

It is illegal to post this copyrighted PDF on any website. Collaborative Care Model Education Opportunities for Psychiatry Trainees:

A Narrative Review

Patrick A. Ho, MD, MPH^{a,b,*}; Eduardo Andres Calagua-Bedoya, MD^{a,b}; Bennis Pavisian, DO^{c,d}; Matthew Phillips, MD^{c,d}; Kevin Johns, MD^{c,d}; and Matthew Duncan, MD^{a,b}

ABSTRACT

Importance: The Collaborative Care Model (CoCM) is an evidence-based methodology meant to improve access to mental health care, especially in primary care settings. While evidence about the efficacy of CoCM is abundant, literature regarding how CoCM is taught to psychiatry trainees appears to be more limited. As psychiatrists play a key role within the CoCM framework, psychiatry trainee exposure to CoCM skills and concepts is imperative for growth of these services. As psychiatry trainees may one day practice CoCM, we aimed to examine available literature about educational opportunities in CoCM for psychiatry trainees.

Observations: While literature was indeed sparse, we identified that CoCM is taught to psychiatry trainees in the form of clinical rotations, didactics, and leadership experiences. Future opportunities are abundant to increase educational opportunities in CoCM for psychiatry trainees.

Conclusions and Relevance: Potential future studies should make use of innovative technologies (such as telehealth), should be process-oriented, and should focus more on team dynamics and opportunities for further collaboration with primary care practices within the CoCM framework.

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The Collaborative Care Model (CoCM) is an evidence-based method of psychiatric care delivery in primary care settings. ^{1,2} While CoCM has been shown to improve access to mental health care and has been found to be effective in the treatment of several mental health conditions in primary care settings, there is a paucity of literature regarding how CoCM skills are taught to psychiatry trainees who might eventually fulfill a necessary role within the framework of CoCM services. In this narrative review, we aim to examine available literature about psychiatry trainee education in CoCM to identify knowledge gaps and future opportunities for improvement, including opportunities for collaboration with primary care residency programs.

METHODS

We examined literature published in PubMed using the search terms collaborative care model, psychiatry, residency, psychiatry residency, education, teaching, and learning.

WHAT IS THE COLLABORATIVE CARE MODEL?

CoCM is a specific type of integrated care aiming to improve access to mental health treatments for patients seen in primary care settings.³ CoCM relies on a team generally consisting of a primary care provider (PCP), a nonphysician behavioral health care manager (BHCM), and a psychiatric consultant.²

How Does It Work?

The PCP functions as the cornerstone of the treatment team, leading care for patients while interfacing with both patients and the CoCM team. PCPs identify and engage patients in need of psychiatric services and can begin treatment and/or place a referral to CoCM. The BHCM then sees the patient and assists in diagnosing psychiatric conditions, provides psychoeducation or brief psychotherapeutic interventions, monitors outcomes, and facilitates communication between team members and the patient.² The psychiatric consultant is available to provide guidance with stepped-care recommendations and ad hoc modifications to treatment plans and can also suggest in-person consultations or referrals to specialized clinics if the patient is not improving.⁴

CoCM is population-focused, as patients become part of a registry that is reviewed regularly by the psychiatric consultant and the BHCM. Outcomes are tracked using behavioral health screening tools such as the Patient Health Questionnaire-9 (PHQ-9) and Generalized Anxiety Disorder-7 (GAD-7),⁴ which permit objective measurement of response to interventions and proactive adjustments when necessary.⁵ Treatment options offered are evidence-supported pharmacotherapy and/or

^aDartmouth-Hitchcock Medical Center, Lebanon, New Hampshire

^bDepartment of Psychiatry, Geisel School of Medicine at Dartmouth, Hanover, New Hampshire

^{&#}x27;The Ohio State University College of Medicine, Columbus, Ohio

^dDepartment of Psychiatry, The Ohio State University Wexner Medical Center, Columbus, Ohio

^{*}Corresponding author: Patrick A. Ho, MD, MPH, Dartmouth-Hitchcock Medical Center, 1 Medical Center Dr, Lebanon, NH 03756 (Patrick.a.ho@hitchcock.org).

