. Quantitative analysis included:

- Paired t-test to test average change from "before" to "after" for all respondents
- Fisher's Exact test to assess differences in "before" responses by profession
- ANOVA to analyze changes from "before" to "after" by comparing each of the five non-physician groups against the physician group, and to evaluate overall difference in change in confidence across professions.

Qualitative data analysis included open coding of typed responses to two open-ended questions and reviewing coding categories to identify themes.

Evaluation/Outcomes/Discussion

A total of 302 of 766 survey respondents answered "before" and "after" parts of the question for one or more of activity formats. Table 1 summarizes all responses.

Table 1. Before (Rows) vs. After (Columns) Average Responses Regarding DEI Confidence

Before Activity	After Activity				
	Very low	**Low**	**Average**	**High**	**Very high**
Very low	1 (33.3%)	0 (0%)	1 (33.3%)	1 (33.3%)	0 (0%)
Low	0 (0%)	1 (6.7%)	10 (66.7%)	3 (20%)	1 (6.7%)
Average	0 (0%)	0 (0%)	65 (50%)	60 (46.2%)	5 (3.8%)
High	0 (0%)	0 (0%)	2 (1.9%)	92 (85.2%)	14 (13%)
Very high	0 (0%)	0 (0%)	0 (0%)	0 (0%)	46 (100%)

Across respondents, most confidence levels appeared to stay the same or improve, with average change in response of 0.36 (SE=0.03, paired t-test, $P<0.0001$).

There were slightly higher proportions of reported "low" or "very low" confidence before activity social workers and psychologists (Table 2). However, there were no significant differences in before activity confidence among profession groups (Fisher's exact test for count data, $P=0.1005$).

Table 2. Before Activity DEI Confidence by Profession

Profession	Number of Respondents	% of Low or Very Low Confidence Before Activity
Physicians	133	4.5%
NPs and PAs	61	3.3%
Pharmacists	13	7.7%
RNs	65	9.2%

Social workers	19	15.8%
Psychologists	11	18.2%

Analysis of differences in confidence change by profession, in comparison to physician reference group revealed no significant differences except for psychologists (Table 3).

Table 3. Change in DEI Confidence by Profession

Profession	Change in Confidence	Difference from Physician Group	Standard Error	*P*-value
Physicians (reference group)	0.5288			
NPs and PAs	0.5350	0.0062	0.0756	0.934701
Pharmacists	0.6815	0.1527	0.1423	0.284179
RNs	0.6112	0.0824	0.0745	0.269308
Social workers	0.5777	0.0489	0.1202	0.684564
Psychologists	0.9132	0.3844	0.1534	0.012745

There was no overall difference in change in confidence across professions after adjusting for the "before activity" rating (ANOVA, *P*=0.17).

Analysis of respondent explanations of DEI confidence self-assessment generated several themes that are summarized in Table 4.

Table 4. Respondent Comments

Theme	Example(s)
Self-confident	"I think that I am a skilled practitioner"
Explained what was learned	"Avoid using the term 'drug' which has a negative association. Using 'medication' has a more positive association."
Confirmed knowledge/practice	"The activities reinforced my current practices."
Positive feedback	"So helpful. Really, it was transformative in terms of being able to deal with the diverse needs and concerns of people of different identity groups."
	"I am impressed with the current diversities of topics ranging from clinical to interpersonal and psychosocial aspect of not just patients but among providers as well."
	"Grand Rounds often addressed this issue explicitly."
Longitudinal approach is needed	"I do not believe a 45-minute lecture on a subject can change the way a person treats other human beings."

Theme	Example(s)
	"This journey requires [one] to continually learn. Never be stagnant."
Questioned the role of CE in support of DEI	"I think participating in the meetings did not impact the way patient care is provided. Striving to be inclusive and aware of diverse needs has always been the goal of service provision."
	"Educate us on medicine---don't try to indoctrinate."
Survey critique	"I'm not certain what the criteria for "very high" would be."
	"The question seems very subjective and could have a 'preferred' response."

Some respondents suggested ways in which our programming could improve the range of experiences and perspectives presented. Suggestions included:

- Support more diversity in presenters, including ethnic origin, academic training, practice, representatives of the LGBTQIA+ community
- Focus presenters on topics related to DEI
- Provide evidence-based content
- Share best practices
- Include more clinical cases
- Take scenarios and questions from the audience
- Focus each quarter on a different culture in the context of patient care
- Discuss changes that were made as a result of education
- Provide options for virtual participation
- Topic-specific suggestions, such as related to facilitating cancer groups
- Some respondents indicated they were unsure/uncertain

One limitation of our study is the relatively low response rate among learners, so it is unclear if our sample well-represents the population of learners.. There could also be question-related limitations, such as respondent uncertainty about or misinterpretation of the scale.

Key Learnings for CME/CPD Practice

CE could influence learner confidence related to providing care that addresses the diverse needs, preferences, and concerns of people of different identity groups. We found no significant differences in before activity DEI confidence among six profession groups. Initial analysis of change in confidence by profession indicated possible differences. However, there was no overall difference in change in confidence across professions after adjusting for the before activity rating. Respondent comments varied from explanation of CE impact on DEI-related confidence to seeing no connection between CE and inclusive practice. Some respondents provided suggestions for improvements.

We will continue to explore ways to measure educational program in relation to inclusive learning and clinical environments and DEI. Our methods and findings provide ideas for peer programs interested in evaluation approaches that support forming inclusive environments and promoting social justice.

Abstract Title

Resources, Not Courses, to Support Learning for Improvement

Study Team/Author

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Institution

University of New Mexico, School of Medicine

Purpose/problem statement

Nonacademic learning-and-development professionals long-ago recognized that formal learning experiences (e.g., seminars, workshops, courses, webinars) minimally impact learning and transfer-to-practice despite their prevalence, including in most CME/CPD activities. Resources used at the time-of-need, in-the-flow-of-work (including point-of-care) have greater impact on performance and, through multiple use in context, potentially promote learning.

Approach

Our CPD program began creating "web apps" (web page links saved on smartphone home screens and used like installed applications) five years ago to support educational development goals. Example topics include feedback delivery, clinical-teaching techniques, and telemedicine tips (both for providers and for coaching trainees). These are available as stand-alone resources or disseminated as performance-support reminders following live courses or linked from enduring materials. During the pandemic, we added web apps to support non-hospitalists recruited for the inpatient service, palliative-care communications, and culturally appropriate communication of code-status changes to families of critically ill indigenous patients (utilized by health systems in three states). Some resources directly link from our website. Others connect to our LMS with optional internet-searching-and-learning credit.

Evaluation/Outcomes/Discussion

System IT challenges limited the collection of usage data, but feedback to CPD indicates widespread uptake and appreciative use. Example: Post-hoc surveys revealed that 87% of adult hospitalists responders and 100% of responders recruited to in-patient service found the resources essential to providing adult COVID care. Users are now collaborating with the office to create additional resources (antimicrobial stewardship, ICU Liberation Bundle).

Performance-support resources intended for in-the-flow-of-work engagement are desired by faculty and providers, improve self-assessed performance, and expand the reach of CPD programs. Web-based software makes it easy to quickly create and update effectively designed resources.

Key Learnings for CME/CPD Practice

CME/CPD programs historically rely on formal learning experiences despite studies in CME, and in professional learning more generally, that people mostly learn their job on the job rather

than through formal, scheduled, out-of-work experiences. In the workplace, people pull from readily available resources rather than relying on memories of training that was pushed at them in the past. Increasing emphasis on performance-support resources, rather than courses, offers strong opportunities to meet program/institutional performance goals and increase value-added recognition for CPD.

Abstract Title

Learning-by-Concordance: An Online Case-based Tool to Create Just-in-Time Learning for Front-Line Health Care Providers

Study Team

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Institution

Université de Montréal, Québec, Canada

Problem Statement

The COVID 19 pandemic spurred Front-line Health Care Providers (FLHCPs) to adapt quickly to unprecedented conditions. Access to expert up-to-date knowledge became critical. FLHCPs sent questions to experts in multiple fields but had to find appropriate answers for themselves.

Approach

In June 2020, FLHCPs turned to Learning-by-Concordance (LbC) to support knowledge transfer to enhance treatment of Covid patients. FLHCP questions selected for our study were: 1) should masks be worn all the time? 2) Can kids attend sports camps? 3) Are Covid-19 PCR tests reliable? 4) Are respiratory illness patients at higher risk? Questions forwarded by FLHCPs to experts were re-written into LbC format comprising: a brief description of the clinical case, an initial hypothesis followed by supplementary information. Learners indicate to what extent the supplementary information changes the initial hypothesis. LbC tool was disseminated via Qualtrics to experts in multiple disciplines (n=7) and FLHCPs (n=30). Answers were compiled and analyzed; a senior microbiologist led an online discussion where she disseminated up-to-date data about these topics.

Outcomes

According to post-activity assessment questionnaires, such nuanced explanations allowed FLHCPs to better integrate multiple perspectives and enact appropriate interventions. For example, experts pointed to prolonged exposure required for transmission, making masks mandatory in closed spaces. They agreed that children's summer camps were not safe, and experts presented evidence that PCR Tests were reliable assuaging FLHCPs doubts, and experts cited recent studies indicating that respiratory illness patients were not at higher risk.

Key Learnings for CME/CPD Practice

Learning-by-concordance and the expert led discussion supported effective sharing of knowledge. Because questions from FLHCPs on-the-field were central, expert answers from

multiple disciplines were easier to apply in the practice setting. The added-value of LbC, allowing for multiple perspectives on FLHCP generated questions, is that it supports just-in-time acquisition of evidence-based knowledge.

Facilitators: Availability of easy-to-use online survey tools such as Qualtrics. This reduced costs and because of the popularity of surveys,participants could easily take part in the exercise.

Barriers: Although literature on LbC design is growing, FLHCPs need support to design LbC tools.

Impact/relevance: Questions submitted by FLHCP reflected their uncertainties: expert insight served to reassure FLHCPs, illustrating LbCs potential to provide just-in-time learning in critical situations. This is an effective way to introduce practicing professionals to up-to-date evidence, especially in rapidly evolving situations.

Wednesday, March 15: Concurrent Research Abstract Session (Block 2): Evolving Teaching and Learning Environments plus Inspirations

Abstract Title

A Virtual Intervention to Support Healthcare Workers During COVID-19: Outcomes from ECHO Coping with COVID

Study Team

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Purpose

Evidence suggests the COVID-19 pandemic has led to increased rates of mental health distress for healthcare professionals (HCPs)[1], resulting in the emergence of HCP-focused interventions to reduce distress and burnout. Project Extension for Community Healthcare Outcomes (ECHO) is a virtual hub-and-spoke education and capacity-building model that utilizes videoconferencing technology to link HCPs with expert interprofessional teams. While ECHO programs have traditionally focused on patient care, ECHO Coping with COVID (ECHO-CWC) was rapidly

developed as an innovative solution to support HCPs needs, promoting self-care and community building at a distance.

Research Methods

ECHO-CWC was implemented at the onset of the pandemic in North America, to promote HCP resilience and wellbeing, while reducing isolation and distress. Weekly sessions consisted of mindfulness exercises; didactics across a range of topics including COVID-19 updates and self-care strategies for HCPs; discussions on HCPs' experiences; and an arts-based segment called "The Art of Coping."

ECHO-CWC evaluation was informed by Moore's evaluation framework for continuing professional development. Data was collected on attendance, weekly satisfaction, perceptions of COVID-19 risks, and self-efficacy in managing mental health. Open-text feedback related to learning and program satisfaction was also captured.

Outcomes

Presently, 1224 interdisciplinary HCPs from 510 organizations across Canada have registered for ECHO-CWC. High mean participant satisfaction ratings were observed, with an overall satisfaction score of 4.4/5.

Participant self-efficacy scores increased throughout the program, with significant gains Pre to Mid-program (M_{pre}=72.34 vs. M_{mid}=78.37; N=42, p=.018), and Mid to Post-program (M_{mid}=77.61 vs. M_{post}=81.71; N=14, p=.050). Ratings of perceived COVID-19 risk significantly decreased Pre to Post-program (M_{pre}=2.91 vs. M_{post}=2.48; p<.001). Analysis of open-text responses showed recognizing signs of burnout and prioritizing self-care as common takeaways for participants.

Discussion

This evaluation provides insight into the unique application of the ECHO model in supporting HCPs during the COVID-19 pandemic. The self-efficacy findings demonstrate the program's effectiveness at increasing confidence with core competencies related to managing mental health and burnout.

Key Learnings for CME/CPD Practice

The ECHO model can be leveraged nationally to support HCPs' mental health and wellbeing during healthcare emergencies. High participant engagement, satisfaction, and improvements in self-efficacy suggest that ECHO-CWC is an effective and low barrier education initiative.

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Abstract Title

Elements and Definitions of Continuing Professional Development Leadership: A Scoping Review

Study Team

David Wiljer PhD, Morag Paton PhD, Victor Do MD, Tharshini Jeyakumar MHI, Jerry Maniate MD, Walter Tavares PhD, Suzan Schneeweiss MD

Institution:

University of Toronto
University of Ottawa

Purpose/Problem Statement/Scope of Inquiry

Leaders are being asked to transform the way that Continuing Professional Development (CPD) is delivered to focus on better, safer, and higher quality care. However there is scarce literature on CPD leadership. We set out to study what CPD leadership means, and describe the competencies required for CPD leadership.

Approach(es)/Research Method(s)/Educational Design

A scoping review following PRISMA-ScR guidelines was conducted. With librarian support, four databases were searched for publications related to leadership, medical education, and CPD. Publications were screened by two reviewers and three reviewers extracted data. A narrative approach was used to code data, summarize results, and produce descriptive statistics.

Evaluation/Outcomes/Discussion

Among 3886 publications, 46 were eligible for full review, and 13 met final inclusion criteria. There was no agreed upon definition of CPD leadership, and variable models and approaches to leadership in the literature. Contextual issues shaping CPD (e.g. funding, training, and information technology) are evolving. We identified several attitudes and behaviours (e.g. strategic thinking), skills (e.g. collaboration), and knowledge (i.e. organizational awareness) important to CPD leadership, however, no established set of unique competencies. CPD professionals will need to expand their competencies. These results offers the CPD community a foundation upon which competencies, models, and training programs can build. We suggest the adaptation of existing leadership frameworks to a CPD context to better guide leadership and leadership development programs.

Key Learnings for CME/CPD Practice

There is no established model, definition, or set of competencies for CPD leadership. CPD leadership is currently largely driven by contextual factors. This work suggests the need to build consensus on what CPD leadership means, on what CPD leaders do, and on what they will need to create and sustain change.

