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EMPIRICAL REPORT

“It’s Complicated”: Using Education to Bridge Essential Care Between Hospital and Community for Complex Patients with HIV

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Abstract

Objective For the most complex patients, like those with HIV and mental illness, integrated care occurs across diverse community and hospital contexts. There is a need for cross-discipline and cross-context educational opportunities for diverse providers to learn integrated care skillsets in real practice settings. The authors developed a Continuing Professional Development (CPD) experience for frontline case workers to be embedded in a hospital-based HIV psychiatry clinic that aims to enhance collaborative skills across hospital and community settings, called the Mental Health Clinical Fellowship.

Methods Through qualitative pre- and post-interviews with 16 participants from October 2020 to October 2021, the authors explored patient, physician, clinician, resident learner, and the Mental Health Clinical Fellow’s learning experiences and the impact on patient care.

Results Preliminary findings elucidate some common challenges providers experience in providing care to this complex population, including facing uncertainty of diagnosis and management, and not having enough time or resources to navigate this uncertainty. The opportunity to work and learn across disciplines through the fellowship reduced challenges, and also facilitated adaptive expertise development.

Conclusions Cross-context and cross-discipline education opportunities facilitate perspective-sharing and enhanced ability to develop adaptive expertise in caring for complex populations. There is also promise for improving care and decreasing fragmentation because of the educational experience.

Keywords Complexity · HIV/AIDS · Mental health · Integrated care

Complex patients have two or more chronic conditions, including mental illness, social vulnerability, or functional impairment, which interfere with achieving desired health outcomes [1–4]. Patients with medical, psychiatric, and psychosocial complexity often require care that is distributed across community- and hospital-based settings. This care is challenging to access and navigate, and is often experienced as fragmented [5–8]. The medical system is not designed to address patients’ increasing complexity [2, 3, 9–11], and traditional medical education pathways do not prepare physicians to care for highly complex patients [9, 12–14].

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One evidence-based solution is integrated care [2, 13–17]. For example, collaborative care in primary care settings, or the Assertive Community Treatment team model for patients with severe and persistent mental illness, are formalized collaborations that adjust access to case management, social services, psychiatric, and primary care to specific complex populations’ needs [17–21]. For some specialized medical populations, including the HIV sector, informal collaborations across diverse community and hospital resources are necessary to meet patients’ needs. Though effective, collaborative care models are resource-intensive, and there are few opportunities for physicians and other care providers, especially community workers, to receive Continuing Professional Development (CPD) to enhance collaborative care skills.

Integration of care between community- and hospital-based specialists requires skills that include communicating with team members who have little overlap in training and

practice in different contexts. Community workers witness their clients' struggle to access necessary care, and may find it challenging to recognize, triage, and communicate medical or psychiatric concerns. Physicians may recognize the impact of social determinants of health but feel unable to meet the needs of patients with multiple comorbidities, while working in a system that does not account for the time this requires [1, 22, 23].

Recognizing the need for CPD of an integrated care skillset for frontline case workers and hospital-based physicians, we developed a one-year clinical secondment for a community AIDS Service Organization (ASO) case worker within a hospital-based interdisciplinary HIV Psychiatry clinic (the Mental Health Clinical Fellowship, hereafter "the fellowship"). This educational experience aimed to teach basic psychiatric approaches to frontline community workers, build knowledge about community-based resources for hospital clinicians, and improve integrated care practices between hospital and community to better meet the needs of complex patients with HIV, mental illness, and other markers of psychosocial complexity. To our knowledge, this is the only educational experience for frontline case workers to be embedded in a hospital context.

Through qualitative interviews, we explored the experiences of patients, physicians, clinicians, residents, and the fellow regarding this cross-disciplinary and cross-context education.

Methods

Context

This research took place in the Clinic for HIV-related Concerns in the Department of Psychiatry at Sinai Health, Toronto, Canada, an urban teaching hospital. The clinic offers psychiatric assessment, psychotherapy, and psychopharmacologic management. Clinic staff supervise medical students, residents, and trainees from other disciplines. The clinic sees HIV+ patients with diverse cultural and racial backgrounds, refugees, new immigrants, and diverse gender and sexual identities, most with significant experiences of trauma.