It is illegal to post this copyrighted PDF on any website, psychiatry residents. In this case, psychiatry residents

Clinical Points

- Although Collaborative Care Model (CoCM) services are evidence-based and effective in treating a number of mental health conditions in various settings, not much literature is available on the education of psychiatry residents in CoCM services.
- Many opportunities exist to develop and evaluate CoCM training opportunities for psychiatry residents.
- Training psychiatry residents in CoCM could enrich the experience of training while meeting mental health care needs of those seen in outpatient primary care settings.

psychotherapeutic techniques.² Throughout the process, the patient remains the center of care, and their goals are considered when implementing treatment plans. Overall, CoCM allows the PCP to maintain clinical responsibility for management of psychiatric conditions with the assistance of the BHCM and psychiatric consultant. Concurrently, the patient becomes an active participant in their treatment plan and benefits from a multidisciplinary approach within the primary care setting.

What Does It Treat?

CoCM has been well studied in the treatment of depression and anxiety.^{1,2,6,7} It has also been used in the treatment of bipolar disorder,⁸ posttraumatic stress disorder (PTSD),⁹ substance use disorders, 10 psychosis, 11 and even more esoteric conditions such as delusional parasitosis. 12 CoCM has also been found to be effective in managing mental health disorders in patients with multiple comorbidities.¹³

In Which Settings Is It Available?

CoCM has been studied in a variety of different countries^{14–16} and validated in different medical subspecialty settings.4 In addition to adult primary care, CoCM services have been found to be effective in obstetrics and gynecology,¹⁷ gastroenterology,^{18,19} infectious disease,²⁰ pediatrics,²¹ palliative care,²² oncology,²³ pain care,²⁴ and neurology.²⁵

HOW IS IT TAUGHT?

While CoCM may no longer be considered novel, it is still an innovative care delivery mechanism that can improve access to mental health services within primary care settings. Innovations such as these rely on education of trainees for growth and dissemination, so it is important to understand available methodology by which CoCM skills are taught.

Clinical Rotation

While clinical rotations have long been the quintessential training experience for many clinical disciplines, there are few studies available about CoCM clinical rotations for psychiatry trainees. One study²⁶ described a 6-month longitudinal half-day per week clinic for third-year worked with an attending psychiatrist who they observed supervising BHCMs initially, while slowly gaining more autonomy over time and eventually leading case reviews

Other available studies described CoCM rotations in settings other than an academic medical center. Zeidler Schreiter et al²⁷ detailed a 3-month rotation for psychiatry residents designated as a community psychiatry experience. In this rotation, residents went to a federally qualified health center providing primary care in an underserved area. This clinical rotation allowed residents to participate in many integrated care experiences, including CoCM case consultations. Finally, Dobscha et al²⁸ described a 6-month half-day per week Collaborative Care Consultation Rotation (CCC) located in a Veterans Affairs (VA) health system. This rotation applied traditional CoCM principles in a VA setting as part of a larger VA initiative.²⁹ This rotation also utilized group supervision, with the ability to accommodate multiple learners simultaneously.

Telepsychiatry Experience

Especially with the advent of the COVID-19 pandemic, educational methodologies in medicine have been forced to rapidly adapt to accommodate shifting safety guidelines.30 For instance, many medical specialties had created virtual rotations using video technology.³¹ While CoCM principles might theoretically lend themselves well to being taught in a virtual setting, no such educational experience has been described in the literature. One study³² outlined the evidence for and principles of telepsychiatry as a mechanism to deliver and enhance integrated care, which could include CoCM as integrated care is a broader term encompassing CoCM and other interventions. The authors also recommended that psychiatry residents gain exposure to CoCM in telepsychiatry settings during their training, but to date no literature exists outlining any telepsychiatry CoCM educational programs for psychiatry trainees.

Didactic Learning

One model didactic curriculum has been developed that aims to teach psychiatry residents principles of collaborative care. 33 This curriculum incorporates readings and videos for trainees to complete as pre-work followed by two 60-minute modules including interactive case simulations. Residents are also trained in the use of psychometric screening tools often used in CoCM (such as the PHQ-9).