Abstract Title

Understanding Leadership and the Role of the Leader in the Context of Continuing Professional Development - From Accidental to Intentional Leaders

Study Team

David Wiljer PhD, Morag Paton PhD, Tharshini Jeyakumar MHI; Victor Do MD, Jerry Maniate MD, Walter Tavares PhD, Suzan Schneeweiss MD

Institution: University of Toronto, University of Ottawa

Purpose/Problem Statement/Scope of Inquiry

Leadership has become known as an established competency for physicians and although the field of CPD has rapidly expanded, there is still little known about leadership in the context of continuing professional development (CPD). This qualitative study begins to map what it meant by CPD leadership and identifies the contextual issues that may hinder or help in moving CPD forwards.

Approach(es)/Research Method(s)/Educational Design

We conducted a qualitative research study using semi-structured interviews with participants of a CPD Leadership program and individuals who have held leadership responsibilities in CPD. Using thematic template analysis methods, two members of the research team coded all transcripts and through consultation with the full team, we identified themes. This research is guided through a constructivist lens. Study participants and researchers each bring our own perspectives and lived experiences to the study and meaning is co-constructed.

Evaluation/Outcomes/Discussion

We conducted 17 interviews. Although the definition of CPD leadership remains slippery, we identified multiple components of CPD leadership including behaviours, attitudes, skills, and knowledge, and some features unique to CPD leadership. As many CPD leaders become leaders by "accident", moving towards "Intentional" leadership would contribute to opportunities to advance CPD and CPD Leadership.

As we set out to identify contextual issues that are or should be shaping CPD's evolution, it was evident that the complexity of CPD was important and influential in moving CPD forwards. There are multiple components important to CPD leadership but the definition of CPD leadership remains elusive.

Key Learnings for CME/CPD Practice

The CPD community will need both consensus-building collaboration and scholarship to better define CPD leadership, build or rebuild pathways to CPD leadership positions, and as a whole, articulate the value of both CPD and the immense capabilities of those who are or who may in future become, leaders within this domain.

Abstract Title

The Great Pivot: CPD Leader Perspectives on Innovations and Trends during COVID-19

Study Team

Soklaridis, Sophie, PhD, Zaheer, Rabia, MPH, Scully, Michelle, BA, Shier, Rowen, MA, Williams, Betsy, PhD, MPH, Dang, Linda, BA, Daniel, Sam J., MD, Sockalingam, Sanjeev, MD, MHPE, Tremblay, Martin, PhD

Institution: Centre for Addiction and Mental Health

Purpose/Problem Statement/Scope of Inquiry

The impact of the COVID-19 pandemic on continuing professional development (CPD) has been unprecedented. The present study expands on our recent narrative review, exploring the trends and innovations in CPD that were strengthened or newly created during the pandemic. The purpose of this research was to deepen our understanding of the innovations, challenges, and learning opportunities imparted to the field as a result of the pandemic, and to explore how leaders are re-imagining the future of CPD education.

Approach(es)/Research Method(s)/Educational Design

This is the second phase of a three-phase study. Phase 1 involved a narrative review of the trends and innovations in CPD that emerged or were amplified during the COVID-19 pandemic. Building on our narrative review findings, in this current Phase 2, we sought to enhance our understanding of how CPD delivery and teaching evolved over the pandemic. In pursuit of this aim, we implemented a qualitative research design using virtual semi-structured interviews and a thematic analysis approach to elicit the perspectives and opinions of CPD leaders and address the research question: What impact has the pandemic had on CPD organizations in Canada and the USA? Lastly, in Phase 3 we will triangulate the findings from the Harrison Survey, narrative review, and qualitative interviews to generate potential recommendations for the future of CPD in an internal position paper report.

Evaluation/Outcomes/Discussion

In this study, we conducted 23 semi-structured virtual interviews with key CPD leaders from Canada and the USA between April to September 2022. Participants' professional experience in CPD ranged from two to 35 years, with the majority having worked in the field for over 15 years. Thematic analysis generated four theme areas: 1) COVID-19 as an accelerant for innovation, 2) Opportunities and challenges as a result of shifting to a virtual environment, 3) Increased focus on equity, diversity and inclusion (EDI) and physician wellness, and 4) Is the future hybrid? Given that navigating hybrid CPD is an emerging priority area in the field, extensive discussion is warranted on the fifth theme area: "Is the future hybrid?" We identified four broad sub-themes pertaining to hybrid CPD: 1) Increased accessibility and flexibility, 2) Corroding work-life balance, 3) Meaningful hybrid engagement, and 4) Uncertainty and ambiguity. Our findings suggest that hybrid delivery has emerged as a critical and enduring component of the CPD landscape, extending significant benefits to learners. Nonetheless, our analysis reveals that hybrid CPD is laden with various challenges that must be addressed.

Key Learnings for CME/CPD Practice

- Research is needed to assess the impact of hybrid CPD on diverse audiences and on work-life balance
- CPD teachers/facilitators required more training to meaningfully engage learners in a hybrid environment
- There is a need for clarity and consensus on terms and definitions such as hybrid, Hyflux, and blended learning.

Abstract Title

Transformation in Time: A Case Study of Decision-Making in Continuing Professional Development Organizations During A Nonnormative Event

Study Team

David Wiljer PhD, Morag Paton PhD, Bita Zakeri PhD, Paula Rowland PhD, Walter Tavares PhD, Betsy Williams PhD, Suzan Schneeweiss MD

Institutions:

University of Toronto
Indiana University School of Medicine
Professional Renewal Center
University of Kansas

Purpose/Problem Statement/Scope of Inquiry

Many CPD providers were in a reactive position as COVID-19 spread globally as few had well developed pandemic playbooks. With numerous calls to learn from these experiences and transform education and training, in this study, we sought to learn how CPD organizations make decisions about CPD strategy and operations during a health or societal crisis.

Approach(es)/Research Method(s)/Educational Design

This work is a qualitative descriptive study of two organizations: CPD at the University of Toronto and the Society for Academic Continuing Medical Education (SACME). Members of both were invited to participate in a questionnaire and semi-structured interview. Interview data was analyzed using thematic analysis techniques. The study recieved ethical approval. Consistent with constructivist research, the lived experiences of our study participants and our collective interpretations are reflected within this work.

Evaluation/Outcomes/Discussion

We conducted 13 semi-structured interviews with consenting participants. Our research shows that decision-making during the pandemic emerged over four phases of reactions and impact from COVID and changed over the course of the pandemic. The creativity, adaptability, flexibility of the CPD community and the need for social connection within the CPD community strongly influenced the decisions of the CPD organizations.

The transformation of CPD will need to be reflective of the creativity, adaptability, and flexibility so well demonstrated by CPD organizations throughout the pandemic. Results suggest that decision-making changes over time in a crisis, and that nonnormative events require a high degree of organization, adaptability, and flexibility.

Key Learnings for CME/CPD Practice

Advancing our understanding of individual and organizational adaptive expertise may enable CPD to better prepare for future crises and react quicker to perceived threat.

Abstract Title

Practice Changes following a Psychiatry Continuing Medical Education Event: What We Learned from the University of Toronto Annual Psychopharmacology Conference

Study Team

Eulaine Ma, PharmD, Wei Wei, PharmD, Certina Ho, PhD, Laura Rivera, MD MPH, Rajeevan Rasasingham, MD, Sanjeev Sockalingam, MD MHPE

Institution: University of Toronto

Purpose/Problem Statement/Scope of Inquiry

Continuing medical education (CME) events are meant to facilitate knowledge translation. Our project aimed to identify participants' intention to change and practice changes after attending the Annual Psychopharmacology Conference (APC) hosted by the Department of Psychiatry, as well as barriers and facilitators to change.

Approach(es)/Research Method(s)/Educational Design

Retrospective self-reporting pre-post surveys administered to CME participants invited self-reflections on knowledge, skills, and behavioural changes against an internal standard. Current literature suggested that surveys administered up to 23 months after CME events have elicited participant responses on aspects of improvements in self-confidence, skills, willingness to change, and implementation of practice changes. The incorporation of a four-month post-CME retrospective self-evaluation survey in our project enabled the assessment and reporting of practice changes by attendees of the APC.

The APC was held virtually in November 2021. We surveyed participants immediately after the APC and four months later in March 2022 on their intention to make any practice changes, and their perceived changes made in clinical practice, respectively. We asked APC participants their self-reported knowledge and level of confidence in applying conference learnings to practice, specific practice changes, as well as barriers and facilitators to change. Quantitative data of the two surveys were analyzed using descriptive statistics, and qualitative responses were subject to thematic analysis.

Evaluation/Outcomes/Discussion

Of the 314 APC participants, 129 (41%) responded to our post-conference evaluation, and 31 (10%) responded to our four-month retrospective survey. Post-conference, 82% of respondents indicated intention to make practice changes, such as expanding their prescribing practices. Four months post-conference, respondents reported practice changes in increased discussions with patients and sharing of conference learning with trainees and colleagues. Relevance to practice was a facilitator to change, while barriers included lack of access to medications (e.g., ketamine and certain psychedelics) that were discussed during the APC.

Participant insights elucidated using the retrospective self-reporting surveys were informative to continuous quality improvement of CME/CPD offerings by the Department of Psychiatry.

Key Learnings for CME/CPD Practice

What we learned from the dual retrospective self-reporting post-APC surveys was instrumental in facilitating knowledge translation and practice changes. Our findings allow for greater optimization of pragmatic and clinically relevant information when designing CME events.

Wednesday, March 15, Plenary Session: CE Educator's Toolkit: How to Apply it to Your Practice

Speakers: Tharshini Jeyakumar, MHI, Inaara Karsan, Joyce Fried, Betsy Williams, PhD, and Kimberly Northrip, MD

Reported by: Robert D'Antuono, MHA

This interactive session introduced the recently published **CE Educator's Toolkit**. The CE Educator's Toolkit, a unique educational resource, was developed by the Society for Academic Continuing Medical Education (SACME) through an Accreditation Council for Continuing Medical Education (ACCME) research grant in fulfillment of ACCME's strategic goal to advocate for research and scholarship in continuing education. The toolkit is a unique and comprehensive resource designed to equip educators with best practices and guidelines to deliver effective continuing education (CE). During the session, learners worked in small groups on applying various aspects of the toolkit to planning situations in their own home institutions.
 http://www.accme.org/ceeducatorstoolkit

Toolkit Research Team

A team of distinguished SACME scholars and researchers participated in creating the toolkit. The members who worked on its development were: *Betsy Williams, PhD, MPH, David Wiljer, PhD, Joyce Fried, FSACME, Gabrielle Kane, MB, EdD, Sharon Ambata-Villanueva, MA, Ashleigh Jaggars, MPH, Tharshini Jeyakumar, MHI, Inaara Karsan, MHI, Morag Paton, PhD, Med, Nathaniel Williams, and Sarah Younus, MPH.*

Overview

Clinical knowledge is continuously shifting the scope of practice and thus, significant gaps persist in translating evidence into practice to provide compassionate and high-quality care for patients. Current CE interventions are focused on instructor-oriented approaches and have been shown to be ineffective in fostering practice change. Inadequate education efforts can thwart the cultivation of knowledge and skills in ensuring practice decisions are rooted in evidence and aligned with current clinical standards. Accredited CE and faculty development are critical factors to promote a lifelong learning mindset of behavior change and practice improvement.

CE interventions for healthcare professionals are more effective when instructional methods promote critical thinking, collaboration, and decision-making skills. These methods improve team performance and encourage behavior change among healthcare professionals. In the absence of these methods, CE can be ineffective and feel unrewarding to learners. Therefore, educators should seek to evolve their educational programs to integrate principles of active learning and activities that promote engagement to make it more appealing for today's healthcare professional learners.

This toolkit aims to provide CE leaders, educators, and healthcare professionals with best practices and guidelines to assist in the design and delivery of CE in a manner that fosters a practical and active learning approach. Although there are different approaches to CE interventions, this toolkit will focus on three key interventions based on evidence-driven investigation and consultation with medical education experts: (1) facilitation of small group learning, (2) case-based learning, and (3) reflective learning. The first section of the toolkit provides information about how the toolkit was developed and allows readers to complete a self-assessment to identify areas of the toolkit that might be most relevant to their CE practice. Section 2 of the toolkit provides a matrix of essential components to consider when planning a CE intervention/activity. The subsequent section explores how to prepare and implement the three interventions selected for the toolkit: (1) facilitation of small group learning, (2) case-based learning, and (3) reflective learning. Section 4 in the toolkit is devoted to assessing and evaluating CE interventions with suggestions for various methods of evaluation. These essentials are discussed in extraordinary detail with instructional concepts and methods to plan, organize and implement each phase. To illustrate, Section 2 discusses:

I. First steps to education intervention design
- Structure a longitudinal and multimodal education intervention
- Use the PDSA cycle to structure your CE intervention
- Conduct a needs assessment to understand the audience and their learning needs

II. Learning Objectives
- Develop targeted learning objectives
- How to write a learning objective
- How to make a learning objective actionable

III. IDEA principles
- Designing for inclusivity
- Designing for diversity
- Designing for equity
- Designing for accessibility
- Checklist

IV. Virtual delivery
- Key considerations for virtual delivery

The toolkit was created for the novice and intermediate experience levels in CE development. With full knowledge of the many demands placed on CE offices, this toolkit is designed to provide educational resources that enable educational planners throughout the institution to advance their skills in developing impactful, well-aligned education.

Toolkit Use, Distribution and Suggested Citation

The toolkit may be used, distributed, or presented for non-promotional educational purposes with attribution: *Accreditation Council for Continuing Medical Education. 2022. CE Educator's Toolkit: Evidence-based design and implementation strategies for effective continuing education.*

Wednesday, March 15, (Block 3): Concurrent Research Abstract Session: Innovations, Inspirations and Intersections

Abstract Title
Development and Evaluation of an Online Pocket Guide to Quality Improvement: A Preliminary Step to Build a Quality Improvement Community of Practice for Healthcare Professionals

Study Team

Certina Ho PhD, Corlissa Chan PharmD, Eulaine Ma PharmD, Wei Wei PharmD, Annie Yao, PharmD

Institution: University of Toronto

Purpose/Problem Statement/Scope of Inquiry

Continuous quality improvement empowers healthcare professionals to optimize patient safety and quality care. A virtual community of practice will facilitate knowledge exchange and translation of quality improvement (QI) initiatives among healthcare professionals. Our project is aimed to develop and evaluate an infographic-based online Pocket Guide to Quality Improvement (PGQI), which will serve as a preliminary step to build a QI community of practice for healthcare professionals.