Intervention

The fellowship is a one-year secondment opportunity for a frontline mental health worker or case manager employed at an AIDS Service Organization (ASO). The fellow remains an employee of the ASO while participating in the fellowship and returns to the ASO afterwards. The fellow maintains one day per week at their ASO throughout the fellowship term to facilitate knowledge translation and continuity; however, fellowship funding ensures that the ASO can back-fill the role.

Fellows require a degree in a clinical discipline and good standing in a relevant regulatory college, as well as a commitment to frontline work in the community with individuals with HIV and mental illness. Candidates for the fellowship have diverse training backgrounds, and so the learning objectives are co-designed and tailored to a fellow's past experience, expertise, and goals. In general, the fellow learns about psychiatric management while working as part of the clinic team providing care to patients, including observation of and participation in psychiatric assessments and follow-up care. They have opportunities to develop skills in psychotherapy modalities through direct supervision, learn about hospital-based psychiatric resources and how community clients access them, and engage in reflective practice regarding challenges in providing mental health care for complex populations. Common topics for learning include the mental status exam and risk assessment, hospital requirements for documentation, and how to contribute to clinical assessment as part of a multidisciplinary team. The fellow also acts as a community knowledge facilitator, sharing expertise about community services and contexts that enhance care for people with HIV, substance use disorders, and mental illness. The fellow assists with patient engagement, including identifying and collaborating with clinic staff to decrease barriers to accessing care in the hospital setting experienced by patients. The fellowship aims to bridge silos between community and hospital, by creating opportunities for perspective and skills-sharing through cross-context, cross-discipline collaboration. In addition to regular supervision with different clinic staff (all experienced teachers and educators), the fellow participates in weekly departmental Grand Rounds, clinic case conference, and other educational offerings through the hospital and university. Fellows are provided with regular formative and qualitative feedback during weekly meetings.

Participants

Participants in the study include (a) clinicians working at the clinic (six psychiatrists, one occupational therapist, all with prior teaching and education experience, as well as experience working in multidisciplinary settings); (b) the fellow; (c) senior residents taking HIV psychiatry electives; and (d) patients of the clinic who worked with the fellow. The clinic's most complex patients were identified to work with the fellow. Patients all had (1) HIV; (2) a DSM5 diagnosis of mood, anxiety, trauma-related, or psychotic disorder; and (3) one or more of substance use disorder (active use or in remission); lifetime trauma or adverse childhood experiences; and/or a social, economic, cultural, and

interpersonal context deemed to complicate assessment or treatment.

Data Collection

The Mount Sinai Hospital Research Ethics Board approved this study. All participants gave written informed consent or verbal informed consent for the semi-structured interviews. Data collection occurred during the fellowship (October 2020–October 2021). An experienced qualitative researcher (SG) conducted the interviews. All clinicians and trainees were interviewed before and after the fellowship program. Clinicians and residents were asked about providing mental health care to people with HIV and mental illness, working with other care providers, learning and/or teaching in the clinic context, and their involvement with the fellowship. The fellow was asked about their role in the clinic and what they learned during their fellowship. Patients were interviewed once, several months into their work with the fellow. They were asked about the care they received in the clinic, from the fellow, and prior experiences of care. All interviews were recorded and professionally transcribed. Data analysis and data collection were concurrent, which allowed emergent themes to inform ongoing data collection.

Data Analysis

Thematic analysis of transcripts was conducted by DC and SG. Themes were discussed with RM and MM. Qualitative research occurs in context and is influenced by perspective. DC is an educator and Associate Program Director of the Psychiatry Residency Program at the University of Toronto. SG is a qualitative researcher and the research coordinator for this project, with expertise in thematic analysis. RM is the head of research for Psychiatry at Sinai Health, with expertise in adult attachment and medically complex patients. MM is a senior scientist at The Wilson Centre, with expertise in qualitative research and adaptive expertise. With a constant comparative approach, new data was iteratively compared with previously collected and analyzed data, informing the emergent thematic structure. Employing a constructivist analytical framework, the data from the interviews were iteratively coded by generating open codes. Using NVivo qualitative data analysis software (version 12, QSR International Pty Ltd., Victoria, Australia), these codes were grouped into categories and sub-categories, which captured the identified themes through an inductive and deductive approach [24]. Team meetings to analyze data and develop a framework for coding occurred throughout 2021. An audit trail was maintained throughout the coding process. An analytical framework was developed iteratively.