Approach(es)/Research Method(s)/Educational Design

To develop our PGQI, we consulted national and international resources for training healthcare professionals on QI and consolidated the concepts into an infographic-based online pocket guide.

We pilot tested our online PGQI along with a 14-item online questionnaire to gather user experience, designed based on Kirkpatrick's four-level training evaluation. The questionnaire was administered to a convenience sample of pharmacists and pharmacy students in Canada in October 2021. We asked about their perceived knowledge, skills, and anticipated practice changes after reviewing our PGQI.

Evaluation/Outcomes/Discussion

The online PGQI https://drive.google.com/file/d/1gmVB_JF63Wva9xOeNheg1jyd7LtmY1FC/view) includes a series of 12 infographics that outline key QI concepts such as defining quality, identifying a quality gap, applying systems thinking and QI tools.

Abstract Title

The Science of Learning as an Inspiration for Continuing Professional Development

Study Team

Thomas J. Van Hoof, MD, EdD, FACMQ, Simon Kitto, PhD, Megan A. Sumeracki, PhD, and Christopher R. Madan, PhD

Institutions:

University of Connecticut Schools of Nursing & Medicine (Van Hoof)
University of Ottawa Faculty of Medicine (Kitto)
Rhode Island College (Sumeracki)
University of Nottingham (Madan)

Purpose/Problem Statement/Scope of Inquiry

To address contemporary challenges in clinician education in the continuing professional development (CPD) phase, practitioners need to use their imagination to think about CPD differently.[1] The science of learning (learning science) provides a powerful perspective to inform the CPD imagination. Learning science is an emerging, interdisciplinary field that seeks to explain the psychology and neurobiology of learning, and that has compiled evidence-based strategies that support learning and memory.[2-5]

Approach(es)/Research Method(s)/Educational Design

Understanding biology-of-learning basics (i.e., encoding, consolidation, and retrieval) can facilitate better planning and implementation of CPD activities.[2-5] Encoding requires mental energy and protected time to represent temporarily something new in working memory. Consolidation is moving information from working memory to long-term memory during a cognitive break, ideally involving a full-night's sleep. Retrieval is the act of recalling something stored in long-term memory to work with it again in another study or practice session.

Evaluation/Outcomes/Discussion

Learning-science strategies (e.g., distributed practice, retrieval practice, and interleaving) have their basis in neurobiology. Distributed practice (or spacing) involves spending small amounts of time regularly rather than spending longer periods infrequently to learn.[2] CPD activities that involve spaced practice (multiple sessions over weeks or longer) is more effective than non-spaced practice (e.g., all-day conferences), as distributed practice involves iterative cycles of encoding, consolidation, and retrieval. Retrieval practice (retrieval-based learning) involves recalling previously learned information from long-term memory for additional study or practice.[3] Far superior to passive review, the act of retrieval, through no/low-stakes testing with feedback and explanations, reinforces what one has learned and uncovers aspects stored inaccurately and/or incompletely. Finally, in contrast to learning things separately (one unit then another), interleaving is mixing distinct but related information together during a learning activity, forcing the brain to understand the structured relationships within a topic.[4]

Key Learnings for CME/CPD Practice

Grounded in a basic understanding of the psychology and neurobiology of learning, the judicious use of learning-science strategies represents an effective and efficient way to learn and to change behavior in CPD. Spacing, practice-testing, and mixing information can improve any learning activity and offer an inspiring perspective to inform the CPD imagination. In addition, the authors recommend:

- Engaging with experts from other fields, such as cognitive psychology and neuroscience, to address challenges that we experience in CPD's goal to change clinician behavior and to improve patient outcomes.

- Engaging CPD participants much more in the planning and evaluation of educational activities, not just in their implementation. In this way, we will inform participants' imaginations about what is most effective and efficient, and as such, increase participant buy-in.

- Sharing more often with our educational colleagues who work at different phases or levels, such as undergraduate and graduate education, so a more seamless transition exists across the educational continuum in the health professions. Good habits begin early, and educators need to reinforce and to extend the professional habits that successful students, trainees, and practicing clinicians require for patient-care roles.

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Abstract Title

The Adoption of AI in Mental Health Care: Perspectives from Mental Health Professionals

Study Team

Wiljer, David, PhD[1-3]; Zhang, Melody, MA[1]; Scandiffio, Jillian[1], MSc; Younus, Sarah[1], MPH; Karsan, Inaara, MHI[1]; Charow, Rebecca, MSc[1,2]

Institutions

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Purpose/Problem Statement/Scope of Inquiry

Artificial intelligence (AI) is increasingly influential within mental healthcare[1]. While many digital tools, virtual services, and mobile applications are designed using AI algorithms, mental health professionals have generally been slower in the adoption of AI[2]. Thus, we conducted a needs assessment among mental health professionals to (1) understand the learning needs of the workforce and their attitudes towards AI, and (2) inform the development of curricula and knowledge translation products.

Approach(es)/Research Method(s)/Educational Design

This needs assessment was guided by the Knowledge Creation stage of the Knowledge-to-Action framework[3], with the purpose of inquiring and synthesizing knowledge for the development of AI education curricula. Data was collected through semi-structured interviews. The interview guide had questions exploring attitudes and motivation towards AI adoption. Mental health professionals (psychiatrists, mental health nurses, scientists, educators, social workers) were recruited. Audio recordings of interviews were transcribed. Data was inductively analyzed until thematic saturation was achieved.

Evaluation/Outcomes/Discussion

Twenty individuals were recruited. Most participants were from Ontario, Canada, while some participants were out-of-province. We are currently working on publishing this material. Findings from this study promote the design of relevant and sustainable education programs to support the adoption of AI within th emental health care sphere. The areas of focus pertain to: (1) how AI should be used in mental health, (2) organizational issues, and (3) the need for education both for new trainees and health professionals. This study was presented at the SACME conference and facilitated a conversation on training initiatives for AI adoption.

Key Learnings for CME/CPD Practice

Indicated by findings from this study, there are opportunities for CPD initiatives to inform on the relevance, practicality and benefits of AI among current and future mental health professionals. CPD programs, specific to mental health, are needed to address gaps in AI knowledge. In partnership with The Michener Institute of Education and the Vector Institute, we have developed an evidence-based education program, "AI for Clinical Champions" that aimed to empower the Canadian healthcare workforce with the appropriate skills, knowledge, and capabilities to adapt and implement AI into clinical practice and healthcare organizations. Future directions include the adaptation of this program for mental health. To do so, contextual issues in the mental health care system (e.g., mindset shift of mental health providers using technology) should be considered. Further, a mentorship component with AI experts from the mental health field could also be considered for specialty-specific training in a hands-on, case-based learning manner.

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Abstract Title

Educational Support to Increase Depression Screenings in Primary Care Settings

Study Team

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Institutions

University of Kentucky
DKBMed
RealCME

Background

The University of Kentucky (UK) primary care clinics had low rates of recommended screening for depression. UK HealthCare CECentral worked with partners to develop a CPD activity to improve screening rates with the PHQ-9 tool.

Research Methods

We created two 30-minute on-demand educational modules on screening, diagnosis, and treatment of Major Depressive Disorder (MDD) as well as team-based strategies for implementation. This education was made available to a national audience. We measured pre and post attitudes, knowledge, and performance on cases. We also recruited 7 UK primary care clinics to take the education and implement screening using QI methodology. The CPD office provided academic detailing, quarterly support calls, quarterly performance data, and case management for participating clinics. We collected 1 year pre- and post-intervention electronic health record data to calculate changes in screening rates and PHQ-9 scores. We administered a survey to patients who had screened positive to assess their experiences with the project.

Results

Nationally 1,015 learners completed the first module and 643 the second. Improvements were seen in all learning objectives pre to post-test with an overall improvement of 35.37% (p< 0.05). PHQ-9 screening rates improved by 462% in the 7 participating clinics. Six clinics had improvements (p< 0.05), while one did not. Additionally, patients who screened positive saw a decrease in PHQ-9 scores from an average of 15.2 to 9.5 on 6-week follow up, indicating improved symptoms. The largest reductions were seen in Black and Latino patients suggesting an impact on health inequities. On follow-up survey 91% of respondents with a positive screen attended a follow-up appointment. Patients identified transportation, work schedule,

appointment availability, COVID, family issues, social anxiety, and finances as barriers to receiving care.

Discussion

This CPD activity combined standard education with support for participating clinics using academic detailing and QI methodology. We only collected clinical data from clinics participating in the QI. Therefore, the relative impact of the standard education cannot be assessed. Research in this area is needed.

Key Learnings for CME/CPD Practice

Providing logistical support for clinic led QI within a CPD program was successful in improving clinician performance and patient outcomes.

Abstract Title

Evaluating a Healthcare Teams Interdisciplinary Cost of Care Conversations after FINassist Training

Study Team

Edward, Jean, PhD, RN; Northrip, Kimberly D., MD, MPH; Rayens, Mary Kay, PhD; Welker, Andrea, JD; Costich, Julia, PhD, MPH

Institution: University of Kentucky

Background

We developed the FINassist (Financial and Insurance Navigation Assistance) training to help the interprofessional team in a pediatric hematology-oncology clinic conduct and address the outcomes of cost of care conversations (CC).

Research Methods

Twenty-two pediatric oncology healthcare team members completed the FINassist interdisciplinary training, consisting of 4 web-based modules and an interactive webinar. We collected pre/post training surveys quarterly on knowledge, attitudes, and behaviors as well as data on referral patterns. Following the training, the team implemented the intervention and participated in post-implementation focus groups.

Results

In the six months prior to training most participants stated they had: not engaged in CC with patients (45%); made <24 referrals to social workers (45%) and financial navigators (82%); and made no referrals to legal advocates (50%). Majority (59%) indicated lack of knowledge as a barrier to initiating CC. After training, multi-item scales demonstrated a significant increase from 6 to 12 months post-intervention in both screening and referral to a social worker, but no change over time in self-reported referral to legal services or a financial navigator. However, twelve months post-training 50 FN referrals and 18 legal advocate referrals were made.

Focus group findings indicated all participants felt the training adequately prepared them to rollout the intervention. All groups reflected that most social/financial needs were referred through social work rather than directly by other team members. Recommendations were made to provide refreshers and more opportunities for the team to engage with each other to better understand what they do. All participants described FINassist as a valuable and effective intervention to address patient/caregiver social, financial, and legal needs. Financial navigation services were especially valued by all. There were barriers to integrating legal services into the model due to COVID (remote work **leading to lack of communication/building rapport).**

Discussion

After FINassist training, healthcare team members were more likely to initiate CC, screen for SDOH, and work collaboratively with team members to help address patient needs.

Key Learnings for CME/CPD practice

It is critical to address SDOH to improve health outcomes. IPE is key to assisting healthcare teams in addressing the complex systems involved.

Abstract Title

Spaced Repetition in a Cohort of Practicing Physicians – Methods and Preliminary Results

Study Team: David W Price MD, Ting Wang PhD, Thomas R O'Neill PhD, Warren P Newton MD MPH

Institutions

American Board of Family Medicine, University of Colorado Anschutz School of Medicine University of North Carolina Chapel Hill School of Medicine

Purpose/Problem Statement/Scope of Inquiry

Spaced repetition results in better long-term learning and knowledge retention than repeated study of the same material. American Board of Medical Specialty Boards incorporate longitudinal knowledge assessments in their continuing certification programs. The effect of spaced repetition in continuing board certification on long term learning and knowledge retention has not yet been systematically evaluated. This study compared the effect of 5 different spaced repetition strategies on American Board of Family Medicine (ABFM) Diplomate learning.

Approach(es)/Research Method(s)/Educational Design

Physicians completing the ABFM Continuous Knowledge Self-assessment (CKSA) in the 4th quarter of 2020 were eligible for inclusion. They were randomized into a control group or 1 of 5 spaced repletion conditions for the next 5 calendar quarters. Control group participants received no repetitions. Participants in the other 5 groups received up to 6 questions repeated either once or twice; the interval between repetitions differed between groups. Confidently but incorrectly answered baseline questions were prioritized for repetition, with decreasing priority

for questions answered incorrectly but less confidently and those answered correctly but not confidently ("guesses").

In quarter 6 of the study, all remaining participants received their repeated questions. The primary analysis compared difference in enduring learning (the percentage of incorrectly answered baseline questions subsequently answered correctly in quarter 6) between physicians receiving any repetitions in quarters 1-5 compared with those who received no repetitions (who would have gone 18 months from first seeing the question). Secondary analyses compared differences in learning between physicians receiving one repetition compared with those who received two, differences in learning between the two single repetition conditions, and differences in learning between the three double repetition conditions. We also compared differences in forgetting (correctly guessed repeated baseline questions subsequent answered incorrectly in quarter 6.

Evaluation/Outcomes/Discussion

Spaced repetition was superior to no spaced repetition for learning at quarter 6 (Cohen's d = 0.5957). Two repetitions produced better learning outcomes than one repetition (Cohen's d = 0.4162). There were no differences in learning between the one spaced repetition strategies (p =0.1715), and minimal differences between the two spaced repetition strategies ($\eta2$ =0.002). Two repetitions resulted in less forgetting than one repetition, and one repetition resulted in less forgetting than no repetitions.

Key Learnings for CME/CPD Practice

Spaced repetition improves long term learning and knowledge retention in a large cohort of practicing family physicians. Two spaced repetitions resulted in greater learning and retention than one repetition. The repetition spacing strategy is less important than the number of repetitions for learning and retention.

Abstract Title

Maintenance of Certification at the Intersection Between Quality Improvement and Professional Development: A Proposal for Change

Study Team

Sofia Valanci MD PhD, Kate Runacres, Farah Wissanji, Jill Garner, Katherine Marsden, Lucy Filteau MD, Chanelle Goulet, Tim Paquette, Guylaine Lefebvre MD, Rhonda St. Croix

Institution: Royal College of Physicians and Surgeons of Canada

Purpose

This project sought to enhance quality improvement engagement from physicians by revising the MOC Framework to reflect the CPD research and physicians' needs.

Research Methods

This project is being approached iteratively. The first step we took was to conduct an assessment from an extensive review, followed by co-design sessions, including diverse Fellows and patient partner groups aiming to understand CPD needs, desires, and barriers. Once the data was analyzed, a team of subject matter experts led the update of both the Framework's credit requirements and learning modalities. We then conducted a round of focus groups and user-case scenario exercises. These exercises allowed physicians to engage directly with the Framework; each participant was given 4-5 real examples of physicians engaging in CPD and asked to report them on their own in the new Framework. The feedback was used to further enhance the Framework. We are currently analyzing feedback from senior-level committees before approval.