Results

Sixteen people participated in the study. Six psychiatrists, one occupational therapist, two residents, and one fellow completed pre- and post-interviews. Six patients, including new and pre-existing patients at the clinic, were interviewed. Twenty-six interviews ranged from 45 to 90 minutes each.

Cross-disciplinary approaches to managing medical complexity, and the importance of perspective-sharing as part of collaborations across tertiary care and community settings, were prominent themes in our data analysis.

Relieving the Burden of Care

Health care providers described caring for medically, psychiatrically, and psychosocially complex patients. They reported that clinic patients with HIV and mental illness have significant early childhood sexual, physical, and emotional trauma, and other adverse life events (e.g., pursuit of refugee status in a new country, experiences of compound stigma and prejudice related to HIV status, race, or sexual identity), in addition to medical and psychiatric illness.

As one psychiatrist explained,

> There's a lot of complexity in the HIV clinic, a lot of personality issues, a lot of drug use … and a lot of … trauma. These are the three main themes that come up over and over.

Providers described feeling overwhelmed at times by these numerous problems and their interaction with patients' medical and psychiatric concerns. Providers noted specific challenges in providing care to complex populations, including tolerating uncertainty in diagnosis or management, not having enough time to navigate uncertainty, nor time and expertise to navigate the psychosocial difficulties and resources required.

Providers spoke about the need for time to engage with more complex patients:

> some of our most complex patients, especially the ones who we struggle to engage, … do benefit from more time, as a way of building trust, as a way of helping clarify ambiguity in their diagnoses, as a way of addressing multiple needs.

Another psychiatrist reflected:

> I have found that … taking on these complex patients, I'm doing a lot more than the average…. I'm so busy that I don't have time to do the little pieces that would be helpful to the patient.… I think we have to limit the number of patients we take on because we're doing so

> much outside the scope of our practice. Psychiatrists are experts in meds and psychotherapy perhaps, but not case management or understanding what the resources are in the community.

This situation in which complex patients have needs that exceed resources has led to frustration and low perceived self-efficacy among providers. A psychiatrist spoke about their experience of burnout and how it relates to wider systemic issues:

> The resources have been reduced over time … I've had a sense of increased pressure to provide care to people with more complexity.… The number of referrals for our clinic went up and it coincided with increasing numbers of people dealing with … triple diagnosis, and meth in particular. And it … was too much. So, too much trauma and too much bad outcome, again, particularly with … meth. And it just became very difficult for me to do that work…. It's burnout.

Though some patients in the clinic might have access to outside case managers or social workers, providers spoke about how the fellow could elucidate, extend, or add nuance to aspects of care specific to psychiatric management and trust-building. Providers in the clinic described that the fellow mitigated their lack of time by meeting with patients more frequently to clarify ambiguity, built trust using a community-based approach, and through resource-sharing, followed up on needs that arose in appointments but were not addressed. One provider describes:

> it felt like it lifted the burden somewhat, and it was … a relief that this aspect of their care was being addressed by somebody else, and that [the fellow] was able to see people weekly sometimes…. [They] probably did have more flexibility around that than I would have, and I think that did improve the care that was provided

Providers felt the fellow could pick up on different aspects of care that might have gone unnoticed, or unattended to due to time constraint, and expressed satisfaction with the role from the perspective of their own workflow. Importantly, patients also benefited. Several patients spoke positively about having a team of providers helping them and appreciated the different roles and expertise each provider had. One patient said:

> I think the best care that I've had has been [here], [where] there's a team environment. So, when I see both a psychiatrist and a mental health clinician and they speak to each other and collaborate on a case, or collaborate with other professionals, I think that that has been the best approach to care that I've had…. How I relate to each of the two professionals is a bit different. I see my psychiatrist … he's not just for medication, I see him more as the official diagnosis person. I see him as the sort that if I need to talk about past events or traumas or things that have shaped who I am, that's the person to go to. But the mental health clinician, I see more as, not a social worker, somebody that is helping me on more practical day-to-day things, such as planning around substance use and managing that area.

Perspective-sharing and improved communication between providers led patients to feel more secure about their care. They described improvement in their care goals. Overall, patients experienced care as integrated and referred to the team as a unit. Their trust in the team helped resolve care fragmentation. One provider reflected,

> [With this] team-based approach, the patient doesn't … see it as disjointed. They see it as cohesive and coordinated care, kind of evidenced by the fact that they would reach out to each of us interchangeably.