Outcomes

Based on the data from 40 co-design sessions, responses were themed into meaningful learning, including interprofessional modalities, workplace learning, and CQI, and barriers, such as lack of time, bad interface, and fear. We propose that the refreshed MOC Framework maintain its three sections. Group learning, individual learning, and feedback and improvement. Section 3 (feedback and improvement), deemed the most relevant for practice change, will be the only section with a minimum requirement of credits per cycle, with the aim of allowing physicians to become motivated and engaged with this section. For ease of use, it will focus on quality and systems improvement. This subsection will also have the highest self-reporting requirement, prompting the physician to explain their methodologies, questions, results, practice changes, and to self-reflect. Credits will be the highest in this section, compared to section 1 and 2. Additionally, coaching and mentorship as a provider or receiver will be eligible for credits to incentivize seeking or providing coaching.

Key Learnings for CPD Practice

MOC or recertification frameworks should be regularly reviewed and co-designed to incorporate more quality improvement modalities with practice and outcome improvement focus.

Thursday, March 16, Plenary Session: Driving Change Through the Intersection of QI and CPD

Speakers: *Sanjeev Sockalingam, MD, Julie White, MS, Heather Clemons, MS, MBA, Lori Deitte, MD and David Price, MD*

Reported by: *Robert D'Antuono, MHA*

The panelists discussed some common themes in each of their institutional journeys toward achieving integration and alignment of quality improvement (QI) and CPD. Each speaker stressed the need to build new relationships and linkages between the CPD office staff in the medical school and the QI office staff in the hospital. In this particular structure, that is, with CPD and QI offices being physically located in different institutions, the process to begin alignment depends on the intentional and direct efforts of the CPD program director to reach out to their counterparts in QI and to start an educational dialogue about shared interests and the benefits of alignment for the institution and their learners.

At Vanderbilt, for example, Dr. Lori Deitte set-up brief ZOOM meetings with the chief quality officer and developed a CPD-QI strategy orientation session. All key stakeholders were invited to attend to discuss the question*: How can learning drive quality and improve performance in core metrics?* Twenty-three leaders attended the 4 hour session. Other strategies included leveraging relationships with interested clinical departments, exploring opportunities for partnership with the unit managing the MOC Part 4 program; and engaging across the medical education spectrum to include direct conversations with UME and GME partners.

Panelists also noted that if the institution is an MOC Part 4 portfolio provider, this offers a synergistic opportunity for partnership with the program and CPD staff who could assist in the management of these projects. For example, the CPD office could help to design institution-wide, accredited QI educational programs in such areas as opioid prescribing, reducing readmission rates, early diagnosis and treatment of Sepsis, and many other quality imperatives that require training large groups of clinical staff.

A rich opportunity for a partnership with the CPD office is to provide the training assistance to residents and faculty with the GME office. To be in compliance with the ACGME residency training requirements, the GME program director must provide education and experience for residents in QI work at all levels, and that this work must be supervised by QI-trained core faculty. For example, many CPD programs have partnered with their faculty development staff to design and offer an accredited quality and patient safety "academy" for faculty and residents with an experiential project requirement. With new skills and training in QI basics, residents and faculty can work together on local departmental QI issues to improve care. These projects may be short term, less than 90 days using a simple PDSA cycle methodology, or more expansive over months.

Panelists agreed that the big goal is for the CPD office to facilitate learning that drives quality across the organization. To do this successfully, CPD staff have to know about institutional quality priorities, initiatives and performance metrics that the hospital leadership wishes to improve. This is an ongoing process and requires sustainable partnerships and sustainable partnerships and long-term collaborations.

At the end of the session, learners took away some important lessons and practice tips mentioned by the panelists as essential to their own success: Be proactive! CPD staff should take a grass roots approach; be intentional in reaching out to QI leaders and identified champions; be able to explain the benefits of partnership; suggest ways QI and CPD staff can work together toward a common goal; and engage in the real work of quality improvement by offering assistance in QI project management at both the departmental and institutional levels.

Thursday, March 16: Concurrent Best Practices Abstract Session (Block 4): Inclusiveness, Diversity, Equity, Accessibility plus Promoting Well-being

Abstract Title

Roots to Offshoots – From the Ground Up: A Multifaceted Model Tackling Health Equity, Diversity, and Inclusion Beyond CME

Author(s)

Sandhya Venugopal, MD, MSHPEd
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Institution: University of California Davis Health

Purpose/problem statement

The University of California, Davis, Health Office of CME (OCME) leveraged its' partnership philosophy and expertise to foster health equity, diversity, and inclusion (EDI), addressing historical beginnings to current-day issues for practice change beyond CME.

Approach

OCME met with subject matter experts (SMEs) and the Vice Chancellor of Health Equity, Diversity, and Inclusion. Leveraging their talents and those of the OCME team, a curriculum was developed for all learners, from health sciences students to faculty, that provided a historical context of EDI in medicine, addressed everyday practice, and established a framework to incorporate EDI into all future CME.

Evaluation/Outcomes/Discussion

OCME incorporated EDI content into residency orientations, faculty development, and new physician onboarding through a multi-faceted approach. To date, over 2200 learners completed CME foundational and onboarding coursework such as Race and Medicine in Clinical Practice, Supporting Educational Excellence in Diversity, Good to Great, and Coaching for Core Communication. Future content is being developed using OCME's EDI framework.

It is a challenging task to leverage partnerships and leadership in CME process development. We used a holistic approach to create a system-wide model for change in EDI education. Models such as this can be successfully replicated and applied broadly to assist in changing cultural norms.

Key Learnings for CME/CPD Practice

EDI is a focus area for UC Davis Health and integral to the strategic plan. In 2022, new California legislation was enacted for implicit bias, and updates were made for cultural-linguistic competency to be addressed in all CME content. While faculty acknowledged that addressing these issues is the right thing to do, it was also perceived as an additional burden. To minimize the impact on faculty and SMEs, OCME put together a guide and actively assisted them in incorporating EDI into the CME curriculum. Institutional change can be created when collaborators with a common goal come together and address a matter from the ground up, addressing the roots and its offshoots.

Abstract Title

Theater for Health Equity: Bringing Together Two Fields for Continuing Medical Education

Study Team

Chheda Sadhana MD; Ingram Kristyn MD; Calderón-Mora Jessica DrPH; Domínguez Adriana PhD; Morales Mayra MBA;; McKean Kim MFA; Tsutsui Hideaki MFA

Purpose/Problem Statement/Scope of Inquiry

Equity in healthcare is essential to addressing health disparities and improving quality of patient care. Teaching clinicians about healthcare inequities has primarily focused on disparity statistics, power analyses, and cultural competency training. These have failed to address the more intransigent problems that contribute to these disparities, such as bias, prejudice, and stereotyping.

Approach(es)/Research Method(s)/Educational Design

A unique partnership was formed between a general academic university and an academic health center on the US Mexico Border to obtain training in Theater of Health Equity methods. This training utilizes principles of Paulo Freire's Pedagogy of the Oppressed & Augusto Boal's Theatre of the Oppressed to build community & interpersonal skills, equipping participants with actionable methods to intercede and advocate for effective communication between patients, clinicians and medical staff by confronting bias while cultivating empathy.

Evaluation/Outcomes/Discussion

The culmination of the workshop resulted in co-facilitators – one individual from healthcare and one from theatre – facilitating a 75 minute training for healthcare professionals consisting of ensemble building exercises, image theatre, and an interactive case scenario tied to the topic. All participants acknowledged that this type of training allowed for issues surrounding bias, prejudice, and stereotyping to be approached in a unique way allowing for a deeper, and more nuanced, understanding.

Key Learnings for CME/CPD Practice

Participation of theatre faculty together with healthcare providers can have a well-defined role in addressing health care disparities due to bias, stereotyping and prejudice

Abstract Title

Competency Based Education and Development in Diversity, Equity and Inclusion (DEI)

Study Team

Kamilah Weems, MS, Lisa Howley, PhD, MEd, Annette Mallory Donawa, PhD, MSEd

Purpose/Problem statement

There have been many advancements in medical education over the past 20 years, including a shift towards competency-based education (CBE) or the use of outcomes for guiding teaching and learning. In order to support CBE across the continuum in contemporary areas, the AAMC launched the *New and Emerging Areas in Medicine* series. This session will introduce the third report in this series, which focuses diversity, equity, and inclusion (DEI). These cross-continuum competencies are designed to help continuing medical education professionals design or adapt curricula and advance research in DEI.

Methods/Approach

The competencies were developed over a two-year period beginning in early 2020. A modified Delphi method was used to refine the draft competencies and increase participant input. This included developing a questionnaire of standard items (see the Survey Questions on page 18), conducting iterative email rounds with that questionnaire, collecting individual and group feedback between rounds, and summarizing the findings. An electronic questionnaire inviting feedback about two iterations was distributed to 255 and 301 individuals and response rates were 73.3% and 57.1%, respectively. We analyzed the mixed-methods data from the two surveys and further revised the competencies. Additionally, we also held focus groups with a select group of medical school deans and medical educators directly involved in developing DEI curricula.

Findings/Outcomes

Overall, there was a more favorable response to the second questionnaire, with an average score across all Likert scale items 4% higher than the score for the first questionnaire, indicating, according to one medical educator respondent, the competencies "will be helpful to them as they educate students, residents and/or physician faculty." The final set of DEI competencies were released during the summer of 2022.

Impact/relevance to the advancement of the field of CME/CPD

The new physician competencies in DEI will enable educators with a roadmap to design more effective educational strategies that address bias, discrimination and racism in the learning environment. Examples of how the cross-continuum competencies can be applied across the learning continuum, with an emphasis on CME/CPD, will be addressed. Learners will explore how the competencies may be used to guide their local curricula including their regularly scheduled series (RSS).

Abstract Title

Creating "Learning Spaces" that Enable Dialogue about Equity, Diversity, and Inclusivity in Health Systems

Study Team

Chan, Ming-Ka MD; Busari, Jamiu O MD; Sonnenberg, Lyn K MD; Mustapha, Taj MD; Maniate, Jerry M MD

Institution

Equity in Health Systems (EqHS) Lab

Purpose/Problem Statement/Scope of Inquiry

The turmoil that occurred in 2020 due to the COVID-19 pandemic was further stirred with the murder of George Floyd and the death of Joyce Eschaquan. These events served as an awakening call for many who were unaware of the harsh realities of racism, discrimination, and social injustice faced by many in North America and around the world. Healthcare was no longer immune to the racial disparities and other acts of misjustice it had ignored. The spotlight was now on us as leaders in healthcare. How would we respond?

Approach(es)/Research Method(s)/Educational Design

We recognized that we needed to create "learning spaces" to bring a fragmented community of individuals in our health system to have deeper conversations about equity, diversity, and inclusivity (EDI), and that we must move beyond superficial understanding to enable change processes. The Sanokondu CDFA (Critical Dialogues For Action) Series has provided individuals' the opportunity to step outside their organization or institution in order to immerse themselves in a gathering who desires to improve the experiences and outcomes within their systems and communities. Utilizing Kern's Framework for Curriculum Development, we have identified important topics and influential national / international speakers, and created an accredited interactive monthly online session with post-session evaluations.

Evaluation/Outcomes/Discussion

We have nearly completed three seasons of the Sanokondu CDFA Series to date and through this experience we have seen how a diverse planning committee can identify diverse and timely EDI topics, and diverse speakers to deeply engage a diverse audience with knowledge and practical approaches.

As we look to our fourth season, we recognize that the Sanokondu CDFA Series critically enables healthcare leaders to build capability, confidence, capacity, and credibility as they wrestle with anti-racism, anti-discrimination and social justice within our health systems.

Using an online format has meant that we need to be intentional to ensure interactivity and engagement with participants and to ensure actionable steps are provided to shift local culture.

Key Learnings for CME/CPD Practice

The CDFA Series has enabled us to support the beginning of individuals understanding their local culture and context, but then to explore strategies to promote culture change that creates a sense of belonging in the environment.

Abstract Title

Addressing Healthcare Professional Burnout: Benchmarking the Role of Continuing Education

Study Team

Chelsea Crooks, PhD[1], Barbara Anderson, MS[2], Marcia Slattery, MD, MHSc

Institutions

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Purpose/Problem Statement/Scope of Inquiry

Healthcare professional burnout is at an unprecedented level despite a plethora of studies investigating risk factors and potential interventions. Continuing education (CE) is a unique platform to support the advancement and dissemination of burnout-related knowledge and strategies. This project aimed to review existing literature investigating primary areas of burnout risk and interventions, and to benchmark a sample of accredited CE activities provided by academic centers focusing on healthcare burnout content.

Approach(es)/Research Method(s)/Educational Design

An initial literature search using PubMed, PsychInfo, and CINAHL databases was performed to identify key variables associated with healthcare burnout among healthcare providers during the past 5 years. Fifteen accredited academic CE programs were next reviewed to benchmark burnout-related content. We chose seven programs that were members of the Professional Well-being Academic Consortium (PWAC) and Jointly Accredited, and eight programs that were either Jointly Accredited or members of PWAC to ensure regional diversity in the US. Benchmarking CE burnout content included common search terms of "burnout", "wellness", and "wellbeing".

Evaluation/Outcomes/Discussion

Literature review identified 3 major areas contributing to burnout, including personal wellness, organization culture, and job-specific stressors. Analysis of the 15 CE programs found that 7 programs had no accredited healthcare burnout offerings. The remaining 8 programs had one or more CE burnout-related courses, with a total of 21 offerings across all 8 programs. Course format included enduring (n=14); live in-person (n=3), virtual (n=2), or both (n=2). Burnout course content was descriptive (n=9) and/or presenting person-centric interventions (n=16); 2 offerings focused on organization-centric interventions. Broader institutional review revealed additional burnout content not included on the CE platform.

Key Learnings for CME/CPD Practice

Burnout-related CE content was absent or sparse in the benchmarked academic healthcare centers' continuing education catalog of accredited activities. Available content primarily consisted of descriptive or person-centric topics. CE platform limitations, including search tools, keyword content tagging, and organizational use barriers were also found. Opportunities include expansion of burnout-related CE content including organizational and job-specific interventions, as well as improvement in CE platform functionality to optimize identification of content.

Abstract Title

Approaching a Coworker in Need – An Online Module to Promote Caring Among Peers

Abstract Study Team

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Sam J. Daniel, MD, FRCSC, Fédération des médecins spécialistes du Québec
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Purpose/Problem statement

A recent survey revealed that 60% of Canadian healthcare professionals have seen their mental health status decline during the pandemic. At the same time, few physicians feel comfortable approaching a colleague with psychological distress despite being trained to intervene with patients in similar situations.