Normalizing Uncertainty as Part of Expert Work

Providers described uncertainty arising when formulating a care plan for complex patients, and at times discomfort with this uncertainty. They indicated that complex patients often present with ambiguous symptoms, numerous concerns simultaneously, or difficulty communicating their experience for various reasons, which reduced clarity. When approaching complex patients, one provider stated that,

> tolerance of uncertainty is pretty important. Tolerance of not only uncertainty, but tolerance of lack of progress … is probably just as important. There is also tolerance of there not being an answer …

A provider spoke to how the community perspective shared by the fellow helped navigate uncertainty when approaching complex patient care:

> I think it has been helpful in having some validation around the challenges, and also getting another perspective … on how to do some things in terms of working with the patients.

The fellow spoke about integrating new psychiatric knowledge into her approach to clients, and learning to rely on a team:

> I think what I've learned is that I had to adapt.... I learned to trust in a team, and I learned to trust myself more.

The fellowship enhanced community collaboration in a clinic that already had strong informal ties to ASOs. Through learning from each other's expertise and perspectives on care, and by supporting each other in a team, the uncertainty and helplessness that providers felt in the face of complex patient care was reduced. This improved self-efficacy and helped providers feel able to positively impact patients in the clinic.

> …it helps all providers stay more organized and feel like they're able to hold all of the multiple needs for patients at once.... it can be quite isolating caring for an acutely mentally ill patient who has … risks, and you worry about them.... So, being able to collaborate and work as a team allows for more than one person to hold that in a way that doesn't distribute responsibility. It actually allows you to hone your practice and make sure that you're doing right by patients.

This kind of integrated care also created adaptive expertise, or the ability to balance the use of previously acquired knowledge while creating new knowledge when encountering complexity and novelty [25, 26]. As one provider expressed,

> teamwork can help with all aspects of what time provides. It can allow for more windows into a patient assessment to help clarify diagnostic ambiguity. It can help … address more of the multiple needs that patients have… the community expertise was hugely valuable, as is the psychiatric expertise.

Integrating Perspectives and Shared Learning

In addition to concrete support in providing care to patients, sharing of perspectives facilitated further learning. One of the providers thought back on how the fellow prompted an integration of perspectives and shared learning:

> I think that [the fellow] is great and … gave a [new] perspective and freshness.... "Okay, this work can be done, people can make change, that it's hard but people could do it." … I think those are benefits. Anytime you add someone new to a team you're going to get …[a] different perspective.

This learning was bi-directional, reflected by providers describing learning "on the job" while caring for patients together. The fellow reflects,

> [P]roviding care, I feel like I'm learning. I'm learning about myself. I'm learning about the patient. I'm learning about how this situation with the patient may translate into a bigger systemic issue.... [T]he learning and the clinical part of it, it completely happened at the same time.

The fellow spoke about skills acquired, including identifying signs and symptoms of exacerbated psychiatric illness, risk assessments, hospital documentation, and identifying basic indications for common psychiatric medications. She reflected,

> I learned more about the … medications in specific disorders.... I was learning much more about … antidepressants, antipsychotic medication, all these things, in the patients that we were caring [for] together with a psychiatrist. That to me was priceless because I [am not] exposed to that kind of knowledge in any other community setting.... I've learned a lot from everyone, literally from every one of my team, colleagues…

A psychiatrist spoke to learning and working collaboratively with the fellow and adapting to patient needs:

> I have thought of the kind of work that [the fellow] did where it … focused on addictions treatment, and motivational interviewing. .... And then, the treatment I provide [was for] …other mental health aspects.... [I]t's having different kinds of people working with us so we can, perhaps, better align ourselves with the [patient's] wishes or comfort levels.... [H]aving a variety of services that can line up, rather than telling patients, this is all we have.

Pondering shared learning and the development of expertise, a psychiatrist said:

> I think being able to focus on your expertise but also expand your scope by learning from the other person... I don't think that we need to expect our community clinicians to be able to provide psychiatric management. I think it's more so that being able to … say, "Hey, I wondered if you can see this patient, something doesn't seem right but I'm not sure what it is." And the same for me, I don't think that I know all the resources that my patients need and could benefit from. I learned that this year, I don't know them. And now I know that they exist and that there are people who have expertise in that who can connect them.