Approach

Our organization developed a 1-hour online module for medical specialists to: 1) become familiar with the five steps method developed by the Quebec Physician's Health Program to help a coworker in need, and 2) develop a detailed plan to approach a coworker following the same structured methodology. A validated questionnaire based on the Theory of Planned Behavior was administered to measure participants' change in behavioral intention and a 4-month post intervention activity survey was used to determine whether physicians had helped a coworker in need.

Findings

Over 350 physicians participated in the activity since its launch in March 2022. Participants agreed or totally agreed that an online course was a perfect learning mode for the topic (98%) and virtually all reported that this course met their learning objectives (99%). An increased score of 1.32 (out of 7) in the behavioral intention was measured using the CPD REACTION questionnaire. Preliminary results from the 4-month follow-up survey show that physicians had approached a coworker in need following the activity.

Discussion

Physicians from 29 out of our 35 affiliated medical associations participated in this activity, thus confirming the widespread interest for the program. In addition, this is the highest intention to change of all our educational programs as measured by the CPD REACTION questionnaire. Preliminary data from the 4-month survey suggest that the activity was effective in helping participants to approach a coworker in need.

Barriers/facilitations

Barriers and facilitators to this program included: 1) keeping participants' confidentiality throughout the activity; 2) emphasizing that helping a coworker is not tied to the healthcare professional responsibilities; and 3) developing real-life scenario videos are key to promoting a behavioral change.

Impact/relevance to the advancement of the field of CME/CPD

We believe that such programs can help physicians facing difficulties feel less isolated and can foster compassion among coworkers, thus increasing collegiality and resilience of individuals and medical teams.

Thursday, March 16: Concurrent Research Abstract Session (Block 5): Technology-enabled and Data-Driven CPD

Abstract Title

What do New Practitioners Need from Continuing Professional Development: A Case Study of Transition to Practice and Early Career Psychiatrists

Study Team

- Mak, Michael MD
- Ho, Certina PhD
- Thompson, Chase MD
- Sarmiento, Tracy MD
- Esplen, Mary Jane PhD
- Tan, Adrienne MD
- Sockalingam, Sanjeev MD

Institution: University of Toronto

Purpose/Problem Statement/Scope of Inquiry

As Canadian psychiatry residencies transitioned to Competence By Design (CBD), the Royal College of Physicians and Surgeons of Canada released a list of Transition-to-Practice (TTP) competencies for residency programs to implement. These competencies include integration of skills directed towards life-long learning (LLL) and management of clinical, administrative, and financial aspects of practice. In the context of implementing CBD, there is an urgency to identify CPD needs to better inform initiatives targeting early career psychiatrists (ECPs).

Approach(es)/Research Method(s)/Educational Design

We will adopt Kern's six-step approach to curriculum development to identify TTP CPD needs of ECPs, develop a TTP CPD workshop, and use the Kirkpatrick's Evaluation framework to assess user experience of the anticipated workshop.

In the first phase of this study, we will conduct a needs assessment of ECPs using semi-structured interviews. Data collected and analyzed will inform our TTP CPD workshop targeted to ECPs to support their transition into independent practice. We will administer post-workshop surveys to assess ECP perceived changes in confidence in practice-related issues. Three months post-workshop, ECP participants will complete a follow-up self-assessment, sharing their perceived behavioral changes following completion of our workshop.

Evaluation/Outcomes/Discussion

We conducted a needs assessment with 44 psychiatry residents and ECPs in Toronto, Canada, to ascertain which of the Royal College TTP experiences they perceived to be most important. We found that ECPs would appreciate further training in practice management; clinical leadership; management of adverse events; business aspects of practice; setting up practice, incorporation, planning for retirement; and building an efficient outpatient practice while preventing burnout.

Key Learnings for CME/CPD Practice

Residents in the Transition to Practice phase of training desire greater training in pragmatic skills, such as the managerial and business aspects of medical practice. TTP teaching curriculum can be tailored to address these needs

Abstract Title

Accelerating the Appropriate Adoption of Artificial Intelligence in Health Care: Clinician Champions Program Evaluation

Study Team

Wiljer, David, PhD[1-3]; Teferi, Bemnet[1], MPH; Younus, Sarah[1], MPH; Al-Mouaswas, Dalia, BSc[4]; Clare, Megan, MA[4]; Charow, Rebecca, MSc[1,2]; Dhalla, Azra, MBA[5]; Gillan, Caitlin, PhD[2]; Jardine, Jessica[1], BEd; Jeyakumar, Tharshini, MHI[1]; Karsan, Inaara, MHI[1]; Lalani, Nadim, BA[5]; Scandiffio, Jillian[1], MSc; Mattson, Jane[4] MPT; Salhia, Mohammad, Med[4]; Scandiffio, Jillian[1], MSc; Zhang, Melody, MA[1]

Institutions

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Purpose/Problem Statement/Scope of Inquiry

The Clinician Champions Program was created to address gaps in artificial intelligence (AI) literacy and education among healthcare professionals (HCP) in an ever-changing medical landscape. As AI accelerates, it is critical to identify equitable and inclusive approaches to AI educational programs for the appropriate adoption in healthcare.

Approach(es)/Research Method(s)/Educational Design

The Knowledge-to-Action (KTA) model guided the project for developing and evaluating evidence-based AI education programs[1]. This program evaluation applies the Health Equity and Inclusion Framework[2] to explore learning environments to better support continuing professional development (CPD). The Clinician Champions Program was held in 2 cohorts: Nov 2021 and Jun 2022. The program was conducted over 6 weeks and included weekly assignments and a capstone project. Data collected included learner pre/post evaluation surveys and course artifacts (e.g., Blackboard data). Themes were generated based on interviews and triangulated with debrief data. Interview data was coded using NVivo.

Evaluation/Outcomes/Discussion

109 clinicians attended the two cohorts. HCPs, including physicians, nurses, researchers, and other clinicians, were invited to share their perspectives following course completion. A total of

17 participants were recruited for interviews: 5 instructors and 12 learners. The evaluation of learner and instructor feedback led to program delivery changes that primarily focused on increasing HCPs' comfort and confidence with AI content. Developments between the two cohorts included an increase in program length from 6 to 8 weeks and flexibility with assignment deadlines to allow more time to understand the AI content.

The study was presented at the SACME conference, where attendees discussed the use of AI in the context of mental health, data security, and educational approaches. These findings underscore the importance of collaboration between learners and faculty from different areas of expertise to enhance the effectiveness of AI education programs. Effective CPD in healthcare necessitates non-traditional classrooms that meet the diverse learning needs and AI competencies of HCPs. Additionally, existing AI education programs should prioritize reaching out to diverse audiences and promoting knowledge sharing among HCPs to enhance AI preparedness.

Key Learnings for CME/CPD Practice

AI educational programs are valuable for the strategic direction of AI use and CPD in healthcare. As the competency and comfort of HCPs in using AI knowledge is critical for the responsible adoption of data-driven care, it is essential to ensure that programs cater to all learners' CPD. Future directions involve developing specialty programs to accelerate appropriate adoption and engage a wider audience in conversations about AI in healthcare. The next steps, informed by the ongoing evaluation, will focus on completing a manuscript for the overall program evaluation, and developing and delivering program iterations for mental health and medical imaging.

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Abstract Title

Applications of Artificial Intelligence for Non-Procedural Skills Training in Health Professions Education: A Scoping Review

Study Team

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Institution: Centre for Addiction and Mental Health, Toronto, Canada

Purpose/Problem/Statement/Scope of Inquiry

This scoping review aims to investigate uses of AI in health professions education for non-procedural skills training at the undergraduate, postgraduate, and continuing professional development level.

Approaches/Research Methods/Educational Design

The proposed scoping review was conducted in five stages adapted from Arksey and O'Malley's scoping review methodology: stage 1 planning and research, stage 2 search strategy, stage 3 screening/selection, stage 4 review and charting data, and stage 5 synthesis. Seven bibliographic databases were searched, seeking articles using AI for the purposes of non-procedural skills training for health professions education and involving healthcare professionals/trainees. Two reviewers independently screened, reviewed, and extracted data.

Evaluation/Outcomes/Discussion
In total, 4903 studies were screened, 178 articles selected for full review, and 32 were identified as meeting inclusion criteria to undergo abstraction. Most studies fit under step 6 of Kern's model, illustrating that AI is being used for evaluation and assessment of learners and programs. Most studies illustrate that AI is being applied in a non-procedural context to provide feedback and evaluate learners and medical education programs. Feedback and evaluation are integral parts of medical education. Results of this study illustrate that appropriate timing, method of delivery, and quality of feedback are being optimized through AI and allow learners to improve their performance and better achieve learning goals and competencies. Additional opportunities to use AI may include adaption of teaching approaches, personalizing learning, creation a learner's zone of proximal development, and large-scale program evaluations.

Key Learning for CME/CPD Practice

Data from this review will be used to shape future integration of AI in learning and evaluation of health professions education programs, including continuing professional development programs.

Abstract Title

Confidence-Based Assessment and Commitment to Change: Mastery Predicts Commitment to Change

Study Team

Lucero, Kate Stringer PhD, Ren, Yi PhD

Institution: Medscape Education

Purpose/Problem Statement/Scope of Inquiry

The current study sought to understand whether mastery assessed via confidence-based assessment methods (i.e., knowledge/competency question paired with confidence in response to the question) predicts commitment to change practice in micro learning. This study examined: Does micro-learning impact mastery of content, and is mastery predictive of commitment to change?

Approach(es)/Research Method(s)/Educational Design

A pre/post, paired design was utilized to assess level of mastery for micro-learning, chapter-based online CME. Use of technology in our online platform facilitated the design of chapters ranging from 5-7 minutes that are housed in one CME/CE certified activity. Thus, one could complete bite-sized segments of learning but accumulate enough learning to equal up to 0.5 CME/CE credit.

Number of experiences of mastery at post-assessment was the independent variable. Case-based questions were asked (e.g., "A primary care physician refers a 28-year-old woman …<case abbreviated for word count>. Should this patient be treated for bipolar disorder?"). A learner could have 0 to 6 mastery experiences. The dependent variable was being committed to intended practices changes (coded as 0 – not committed/somewhat committed and 1 – committed/very committed; "What is your level of commitment to making intended practice changes?"). Data were collected October 18, 2021 to June 30, 2022.

This study analyzed 5,998 paired responses of clinician learners who completed all chapters, both pre/post assessments and the evaluation between October 18, 2021, and June 30, 2022. Among the responses, 52.67% (n=3,159) were physicians, 47.33% (n=2,781) were other HCPs. 59.85% of participants were from the United States.

Evaluation/Outcomes/Discussion

The number of mastery experiences significantly predicted being committed/very committed to intended practice changes. A 1 unit increase in the total number of mastery experiences, resulted in one being 31.18% more likely to commit changes in practices (Coef.=0.2714, OR=1.3118, $p<0.001$).

Key Learnings for CME/CPD Practice

Demons tratting knowledge alone is not enough to lead to behavior change. Very little research has examined the potential outcomes of CBA methods, and hence, mastery of content and its link with commitment to change practice. This study suggests micro learning can enhance mastery experiences and that CBA is associated with commitment to intended practice change. Micro learning can be designed so that it allows a learner to move at their own pace through a 0.5 credit activity online and evaluated using CBA methods. CBA's link to commitment to change provides some support for its correlational validity.

Abstract Title

The Trials and Tribulations for Meaningful, Accessible, Personalized CPD. An Exploration

Study Team

Kate Runacres, Yusuf Yilmaz PhD, Tim Paquette, Kirk DesRosier, Jill Garner, Katherine Marsden, Guylaine Lefebvre MD, Rhonda St Croix, Sofia Valanci-Aroesty MD PhD.

Institution: The Royal College of Physicians and Surgeons of Canada

Purpose

Providing personalized, accessible, streamlined access to learning opportunities may help healthcare providers engage in learning and improve patient outcomes. This study aims to understand and resolve the barriers preventing access to meaningful and personalized CPD.

Problem Statement

Adult learning theories stress the importance of learners' autonomy and control when choosing their professional development. Adult learning theories assume that learners need to know what they want to learn, have a self-concept, bring their own previous experience, and have a readiness, orientation, and motivation to learn.

Engagement with CPD is multifactorial; it combines the assumptions of how adults learn with the complexity of physicians' real-life needs. A perceived loss of control or decrease in choices can hinder this engagement. Although CPD is readily available in person or virtually, physicians still encounter barriers to participation, including but not limited to choice and communication issues, lack of personalized options, time constraints, isolation, geographical barriers, and financial constraints. A loss of control or a perceived decrease in choices can hinder this engagement.

Approach

This is a work in progress taken in iterative steps. First, we reviewed the relevant literature and licensure requirements. Next, we held over 40 focus groups with physicians, national specialty societies and university CPD offices. Data was analyzed, and responses were coded into barriers, needs, and desires for engaging in CPD. Next, we expect to pilot a proof-of-concept learning hub where physicians will engage in a one-stop personalized platform with different CPD options, including but not limited to: meetings, abstracts, webinars, social media links, and discussion forums, with automatic credit allocation.

Discussion Key Learnings for CME/CPD Practice

Creating a personalized learning platform will ensure physicians focus on learning and development while complementing the important role played by specialty societies and universities in medical education. A personalized learning platform should decrease the time physicians take to look for CPD, reduce isolation in practice, provide connections to specialists from other disciplines, increase communication efforts with CPD providers, and strengthen the technological aspect of CPD while applying 21st-century educational principles and practices.

Key Learnings for CME/CPD Practice

Physicians are interested in having a one stop for all CPD that provides personalized recommendations, can be paused and resumed, is easy to use, automatic, and can provide interprofessional opportunities, as well as networking not limited to geographical

Abstract Title

Boosting Capacity to Screen and Care for Underserved Children with Autism Spectrum Disorders: Using Robust Evaluation Methodologies to Inform an ECHO® Program

Study Team

White, Julie, MS, Belinda O'Hagan, MA, Rachel Amgott, NP, Ilana Hardesty, MA, Amy Ursitti, BS, Sarah Foster, MS, Alana Chandler, BS, Marilyn Augustyn, MD, Jacey Greece, DSc.

Institution: Boston University Chobanian & Avedisian School of Medicine

Purpose/Problem Statement/Scope of Inquiry

There are insufficient developmental and behavioral specialists to meet increasing demands for autism screening and diagnosis among pediatric care providers affiliated with Boston Medical Center (BMC). Boston University School of Medicine Continuing Medical Education sponsored a

Project ECHO¨ in 2020 –2021 on the topic of autism spectrum disorder (ASD) in partnership

with the Developmental and Behavioral Pediatrics group (DBP) from BMC, our affiliated hospital. BMC is the largest safety net hospital in New England. The program launched in October of 2020 when COVID was raging.

We conducted this 12-session yearlong program, meeting once a month on Zoom for one hour, to train clinicians from six Community Health Centers and the BMC pediatric practice how to conduct screening and initial assessment for autism spectrum disorder (ASD). The ECHO model includes 10 minutes of didactic content, followed by a case presentation of an actual case from one of the participating sites, with recommendations being made by peers and faculty We partnered with a professor from our School of Public Health to help us with assessment, implementing a robust process and outcome mixed-methods evaluation that assessed barriers and facilitators to program implementation and participants' changes in knowledge, skills, and confidence in screening. This project was funded by the Noonan Foundation.

Approach(es)/Research Method(s)/Educational Design

Prior to program initiation, an environmental scan was administered to participating clinics gathering data on numbers of clinicians and pediatric patients, ASD resources, screening and referral practices, EMR support, and patient health communication practices. Content was iteratively developed based on environmental scan data, unbiased training observations at each session, and participants' feedback during each session and via standard evaluation data collected after each session. The program team met weekly to discuss the evaluation results and to adjust the content in response to participants' needs.

To evaluate the training's impact on clinician's self-reported knowledge, skills, self-efficacy, burnout, and professional fulfillment, a pre-survey, mid-point survey, and post-survey were administered. Focus groups were conducted 90 days after the final session and transcribed, coded, and analyzed.

Evaluation/Outcomes/Discussion

The average health center employed 14.5 clinicians and served 6,900 patients under age 18 annually. A majority (71.4%) reported not having enough options for patients who screen positive for ASD. Clinicians reported significant increases in knowledge, ability, and self-efficacy, and a decrease in burnout. Participants liked the accessibility of the virtual format, having a facilitator who could answer questions in real-time, guest speakers who shared information about specific topics (e.g., insurance), and case discussions with other clinicians.

Key Learnings for CME/CPD Practice

A very robust evaluation methodology conducted by an evaluation expert, resulted in high-quality findings that inform practical recommendations for further program implementation and sustainable positive outcomes. Expect that your evaluation design may evolve during the life of the program.

Thursday, March 16: Concurrent Oral Poster Sessions A & B (Block 6): All Topics

Poster Title

Creating Spaces for Dialogue, Action and Community: Establishing the Equity in Health Systems (EqHS) Lab

Study Team

Chan, Ming-Ka MD; Busari, Jamiu O. MD; Sonnenberg, Lyn K. MD; Alie, Ellen MHA; Wong, Suzanne MD; Selim, Omar MD; Radhakrishnan, Arun MD; Do, Victor MD; Rangel, Cristian PhD; Maniate, Jerry M MD

Institution: Equity in Health Systems (EqHS) Lab

Purpose/Problem Statement/Scope of Inquiry

Power, privilege, and marginalization are commonplace in many healthcare and health professions education systems which contribute to the fragmentation that historically has existed. This fragmentation is evident in the silos that exist within organizations and between organizations within the same systems and result in negative impacts on care, experiences, and outcomes. These challenges are experienced by those within the systems (e.g., learners, teachers, staff, practitioners, and leaders), and those served by these systems, (e.g., patients, caregivers, communities and populations). Within health professions academia, this marginalization can negatively impact those seeking to explore and address areas such as anti-racism, anti-discrimination, and social justice, without which can perpetuate the experiences of oppression, isolation and mistrust among our most vulnerable populations.

Approach(es)/Research Method(s)/Educational Design

The Equity in Health Systems (EqHS) Lab was established to be an academic home for a group of individuals who seek to explore and address racism, discrimination, and injustice in the health

care and education systems. It is a transdisciplinary community bound by commonly held principles and vision for what needs to be done to positively impact models of care, education, research, and leadership within our health systems. The impact of the EqHS Lab is reflected in its growing community of international members and unique collaborative partnerships, resulting in broad engagement with educational offerings, innovative projects, and research initiatives.

Evaluation/Outcomes/Discussion

Since its inception in September 2021, the EqHS Lab has supported accredited educational series', academic publication development, and several peer reviewed and invited workshops through collaboration. The transdisciplinary nature of our network has formed a growing list of unique collaborative partnerships. The EqHS Lab is being sought out by other health system organizations for its expertise and experience in anti-racism and anti-discrimination work, and our unique approaches to questions.

Key Learnings for CME/CPD Practice

It is critical for those involved in anti-racism, anti-discrimination, and social justice within our health systems to engage in building a collaborative academic community that supports and enables them in the brave work that must be done.

Poster Title

Australian medical regulation frameworks and the use of eHealth data analytics to strengthen CPD: An analysis of implementation barriers and enablers with the Australian Specialist Medical Colleges

Study Team

Carol Pizzuti, Medical Anthropology, MRes
Industry PhD Candidate

Institutions

The University of Sydney | Faculty of Medicine and Health Sciences, Discipline of Biomedical Informatics and Digital Health
Digital Health CRC | Research Program: Using practice analytics to understand variation and support reflective practice
The Royal Australasian College of Physicians | Professional Practice Directorate, Member Learning and Development Team

Background

Starting from January 2023, Australian medical practitioners will have to meet specific mandatory CPD Standards to renew their registration to practice medicine. Among other requirements, they will be asked to undertake "Measuring Outcomes" CPD activities for a set minimum hours per year.

According to the regulatory frameworks and policies developed by the Medical Board of Australia (MBA), "Measuring Outcomes" activities require the analysis of patient health data to

be completed and, ideally, the use of large eHealth datasets and big data analytics technologies for a better insight on medical care and practice.

As per their institutional role, Australian Specialist Medical Colleges (the Colleges) are currently working on the implementation of the MBA CPD Standards. Even though many Colleges have emphasised the challenges inherent in "Measuring outcomes" activities and voiced their concern around health and eHealth data accessibility, they are nevertheless responsible to provide medical practitioners with tools and guidance to complete their CPD requirements.

Bearing in mind the Australian healthcare landscape, this study aims to identify the factors that can be addressed by the Colleges to successfully implement MBA regulatory frameworks and foster data strengthened CPD.

Methods

An analysis of implementation barriers and enablers was conducted together with 4 participating Colleges, for a total of 18 research participants purposefully recruited among the Colleges CPD teams. Semi-structure interviews were conducted online and analysed using a hybrid inductive and deductive approach to thematic analysis.

Preliminary Findings

Historically, most Colleges have focused on trainees' education and curricula, considering original research on CPD of secondary importance. Also, Colleges' CPD units currently dedicate time and resources almost exclusively to the development of traditional educational activities. Considering the ongoing shift in CPD requirements, both these practices have created operational barriers for a smooth change in CPD management and development.

In addition to this, some internal and external environmental factors − such as organisational operations and structure, medical practitioners' attitudes towards CPD and the use of eHealth data for performance assessment purposes, and the lack of collaboration and shared vision at systemic level − are hindering Colleges' efforts in implementing the MBA standards and promoting data-driven CPD.

Evaluation/Outcomes

Final considerations will be made at study completion.

Impact/Relevance to the Advancement of the Field of CME/CPD

Study results and related recommendations are expected to support the Colleges in their institutional role and advance the uptake of eHealth data analytics for CPD purposes.

Poster Title

Co-creation of a novel educational intervention to enhance child and adolescent psychiatry training in equity diversity, and inclusion principles: incorporating lived experience into curriculum design

Study Team

Nikhita Singhal (MD), Jenny Chum (MD), Catherine Deschênes (MD), Ayan Dey (MD), Oshan Fernando (PhD), Arfeen Malick (MD), Jude Sanon (BSc), Yezarni Wynn (MD), Raj Rasasingham (MD), Chetana Kulkarni (MD)

Institution: University of Toronto

Purpose/Problem Statement/Scope of Inquiry
Amidst the current social climate, there has been increased discourse around longstanding systemic inequities impacting youth mental health. Despite this, equity, diversity and inclusion (EDI) principles have not been a major component of Canadian child and adolescent psychiatry (CAP) training. Our objective is thus to develop and evaluate a novel educational intervention focused on EDI themes relevant to CAP.

Approach(es)/Research Method(s)/Educational Design
The study is grounded in Kern's six-step framework for curriculum development and comprises the following stages: (1) an environmental scan to better understand the current state of CAP EDI training (sampling program directors, current trainees, and recent graduates); (2) co-design and development of virtual educational modules with input from individuals with lived experience; and (3) evaluation of the modules based on Kirkpatrick's four-level model.

Evaluation/Outcomes/Discussion
Results from our initial needs assessment surveys and interviews indicate a significant gap in EDI training across programs; barriers identified included soliciting local expertise and finding time within curricula. Information collected was reviewed and thematically analyzed for identification of module topics and potential design elements. Specific topics of interest included cultural formulation, anti-Black racism, LBGTQ+ considerations, Indigenous issues, and refugee mental health. The first two modules developed focus on cultural formulation and anti-Black racism. Feedback from our initial pilot test will inform iterative refinement of these modules and development of the remaining modules in the series.

Based on our findings, there is a clear lack of dedicated EDI teaching in Canadian CAP postgraduate training and innovative solutions are needed. Equally important to addressing these principles is the process by which EDI is incorporated and disseminated in curriculum design. The co-creation of module content with individuals with lived experience represents a novel aspect of the project. Our combined process- and outcome-oriented approaches will support CAP EDI postgraduate training as well as lifelong EDI self-evaluation for CAP clinicians.

Key Learnings for CME/CPD Practice

EDI principles are an essential component of any CME/CPD activity and involving individuals with lived experience in the development of such activities is beneficial. While the intention of this project is to develop asynchronous EDI learning modules to incorporate into the existing CPD curriculum of CAP trainees, we anticipate this may serve as a foundation to be adapted for broader applicability to a variety of medical specialties and interdisciplinary health care professionals.

Poster Title

Podcast on Quality Improvement and Leadership for Early Career Healthcare Professionals

Study Team

Certina Ho PhD, Annie Yao PharmD, Samuel Chan PharmD, Autumn Chen PharmD, Vargha Amirabadi PharmD, Crystal Zhang PharmD, Nashita Tabassum PharmD

Institution: University of Toronto

Purpose/Problem Statement/Scope of Inquiry

Podcasts have grown rapidly as a platform for providing engaging and entertaining educational content to healthcare professionals and health profession learners. They can be considered as a resource to complement traditional didactic-based CME/CPD on quality improvement and leadership. The objective of the Leading with Quality Podcast was to create a virtual resource for early career healthcare practitioners to learn about quality improvement (QI), medication safety, leadership, and business management, etc.

Approach(es)/Research Method(s)/Educational Design

We developed seven podcast episodes where seven guest speakers, ranging from faculty members to clinical directors, shared their QI and leadership experiences in higher education, hospital administration, pharmaceutical industry, provincial regulatory authority, and experiential learning. An interview format, along with an average duration of 30 minutes per podcast episode, was maintained to optimize audience engagement. The podcast content primarily included real-life examples and lived experiences from the presenters. We released the episodes on SoundCloud and created a playlist on Spotify. Based on Kirkpatrick's four-level training evaluation, we designed and administered a 10-item online questionnaire to obtain feedback from listeners. We asked for their perceived value and relevance of the content and knowledge gain in QI and leadership after listening to the seven-episode podcast pilot series.

Evaluation/Outcomes/Discussion

A total of 20 responses were collected within a month of dissemination of the online questionnaire. Respondents perceived the podcast episodes to be valuable and relevant and that they improved their knowledge about leadership and QI. They would listen to more episodes and recommend existing episodes to other healthcare professionals and learners. A few respondents mentioned that concepts and jargon should be explained at the beginning of the episode to improve clarity, and that some episodes might benefit from dividing into two sessions to allow for more elaboration on the subject matter. The Leading with Quality Podcast (https://spotify.link/O7Sq9OtCayb) is an accessible educational resource that can be utilized by any healthcare professionals who wish to learn more about QI and leadership.

Key Learnings for CME/CPD Practice
The Leading with Quality Podcast will serve as a self-directed and easy-to-access CME/CPD resource to support early career healthcare professionals in learning about QI and lived experiences from healthcare leaders.

Poster Title
Improving Depression Screening in Patients with IBD – A Quality Improvement Initiative

Study Team

Natalie Sanfratello, MPH, Sharmeel Wasan, MD, Erika Gaitan, MSW, Alana LeBron, PhD

Institutions

- Boston University Chobanian & Avedisian School of Medicine, Center for Continuing Education
- Boston Medical Center
- Health Resources in Action

Purpose/problem statement

Disparities in adherence to health maintenance recommendations have been well-documented in patients with IBD. Approaches to identify and address major depression in this population remain under-described.

Approach

From August 2021 to June 2022, the team carried out a QI project centering on mental health screening rates. The team set an aim to increase the percentage of patients with a current PHQ-2 score from 18% to 65% by June 30, 2022. Adherence to depression screening was quantified based on proportion of completed PHQ-2 questionnaires in adult patients attending IBD clinic. Based on gap analysis findings, the project team implemented two interventions. The first was a multidisciplinary Tune-Up Clinic to address multiple health maintenance recommendations simultaneously in October/December 2021. The team implemented a Medical Assistant-driven mental health screening process utilizing the PHQ-2 screening via the electronic health record in March 2022.

Evaluation/Outcomes/Discussion

PDSA 1 did not improve PHQ-2 screening rates. PDSA 2 improved screening rates from 18% at baseline in August 2021 to 84% by June 30, 2022 and held at an average of 77% following the project period. Since beginning, 62% of eligible patients were already followed by another mental health professional or received a referral to and made an appointment with the GI psychologist.

Depression screening was identified as a gap in health maintenance in patients with IBD in an under-served population. The introduction of PHQ-2 administration to all patients in clinic led to a significant improvement in screening completion, and referrals to GI Psychologist. This model can be readily applied in IBD practice.
Covid-19 related absences played a role in the rate of screenings for some months. This program was facilitated by having a GI psychologist on staff to which not all IBD practices have access.

Key Learnings for CME/CPD Practice

The mental health-centric objective of this interprofessional accredited quality improvement activity was informed by patient focus groups and provider interviews as well as the traditional needs assessment/current state assessment approaches. The quality improvement model encourages team-based learning and process improvements. This intervention was successful

in creating a sustainable, embedded process that the clinic will continue past the intervention period.

Poster Title

Communities of Practice – What is the Secret Sauce?