Learning About Anti-oppression, Structural Marginalization, and Stigma

Incorporating a community worker in the clinic also illuminated issues of oppression and racism. Patients who experienced stigma described the fellow helping overcome this barrier. One patient reflected:

> I think [they] understand 100% my problems and things I'm going through. I think that [they] really tr[y] to keep things open and honest and encourage me to be honest without any judgement. Which is not something that I've always felt as easy to do … with every other clinician. There are other clinicians where I would talk about substance use and would probably make myself look a little bit better than I actually was because I felt guilty about it, or I felt stigma, or I was embarrassed or ashamed. I think [the fellow] has done a wonderful job of letting me know that her perceptions of me are not based upon amounts of substance use or anything else that's going on.

Providers learned from the fellows' facility with discussing institutional racism. One provider reflects on a case they sought guidance from the fellow about:

> I assessed [a patient] … shortly after George Floyd died, and he said, maybe, I should be seeing a Black psychiatrist, but he was prepared to give me a go. I think I was able to do a fairly good psychiatric assessment ... We did talk about race and his experience with racism and immigration.

As a clinic that has been providing care since the beginning of the HIV/AIDs epidemic and has emphasized tackling stigma, providers reflected on the fellows' unique community perspective. The fellow was not a hospital employee, and perhaps as a result, spoke freely about the impact of the hospital context as a barrier to patients' access to care. The fellow challenged clinic providers to attend to structural racism experienced by clinic patients, arguing that silence reinforces oppression. These discussions prompted providers to learn more about racial oppression through reading, case discussions, and conferences about anti-racist treatment approaches. One provider said:

> I'm curious about my biases and how they show up and trying to mitigate any negative impact from that. I think that has been broadening for me, in terms of, you know, racism or sexism, sexual orientation. Just kind of constantly … reflecting on how this stuff shows up.

Discussion

Patients who are medically, psychiatrically, and psychosocially complex require intensive care, often across diverse hospital- and community-based settings. This care often includes frequent appointments and a need for coordination. Few care models integrate community-based resources and community provider perspectives, and there is a notable lack of education available to support providers with collaborative care skillsets in informal settings. We developed the fellowship to fill the need for CPD opportunities that teach a cross-discipline, cross-context integrative care skillset.

Our study reinforces that collaborative care models work for patients; the fellowship improved perceived care quality through improved communication between community and hospital providers, integration of clinical and community perspectives in care, and shared learning to fill practice gaps for both clinical and community providers. Participants reported that the care model mitigated fragmentation and improved access to psychiatric care for patients, while helping mitigate burnout for providers.

Our results also suggest that cross-discipline, cross-context collaborations that emphasize bi-directional learning between the community and hospital help clinicians hone adaptive expert skills [13, 25, 26]. Through regular exposure to different perspectives on care and authentic engagement with these perspectives, providers experienced improved confidence in their ability to manage patient issues, to navigate ambiguity, and tolerate uncertainty. As an example, the fellows' community perspective would often illuminate structural barriers to mental health, which were essential to the success of the psychiatric management plan proposed. In medical education, there is growing recognition that unidimensional CanMEDS roles [27] and Accreditation Council for Graduate Medical Education core competencies inadequately capture the skills necessary for physicians to care for complex populations — i.e., the ability to work in collaboration with patients and community care providers [17], while applying nuanced medical expertise to navigate uncertain diagnoses. Supporting the development of adaptive expertise through a program like this facilitates impact beyond the clinic, out to the HIV care community.

This fellowship elevated essential conversations acknowledging systemic barriers to care for patients and made moves towards dismantling those barriers. We observed an important relationship between transformative learning experiences (for providers, residents, and the fellow) as a stepping stone towards adaptive expertise development. Transformative learning describes the ability to recognize one's own patterns of thinking, how that informs one's perspective and point of view [27–31]. The experience of a "disorienting dilemma" coupled with critical reflection

and dialogue can lead to change in one's "frame of reference" [28]. This fellowship, perhaps more than other learning experiences, explicitly emphasizes a "perspective exchange," and elucidated the important role for mentalizing "frame of reference" in developing expertise in caring for complex patients [28]. Authentic engagement by participants as both teacher and learner with one another facilitated these benefits.