Study Team

Reese-Queen, Chanise, EdD, Tono, Lucia, PhD, White, Julie, MS

Institution

University of Maryland School of Medicine, Center, Temple Health CME Program (Fox Chase Cancer Center, Temple University Hospital-Jeanes Campus), Boston University Chobanian & Avedisian School of Medicine

Purpose/Problem Statement/Scope of Inquiry

Professional associations such as the Society for Academic Continuing Medical Education (SACME) and the Mid-Atlantic Alliance for Continuing Medical Education (MAACME) provide membership benefits such as educational and networking events where members, who are Continuing Medical Education/Continuing Professional Development (CME/CPD) professionals, can discuss common challenges such as accreditation compliance, organizational and funding issues.

Prior to the pandemic, between annual meetings, the SACME Northeastern Region (SACME NE) held informal networking events, called "Coffee Chats" via conference calls which were inconsistently scheduled and not productive. MAACME conducted an annual in-person meeting each year and no gatherings in between. With the broad adoption of videoconferencing in response to the COVID pandemic, SACME NE began holding virtual Coffee Chats in April 2020. MAACME Chats were launched in October 2021. These two virtual communities of practice continue to meet regularly to this day. This study identifies the main characteristics that allow these CoPs to meet the needs of their members.

> **Who:** Society for Academic Continuing Medical Education Northeastern Region Coffee Chat
> **Inception:** April 2020
> **Frequency:** Every other Friday for one hour – 9:30 to 10:30 AM Eastern Time
> **Platform:** Zoom
> **Number of participants:** Average of 20 participants representing a homogenous group of 17 mostly
> medical schools with a small number from hospital/health systems
> **Facilitation:** Same facilitator each meeting – the style is informal
> **Content:** Work-related questions posed by members in an open forum format
>
> **Who:** Mid-Atlantic Alliance for Continuing Medical Education (MAACME) Chats
> **Inception:** October 2021
> **Frequency:** From 1:00 to 2:00 PM Eastern Time the third Thursday of the month
> **Platform:** Zoom

Number of participants: 35 – 50 representing a heterogenous array of organizations including hospital/health systems, medical specialty societies, medical schools, and other organizations
Facilitation: Each meeting is led by a different facilitator who is a member of the group. A planning committee identifies a topic and selects a facilitator for each meeting
Content: Pre-defined topics alternating each month with open forum discussion

Approach(es)/Research Method(s)/Educational Design

A mixed methods approach employing the instrumental case study design was used for this study. Invitations to participate in focus groups were sent to 40 active members of the SACME group and to the entire MAACME membership of 125, totaling 165 people. A separate focus group was conducted with each CoP, with 20 members in attendance for each. Questions were aimed at gathering demographic information and determining why individuals joined and continue to stay with the groups. Common themes about professional development and personal well-being emerged which informed a survey that was sent out to the 165 individuals on our lists. We asked survey respondents to rank close ended items and to select specific logistical items that were key to their attendance. Forty-nine people responded to the survey - 30 percent of the total surveyed.

Evaluation/Outcomes/Discussion

- 57% of the respondents have worked more than 16 years in Continuing Medical Education/Continuing Professional Development (CME/CPD).

- 41% and 35% of respondents work in medical schools hospitals/health systems, respectively.
- When asked to rank the importance of specific elements and their impact on their attendance at SACME/MAACME CoPs, the respondents selected the following as the top three items:

    - Available on Zoom/videoconferencing
    - Facilitator who draws out the discussion – inviting others to speak – in a non-judgmental way
    - Questions/discussions are generated by the peers

- 96% of the respondents felt very comfortable sharing information openly

- The three most highly ranked professional development benefits of participating in the CoPs were:

    - Learning from peers during the group meetings, refreshing and
    - expanding the depth of my knowledge
    - Sharing of best practices among peers including resources and tools during the meeting
    - Exchanging ideas, experiences, and innovations.

- The three most highly ranked benefits of participating in the CoPs with regard to personal well-being were:

    - Creates a safe space to discuss issues

- Inspires me to improve my practice
- Reduces isolation, great way to connect

Key Learnings for CME/CPD Practice

The pandemic led to the widespread adoption of teleconferencing and regular virtual meetings among the SACME NE and the MAACME membership. Virtual Communities of Practice can support the professional development and personal well-being of CME/CPD professionals. Availability via videoconferencing with a facilitator who creates a safe space for members to participate are important factors
of a successful CoP. Opportunities exist for further exploration of the differences between the two CoPs and among individuals who are not actively engaged in the CoPs.

Limitations - The percentage of individuals overall who participated in the focus groups was greater for the SACME group than the MAACME group potentially biasing the results. Among the respondents, 57% reported working in CME/CPD for more than 16 years and 76% reported working in medical schools or hospital/health systems potentially biasing the results towards these cohorts.

Poster Title

Building resilience and well-being in primary care during and after the Covid-19 pandemic: A mixed methods literature review

Study Team

Luconi, Francesca (PhD), Rodriguez, Charo (MD PhD), Lavoie-Tremblay, Mélanie (PhD), Gutberg, Jennifer (MSc), Baker, G. Ross (PhD), Montreuil, Tina (PhD), Harley, Jason (PhD), Nugus, Peter (PhD), Briand, Catherine (PhD), Lalla, Leonora (MD), Desseilles, Martin (MD), Lynn, Brenna (PhD), Schneeweiss, Suzan (MD), Barin, Ozlem (MSc), Zahedi, Sima (MD), Lauzon, Béatrice (PhD).

Institution: McGill University, Montreal, Quebec, Canada

Purpose/Problem Statement/Scope of Inquiry

The COVID-19 pandemic has underscored the need to support the mental health, well-being, and resilience of frontline health care workers (FWs). However there has been a substantial mismatch between perceived needs and available interventions. *Review question:* What is the current state of knowledge regarding effective individual and team-level interventions for building resilience among FWs (limited to primary care practitioners (PCPs)) in response to public health emergencies?

Approach(es)/Research Method(s)/Educational Design

Theoretical framework(s): The Knowledge-To-Action framework was used to make sense of literature review findings. *Methods:* Medline and PsycInfo were searched (1967-2021) with medical librarian assistance. *Inclusion criteria*: These included: (1) PCPs (family physicians/GPs, nurses, psychologists, we retained studies which included one or more of these

types of professionals); (2) intervention(s) pertaining to mental health/resilience/well-being of PCPs in response to disasters; (3) primary care setting(s) (clinics, offices, ERs, nursing homes, long-term care); (4) language of publication (we considered studies in English, French, Italian, Spanish, Persian, Turkish, and Azeri/Azerbaijani).

Inter-rater reliability (source selection): 100 sources (i.e., articles, books, and other types of sources) were reviewed by 3 reviewers. Quality of individual studies/reviews was assessed using the Kmet 2004[4] tool and modified PRISMA[2] criteria (for systematic, rapid, and scoping reviews). We did not exclude articles based on quality rating. *Data extraction*: Our extraction template was developed by two reviewers and validated by 4 researchers. The PRISMA guidelines[2] were used for reporting of review results.

Grey literature: We searched reports by Canadian provincial/national regulatory and licensing bodies for interventions on PCP resilience, mental health, and/or well-being. We carried out a comprehensive search of web pages (i.e., of the first 100 results, for eligible organizations).

Evaluation/Outcomes/Discussion

Inter-rater reliability: Values for the selection of sources were as follows. Kappa (raters 1 and 2, initial rating): 79.7%; kappa (raters 1 and 3, initial rating): 74.6%. Post-discussion agreement was 100%. We included 86 studies (N=85 in English, 1 study in Italian). 85% of these studies were published between 2020-2021. 67 (78%) specifically dealt with Covid-19. Within a wide variety of publication types, the most frequent were research studies (31 or 36%) and evaluation studies (14 or 16%). With regards to the setting, 40 (46% of included) were in hospital(s); 23 (27%) were in ERs.

Target audience (interventions could focus on one or more group(s) of health care professionals): 65 (76%) of included works focused on nurses, 49 (57%) physicians, 12(14%) psychologists, and 38 (44%) other professionals. 12% of included studies were systematic, or rapid, or scoping reviews; 27% were quantitative, 12% qualitative, and 7% used mixed methods.

Quality: N=27 (31% of included) quantitative studies could be rated: ratings ranged 0.27 - 1.00 (21/27 studies were above 0.50); N=16 (19%) qualitative studies rated: ratings ranged 0.30 – 0.95 (10/16 studies above 0.50); N=10 (12%) systematic, rapid, and scoping reviews rated: ratings range 1.07 – 1.64 (7/10 studies were below 1.50).

The quality of evaluation(s) was in many cases low. 27 studies reported 59 barriers (N=22 studies reported organizational barriers (these included peer, team member, and team leadership factors; this also included wider organizational characteristics such as available resources across the organization); 3 studies reported stigmatization as a barrier). 27 studies reported 60 facilitators (16/27 studies reported organizational/team/peer support as a facilitator). The most common intervention types were psychosocial (37 or 43%) and training interventions (21 or 24%). Examples of evaluated interventions identified in the white literature included Project 7 Mindfulness Pledge[6] (includes a voluntary mindfulness pledge aimed at improving job satisfaction and teamwork (nurses)) and Dedicated Wellbeing Centres for hospital staff[5].

Grey literature: 12 organizations were identified. A variety of interventions were identified, however only N=1 intervention was evaluated. *Discussion:* This mixed methods review explored interventions for building resilience among PCPs during the Covid-19 pandemic. There has been a recent increase in interest in this topic: most studies were published 2020-1 and dealt with COVID-19. Organizational barriers and enablers are key to support leadership in

developing relevant interventions. A question raised by the literature is whether the stigmatization of mental health in PCPs could explain their unwillingness to engage with interventions?[1]

Limitations: The existing literature has important limitations. There were few evaluations of interventions and evaluations were of inconsistent quality. Terminology was sometimes unclear in the included studies: for example, 'frontline worker' is a broad term for which it was difficult to tease out the target audience. The definition of primary care varies internationally. Our grey literature review was also limited to a specific type of documentation.

Next steps: As this literature review represents the first stage of a multiple case-study, we will complete data analysis and triangulate findings with 56 semi-structured interviews conducted in Quebec, Ontario, and British Columbia.

Key Learnings for CME/CPD

Practice gaps were identified in the literature on mental health/resilience/well-being of PCPs: these included a lack of evaluated interventions. Organizational barriers and enablers are key to support leadership in developing relevant interventions.

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Poster Title

A Comparison of Performance and Answer Confidence on Summative Assessments of Physician Knowledge

Study Team

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Institutions

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Purpose/Problem Statement/Scope of Inquiry

Physicians are generally unable to accurately self-assess in the absence of objective data. Structured assessments providing objective evidence of knowledge gaps can guide physician self-assessment. Relevant, appropriately challenging summative assessments may provide motivation for physicians to learn and more meaningfully engage with material; expectations of being tested can lead to better learning. We compared differences in physician answer accuracy and answer confidence in two different longitudinal assessment activities, one formative and one summative.

Approach(es)/Research Method(s)/Educational Design

CKSA (continuous knowledge self-assessment) is a low-stakes activity in the lifelong learning and self-assessment component of the American Board of Family Medicine (ABFM) Family Medicine Continuous Certification (FMCC). FMCLA (Family Medicine Certification Longitudinal Assessment) is an alternative to the periodic secure knowledge examination, higher stakes component of knowledge assessment in FMCC. We compared differences in physician answer accuracy and confidence in their answers between these two ABFM longitudinal assessment activities.

Study cohort A consisted of ABFM Diplomate physicians who completed 75 questions in both CKSA and FMCLA in 2019 (n = 1480). Study cohort B consisted of ABFM Diplomate physicians who completed 75 questions in both CKSA and FMCLA in 20202 (n = 2090). Study cohort C consisted of a subset of physicians from Cohort A who additionally completed 75 CKSA and 75 FMCLA questions in 2020 (n = 1217). We compared cohorts A and B to determine if patterns of answer accuracy and confidence after one year were similar in two different physician groups. We compared cohorts A and C to determine if the one-year accuracy/confidence pattern persisted for a second year.

Evaluation/Outcomes/Discussion

In all three cohorts, participants were more often correct on FMCLA but were more confident in their answers on CKSA. The differences could not be explained by question difficulty. Even though items in both platforms were drawn from the same item bank, participants viewed the FMCLA questions as less relevant to their practice. Participants self-reported using resources more frequently to answer FMCLA questions. They were also more likely to answer questions quickly on CKSA, suggesting less engagement or reflection. This study shows that physician performance and confidence vary with the stakes of the knowledge assessment.

Key Learnings for CME/CPD Practice

Summative (higher stakes) and formative (lower stakes) assessment provide complementary information in CPD and serve complementary roles in physician specialty board certification.

Poster Title

Exploring Key Elements of User Experience in Gamification of Health Profession Education: What We Learned from the Literature

Study Team

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Institution: University of Toronto

Purpose/Problem Statement/Scope of Inquiry

Serious games, or gamification, in health profession education aims to improve knowledge retention in a more engaging format than traditional teaching and learning methods. User experience (UX) impacts the effectiveness and satisfaction of games. Effective gamification requires both the application of UX elements and the incorporation of relevant educational topics. Our goal is to identify key UX elements in medical education gamification, and learner-directed patient safety topics to help design educational games for pharmacy students at our institution.

Approach(es)/Research Method(s)/Educational Design

We completed the first three steps of Kern's six-step approach to curriculum development of a patient safety curriculum for health professionals in a previous study, with this project being Kern's Step 4: Educational Strategies. A structured search in MEDLINE, Science Direct, JSTOR, Web of Science, and IEEE Xplore was performed to locate relevant papers discussing UX elements of games and applications in medical and health profession education. Article titles, abstracts, and full texts were screened and cross-analyzed by two independent analysts. Included articles were then subject to thematic and content analysis. A needs assessment questionnaire was disseminated to early-career pharmacists and Year 4 PharmD students in our program who attended a patient/medication safety course in 2021 and 2022, respectively, seeking their input for specific topics and safety competency domains that may benefit from gamification.

Evaluation/Outcomes/Discussion

We identified 76 articles. Upon screening, nine articles were included in our subsequent thematic analysis. Key elements of UX in gamification included ease of use, clarity, and affordance; realism and authenticity; feedback mechanism; competition and points system; and complexity and challenge. Our needs assessment revealed that root cause analysis, failure mode and effects analysis, multi-incident analysis, and safety competency domains on safety, risk, and quality improvement should be considered for gamification in pharmacy education. UX elements involving various forms of player-game or player-player interactivity may explain gamification's potential in promoting learner engagement. We also identified needs for

knowledge reinforcement in the skill-based areas of applying incident analysis tools in practice, an important skill for health profession students and healthcare practitioners.

Key Learnings for CME/CPD Practice

Gamification can be an effective education strategy in both undergraduate education and in CME/CPD programs. Our study provides insights on the foundational UX elements needed in the design of engaging and needs-targeted serious games in health profession education.

Poster Title

The SMART Pharmacist Podcast: Medication Safety Learning Anywhere Anytime

Study Team
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Institution: University of Toronto

Purpose/Problem Statement/Scope of Inquiry

The recent engagement of pharmacy regulatory authorities across Canada in medication incident reporting and shared learning has demonstrated a national interest to take steps to prevent errors and patient harm. Medication safety learning through podcast will provide pharmacy professionals with a dynamic and engaging educational resource that can be accessible anywhere anytime. The objective of the SMART Pharmacist Podcast was to create a virtual resource for healthcare practitioners to learn about contemporary topics in medication safety.

Approach(es)/Research Method(s)/Educational Design

We developed six educational podcast episodes on different patient/medication safety-related topics, from the aftermath of an incident, medication incidents associated with students, to compounding errors, and drug-drug interactions in older adults. A professional tone, along with a short duration of 15 minutes per podcast episode was maintained to optimize audience engagement. All episodes contained specific learning objectives and take-away learning points. The podcast content was supported with medication incident examples that have been anonymously reported to a national medication safety organization in Canada. We released the episodes on SoundCloud and iTunes. Based on Kirkpatrick's four-level training evaluation, we designed and administered a 12-item online questionnaire to obtain feedback from listeners. We asked for their perceived knowledge, skills, and anticipated practice changes after listening to the podcast episodes.

Evaluation/Outcomes/Discussion

A total of 13 responses were collected within a month of dissemination of the online questionnaire. Respondents practiced in Ontario, Nova Scotia, Saskatchewan, and New Brunswick in Canada. Accessibility, information accuracy/validity, relevance of information to pharmacy or clinical practice, and scope/coverage of information of podcast were very positive. Respondents perceived the podcast episodes to contain information that has an impact on pharmacy and healthcare practices and that the medication safety recommendations presented

are feasible and effective. The SMART Pharmacist Podcast https://soundcloud.com/user-987300055) is an accessible educational resource that can be utilized by any healthcare professionals who wish to learn more about effective and feasible (**S**pecific, **M**easurable, **A**ttainable, **R**elevant and **T**ime-based) medication safety prevention strategies.

Key Learnings for CME/CPD Practice

The SMART Pharmacist Podcast will serve as an easy-to-access CME/CPD resource to support healthcare professionals in advancing safe medication practices.

Poster Title

Podcast on Quality Improvement and Leadership for Early Career Healthcare Professionals

Study Team

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Institution: University of Toronto

Purpose/Problem Statement/Scope of Inquiry

Podcasts have grown rapidly as a platform for providing engaging and entertaining educational content to healthcare professionals and health profession learners. They can be considered as a resource to complement traditional didactic-based CME/CPD on quality improvement and leadership. The objective of the Leading with Quality Podcast was to create a virtual resource for early career healthcare practitioners to learn about quality improvement (QI), medication safety, leadership, and business management, etc.

Approach(es)/Research Method(s)/Educational Design

We developed seven podcast episodes where seven guest speakers, ranging from faculty members to clinical directors, shared their QI and leadership experiences in higher education, hospital administration, pharmaceutical industry, provincial regulatory authority, and experiential learning. An interview format, along with an average duration of 30 minutes per podcast episode, was maintained to optimize audience engagement. The podcast content primarily included real-life examples and lived experiences from the presenters. We released the episodes on SoundCloud and created a playlist on Spotify. Based on Kirkpatrick's four-level training evaluation, we designed and administered a 10-item online questionnaire to obtain feedback from listeners. We asked for their perceived value and relevance of the content and knowledge gain in QI and leadership after listening to the seven-episode podcast pilot series.

Evaluation/Outcomes/Discussion

A total of 20 responses were collected within a month of dissemination of the online questionnaire. Respondents perceived the podcast episodes to be valuable and relevant and that they improved their knowledge about leadership and QI. They would listen to more episodes and recommend existing episodes to other healthcare professionals and learners. A

episodes and recommend existing episodes to other healthcare professionals and learners. A few respondents mentioned that concepts and jargon should be explained at the beginning of the episode to improve clarity, and that some episodes might benefit from dividing into two sessions to allow for more elaboration on the subject matter. The [Leading with Quality Podcast](https://spotify.link/O7Sq9OtCayb) is an accessible educational resource that can be utilized by any healthcare professionals who wish to learn more about QI and leadership.

Key Learnings for CME/CPD Practice

The Leading with Quality Podcast will serve as a self-directed and easy-to-access CME/CPD resource to support early career healthcare professionals in learning about QI and lived experiences from healthcare leaders.

Poster Title

The Dartmouth Scholarship Enhancement in Academic Medicine (SEAM) Awards: Igniting health professionals' engagement and professional development through Investment in academic

Study Team

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Institution: Dartmouth-Hitchcock Health and Geisel School of Medicine at Dartmouth

Purpose/ Problem Statement/Scope of Inquiry

Assessment of the outcomes, impact, effectiveness, sustainability, transportability, and accountability of the SEAM Awards Program in the Department of Medicine (DOM) at Dartmouth-Health and Geisel School of Medicine at Dartmouth, 2019-2022

Complexity Theory (Frye and Hemmer, 2012) Context, Input, Process, Product (CIPP) Evaluation Model (Stufflebeam,1983)

Approach(es)/Research Method(s)/Educational Design

Mixed Methods: Quantitative descriptive statistics (survey of recipients) Qualitative interviews and focus group analysis (recipients, mentors, section chiefs) Qualitative document analysis (2019 AAMC StandPoint Survey Report; 2019 DOM Section Chiefs Survey)

Evaluations/Outcomes

Based on department chair's and strategists' intent for academic investment, SEAM Award Program benefits and impacts to:1. recipients, e.g., career achievement /satisfaction, institutional engagement, academic professional development, and promotion; 2. department, e.g., faculty scholarship (publications, presentations, extramural funding), academic and clinical collaborations, attention to department areas of interest; and, 3. institutions, e.g., imitation by other departments, reputation. Based on results/findings we will also report challenges, limitations, and recommended Improvements.

Discussion

Since its launch in academic year 2018-19 in response to results from Dartmouth's 2019 AAMC StandPoint Faculty Engagement Survey for Health Professionals Report and 2019 DOM Section Chiefs' Survey, the DOM's SEAM Award Program has provided 39 grants with $1,167,280 in departmental academic donor funds to 51 inter-professional faculty to ignite academic dreams, improve engagement, and enhance professional development.

Key Learnings for CME/CPD Practice

Leaders, decision-makers, and stakeholders at medical schools (deans, chairs, and promotion/development/communication directors), Academic Medical Centers/Systems (board members, senior officers), and the AAMC (researchers, CFAS) need strategies to "enhance faculty engagement", "improve work environment and culture" (AAMC StandPoint Report, 2019) and invest in CPD for faculty educators in medicine, nursing, and related professions. The focused use of departmental academic funds to encourage scholarship and provide uplift by igniting and sponsoring academic dreams can deliver meaningful results.

Thursday, March 16, Afternoon Plenary Session: Advancing the Value of CPD: Aligning CPD with Systems of Healthcare for Greater Systems of Impact

Speakers: Suzan Schneeweiss MD, Celine Monette, Todd Dorman MD, and Janine Shapiro MD

Reported by: Sophie Soklaridis, PhD

In this interesting session, the speakers outlined how CPD is the cornerstone for value creation in the healthcare system. However, showing the value of CPD is not without its challenges. A case must be made for why we should invest in CME/CPD. *And thus the question becomes, can the value of CPD be measured and quantified in a way that makes a convincing case for investing in CPD?*

The speakers described how our context is shifting quickly towards the knowledge age. We have entered an era where artificial intelligence can process information for humans and turn it into knowledge. And in some cases, even help make clinical decisions. In the knowledge era we need knowledge resources to remain competitive. To remain competitive we need to think about how we increase our intellectual capital. The three main components of intellectual capital are human, relational and organizational. Human capital refers to the skills/competences within an organizations workforce. Relational capital refers to partners, stakeholders, patients and their families. Organizational/structural capital refers to the information systems, databases, policies, intellectual property and culture that exists within an organization.

The speakers asked us to consider the following: *In the knowledge age, what is the possible role for CPD?* CPD can play an important role for increasing human capital; it invests in knowledge and training, with the ultimate goal of improving the care delivered to patients. A CPD office could be a key player by understanding the roles of other players (government and agencies, public health institutes, licensing authorities, academic and research schools, CPD

professional societies, clients and patient organizations). CPD provides a mechanism to think about cohesiveness of key stakeholders in healthcare. Through nurturing relationships, implementing interventions and measuring key outcomes CPD initiatives can support system change. As key players, they create connections, strategic planning, build processes, and measure return on value.

So what do we mean by value? We explored the concept of value through two case studies. One examined the notion of accountability. Those of us in CPD feel like we need to justify our work. We have a responsibility to society. And this responsibility goes beyond financial reporting. We often justify our value through quantification (i.e. budget, financial report). However, there is also value in the process. This is where we need to align with the needs of our learners, patients, healthcare systems and society. For this kind of value, we need creativity and connection. To implement a connect strategy, each of us must define who we are, create or integrate in a value in chain, PDSA, manage the asset portfolio, measure and report. Let's take a look at each case study in more detail.

Case Study 1: How do I make the case for CME and CPD?

Our speakers suggested making the case for value every five years. CME/CPD is an asset, tactical lever to accomplish a mission, and is a force toward quality improvement. We need to demonstrate there is a value for faculty (i.e. learning, promotions) and improvement in clinical outcomes as a result of engaging in CPD/CME.

Case Study 2: How do we take care of faculty?

Our CPD mission is implementing educational activities that build and sustain faculty vitality and advance the professional development of our faculty and academic missions of teaching research clinical care and community health. It is of utmost importance that CPD offices are a source of support for all professional development needs along the lifespan of an individual's career. Some initiatives could include leadership development, wellness, and research mentorship. These initiatives can be offered in a variety of ways. The pandemic has forced an evolution of CPD from in-person to diverse modalities (in-person, hybrid, hyflex, online). Capturing the value of these initiatives through metrics will be essential for CPDs continued growth . Some examples include:

- Participation rates
- Participants satisfaction
- Changes in competence
- Changes in performance
- Learner/patient outcomes

The answer to "why CPD" is simple. Faculty and clinicians are critical assets to our healthcare institutions. If we don't have the faculty, how are we supposed to train our next generation? CPD can be an important component to an individual's career development. When faculty engage in CPD initiatives, they remain engaged, which in turn can enhance professional satisfaction and help faculty achieve their potential. CPD can also increase academic productivity. And all these value outcomes help to facilitate recruitment, advancement and retention of our next leaders in CPD.

Friday, March 17, Plenary Session: Structuring Partnerships with Patients in CPD: How to Harness the Power of Patient Knowledge to Lead Systems Change

Panelists: Sophie Soklaridis, PhD, Laura Williams, MSW, Terrell Smith, Holly Harris, Lynn Ferguson, Christy Keegan

Reported by: *Vjeko Hlede, PhD, DVM and Holly Harris*

"An actively engaged patient and family are the most underutilized members of the healthcare team" is a powerful statement coined by Dr. Jim Jirjis. This panel, in an engaging discussion, builds on this idea by exploring how to meaningfully partner with patients' and better combine lived expertise of patients and the learned expertise of healthcare professionals. In this summary, we will highlight some of the key learnings from this panel.

Story of change. The panelists highlighted their personal experiences leveraging their lived expertise to lead systems change. They highlighted barriers and facilitators that they have navigated to influence the systems that impact them most. They discussed the importance of embedding the patient/family voice in the development, actualization and evaluation of priorities and initiatives that impact patients' lives.

Power sharing matters. Panelists explained that a clear vision, commitment to power sharing, honesty, and transparency are essential in creating the conditions for true meaningful partnerships between those with learned and lived expertise.

To improve its capacity to address complex, evolving challenges of patient-centered healthcare in a system that is affected by strong cultural, social, economic, and political powers, the Vanderbilt University Medical Center adopted a strategic framework with 3 strategic directions:

- Design with patients and families
- Make diversity and inclusion intentional
- Discover, learn, and share

The strategic framework was selected over the traditional strategic plan approach because it is agile and empowers all stakeholders to act strategically. Instead of pre-defined strategic goals and strategies – that may get outdated even before they are approved, the strategic framework provides a few fundamental guiding principles. The guiding principles enable all stakeholders to create and improve strategies whenever and wherever they are needed. It is an adaptive planning tool that helps us respond to changes in a complex context. In this case, it helps us tackle the complexity of patient engagement and associated system change. [HH1] [SS2]

Working equitably in hierarchical systems is difficult work but it is work worth doing. It involves critical reflection, willingness of those in positions of power to "pass the mic", and an ongoing commitment to equity and inclusion. System transformation doesn't happen overnight

but we can move in the right direction by challenging assumptions. For example, we can challenge the assumption that engaging patients in CPD requires cumbersome unidirectional capacity building whereby patients must be 'brought up to speed'. When we challenge this assumption, and also better prepare those working with and learning from patients, we set the stage for rich multidirectional learning and amongst all stakeholders.

Perspectives are important. Patient engagement removes the need to make assumptions, enhances innovation, supports creativity, and allows us to learn from diversity - participants convincingly explained. Patient experience and clinician experience can help us bridge the gap between the stressed and "on fire" healthcare system we have and the well-performing healthcare system we need. Therefore, we should invest in *epistemic equity.* That means seeing patients with lived expertise and learned expertise as equally legitimate and valuable sources of knowledge. In other words, we should learn from each other and increase our capacity to be productively disruptive.

The panel dedicated 30 min for reflection and engaging question-and-answer discussion with participants. This was an exceptional panel, emotionally and intellectually moving, and one that our participants are not likely to easily forget. Click the link to listen to panelists relate their experiences as patients struggling to engage with the healthcare system.

Panelist Presentation: Link: https://youtu.be/Y2NtJnUsHOI

INSPIRING AND
IGNITING
THE CPD IMAGINATION

PRESIDENTIAL RECOGNITION FOR THE IDEA REPORT
Edeline Mitton, MEd
Director of CME
SUNY Downstate Medical Center
DOWNSTATE HEALTH SCIENCES UNIVERSITY

" I learned new innovative strategies for inter-professional and team-based education. Unique concepts of inclusiveness, diversity, equity & inclusion. Also, important ways to utilize technology to enhance learning and teaching more effectively. "

" I appreciated the opportunity to have social interaction and learn in person from colleagues. In addition, I learned about multichannel delivery-liked the focus on 'system.' "

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