Our study has limitations. First, these are preliminary results based on one year of the program, with one candidate in the role of fellow, and in a single context. In addition, this pilot occurred during the first year of the COVID-19 pandemic, and the related strains impacting the medical learning environment also impacted the fellowship (transition to virtual care, impact of disconnection on learning). Further, the fellow's experience of hospital-based work was undoubtedly impacted by pandemic protocol. The findings described in this manuscript occurred despite these added challenges to the fellowship and care provision. As such, further study is necessary, with diverse candidates in the role of fellow and in diverse clinical contexts. Second, as an additional role in the clinic, it is challenging to distinguish the perceived benefit of the unique integrative and educational aspects of the role, from the benefits of simply adding another care provider. Third, this study involved only 16 participants, a small population sample. Fourth, our study included a small number of patient participants. As described, the patient population of our clinic experience significant barriers to health care access, and some patients were unable to participate, especially in the context of the COVID-19 pandemic where barriers to in-person care were heightened and virtual care was not always an acceptable option.

Though preliminary, we argue that cross-discipline, cross-context learning that involves staff from hospital and community directly working together on patient care can support adaptive expertise development and transformative learning, affecting how providers formulate psychiatric management plans that integrate a psychiatric and community-based lens. We are piloting a second year of the fellowship, to further explore the resonance of these early findings.

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Declarations

Disclosures On behalf of all authors, the corresponding author states that there is no conflict of interest.

References

1. Webster F, Rice K, Bhattacharyya O, Katz J, Oosenbrug E, Upshur R. The mismeasurement of complexity: provider narratives of patients with complex needs in primary care settings. Int J Equity Health. 2019;18(1):107.
2. Baird MA, Peek CJ, Gunn WB, Valeras A. Working with complexity in integrated behavioral health settings. In: Talen MR, Burke Valeras A, editors. Integrated behavioral health in primary care: evaluating the evidence, identifying the essentials [Internet]. New York, NY: Springer; 2013 [cited 2021 Sep 9]. p. 299–324. Available from: https://doi.org/10.1007/978-1-4614-6889-9_14.
3. Maunder RG, Wiesenfeld L, Lawson A, Hunter JJ. The relationship between childhood adversity and other aspects of clinical complexity in psychiatric outpatients. J Interpers Violence. 2021;36(19–20):9060–76.
4. Loeb DF, Bayliss EA, Candrian C, deGruy FV, Binswanger IA. Primary care providers' experiences caring for complex patients in primary care: a qualitative study. BMC Fam Pract. 2016;17(1):34.
5. Koester KA, Morewitz M, Pearson C, Weeks J, Packard R, Estes M, Tulsky J, Kang-Dufour M_S, Myers JJ. Patient navigation facilitates medical and social services engagement among HIV-infected individuals leaving jail and returning to the community. AIDS Patient Care STDs. 2014;28(2):82–90.
6. Powers C, Comfort M, Lopez AM, Kral AH, Murdoch O, Lorvick J. Addressing structural barriers to HIV care among triply diagnosed adults: Project Bridge Oakland. Health Soc Work. 2017;42(2):e53–61.
7. Noest S, Ludt S, Klingenberg A, Glassen K, Heiss F, Ose D, Rochon J, Bozorgmehr K, Wensing M, Szecsenyi J. Involving patients in detecting quality gaps in a fragmented healthcare system: development of a questionnaire for Patients' Experiences Across Health Care Sectors (PEACS). Int J Qual Health Care. 2014;26(3):240–9.
8. Strike C, Rhodes AE, Bergmans Y, Links P. Fragmented pathways to care: the experiences of suicidal men. Crisis. 2006;27(1):31–8.
9. Webster F, Rice K, Dainty KN, Zwarenstein M, Durant S, Kuper A. Failure to cope: the hidden curriculum of emergency department wait times and the implications for clinical training. Acad Med. 2015;90(1):56–62.
10. Choi BY, DiNitto DM, Marti CN, Choi NG. Impact of mental health and substance use disorders on emergency department visit outcomes for HIV patients. West J Emerg Med. 2016;17(2):153–64.
11. Corazza GR, Formagnana P, Lenti MV. Bringing complexity into clinical practice: an internistic approach. Eur J Intern Med. 2019;61:9–14.
12. Sockalingam S, Chaudhary ZK, Barnett R, Lazor J, Mylopoulos M. Developing a framework of integrated competencies for adaptive expertise in integrated physical and mental health care. Teach Learn Med. 2020;32(2):159–67.
13. Sockalingam S, Mulsant BH, Mylopoulos M. Beyond integrated care competencies: the imperative for adaptive expertise. Gen Hosp Psychiatry. 2016;43:30–1.
14. Sunderji N, Waddell A, Gupta M, Soklaridis S, Steinberg R. An expert consensus on core competencies in integrated care for psychiatrists. Gen Hosp Psychiatry. 2016;41:45–52.

15. Priester MA, Browne T, Iachini A, Clone S, DeHart D, Seay KD. Treatment access barriers and disparities among individuals with co-occurring mental health and substance use disorders: an integrative literature review. J Subst Abuse Treat. 2016;61:47–59.
16. Ciechanowski PS, Russo JE, Katon WJ, Von Korff M, Simon GE, Lin EHB, et al. The association of patient relationship style and outcomes in collaborative care treatment for depression in patients with diabetes. Med Care. 2006;44(3):283–91.
17. Youssef A, Wiljer D, Mylopoulos M, Maunder R, Sockalingam S. "Caring About Me": a pilot framework to understand patient-centered care experience in integrated care - a qualitative study. BMJ Open. 2020;10(7):e034970.
18. White LM, McGrew JH, Salyers MP, Firmin RL. Assertive community treatment for parents with serious mental illnesses: a comparison of "parent-sensitive" assertive community treatment teams versus other teams. Psychiatr Rehabil J. 2014;37(3):251–60.
19. Verhaegh MJM, Bongers IMB, Kroon H, Garretsen HFL. Model fidelity of assertive community treatment for clients with first-episode psychosis: a target group-specific application. Community Ment Health J. 2009;45(1):12–8.
20. Phillips SD, Burns BJ, Edgar ER, Mueser KT, Linkins KW, Rosenheck RA, Drake RE, McDonel Herr EC. Moving assertive community treatment into standard practice. Psychiatr Serv Wash DC. 2001;52(6):771–9.
21. Katon WJ, Lin EHB, Von Korff M, Ciechanowski P, Ludman EJ, Young B, et al. Collaborative care for patients with depression and chronic illnesses. N Engl J Med. 2010;363(27):2611–20.
22. Ojikutu B, Holman J, Kunches L, Landers S, Perlmutter D, Ward M, Fant G, Hirschhorn L. Interdisciplinary HIV care in a changing healthcare environment in the USA. AIDS Care. 2014;26(6):731–5.
23. Lingard L, McDougall A, Levstik M, Chandok N, Spafford MM, Schryer C. Representing complexity well: a story about teamwork, with implications for how we teach collaboration. Med Educ. 2012;46(9):869–77.
24. Braun V, Clarke V. Using thematic analysis in psychology. Qual Res Psychol. 2006;3(2):77–101.
25. Mylopoulos M, Woods NN. When I say … adaptive expertise. Med Educ. 2017;51(7):685–6.
26. Mylopoulos M, Kulasegaram K, Woods NN. Developing the experts we need: fostering adaptive expertise through education. J Eval Clin Pract. 2018;24(3):674–7.
27. Frank J, Snell L, Sherbino J, editors. CanMEDS 2015 Physician Competency Framework. Ottawa: Royal College of Physicians and Surgeons of Canada; 2015.
28. Mezirow J. Understanding transformation theory. Adult Educ Q. 1994;44(4):222–32.
29. Hatlevik IKR, Hovdenak SS. Promoting students' sense of coherence in medical education using transformative learning activities. Adv Med Educ Pract. 2020;11:807–16.
30. Greenhill J, Richards JN, Mahoney S, Campbell N, Walters L. Transformative learning in medical education: context matters, a South Australian longitudinal study. J Transform Educ. 2018;16(1):58–75.
31. Agrawal S, Kalocsai C, Capponi P, Kidd S, Ringsted C, Wiljer D, Soklaridis S. "It was great to break down the walls between patient and provider": liminality in a co-produced advisory course for psychiatry residents. Adv Health Sci Educ. 2021;26(2):385–403.

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