Didactic learning should be considered a key component of CoCM education. Available literature on CoCM education for psychiatry trainees mostly focuses on clinical education and experiential learning, but there is recognition of the importance of a didactic curriculum. For instance, as part of the VA CCC rotation, ²⁸ residents reviewed seminal CoCM articles and participated in a weekly journal club to discuss these concepts. Other rotations also incorporate seminars that use readings combined with clinical experiences to spark discussion.²⁶

It is illegal to post this copyrighted PDF on any website. Leadership

As trainees advance to more senior levels and improve their knowledge and clinical skills in an area such as CoCM, teaching more junior trainees can prove to be a valuable experience. Such an experience could help trainees to continue consolidating knowledge and gaining mastery over skills. Although there are few instances of such experiences for CoCM in the literature at this time, the concept of trainees acting as teachers for more junior trainees has been previously successful with psychiatry residents. 34 Additionally, as a result of one CoCM rotation, an "integrated care chief" position was created for a fourth-year resident who would be more involved in CoCM education for residents.²⁶ Such an opportunity can allow trainees to develop and cultivate leadership skills that could be used in future CoCM practice.

WHERE DO WE GO FROM HERE?

Increasing access to mental health care has chronically been a topic of consternation to which a great deal of resources have been devoted. Due to lack of access to mental health care resources, many patients necessarily obtain mental health care in primary care settings.^{35,36} CoCM has constituted an evidence-based and effective population health measure to increase access to mental health care while partnering with primary care practices. Much of the literature specific to CoCM education for psychiatry trainees has been outcome-oriented rather than process-oriented. Future studies examining CoCM training opportunities for psychiatry trainees in a process-oriented manner can help to improve opportunities for teaching psychiatry trainees to hone these skills, as they may eventually work within a CoCM framework. Continued growth and innovation in CoCM will depend on education of psychiatry trainees who can eventually make CoCM part of their practices. Development of shared metrics to evaluate the success of efforts to prepare psychiatry residents to practice in CoCM will be critical to assessing the efficacy of programs.³⁷

Although literature pertaining to CoCM education of psychiatry trainees is sparse, the available studies make it clear that future opportunities for advancement of educational methodologies are abundant. The literature demonstrates that CoCM is effective in treating numerous conditions in primary care and specialty care settings. Despite this, only a few studies have been conducted on education of psychiatric trainees in CoCM. A repository of seminal works in CoCM exists⁴ and has lent itself well for use in CoCM rotations or didactic education, but more work should be done to advance our ability to disseminate these works and teach these principles to psychiatric trainees.

Further collaboration between primary care training programs and psychiatry training programs may be necessary to enhance awareness of CoCM and increase the availability and quality of clinical training opportunities. Shared CoCM didactics for both psychiatry and primary care trainees could help familiarize these trainees with the team

interdisciplinary collaboration during clinical experiences.

It should be noted that the development of CoCM clinical experiences for psychiatry residents has faced challenges. A survey of Ohio psychiatry residency program directors³⁵ found that barriers to CoCM curricula included limited placement sites and confusion regarding the role of psychiatry residents within primary care settings. Additionally, rotation time that could be spent in CoCM experiences may be limited for psychiatry residents. A survey of 18 psychiatry residents across 5 residency programs by two authors of this article (K.J. and M.P., unpublished data, 2017) found that only 32% of residents had participated in an integrated care rotation such as CoCM. This gap in training existed despite 84% of respondents reporting that it was important to gain such experience and 78% reporting that there were CoCM clinical experiences available in their respective programs.

Elements involving telepsychiatry and leadership in CoCM are not often described but are important components of future CoCM practice. Team dynamics and interactions between team members from different disciplines are similarly important considerations. As CoCM is collaborative by nature and otherwise well-described,³⁷ it will be important to establish best practices in team dynamics to improve the efficiency and efficacy of a CoCM practice. Team dynamics should be a focus of CoCM clinical rotations, as psychiatry residents may feel that they are being used as "cheap psychiatrists" rather than a consultant if team dynamics are not well-defined. It should be noted that although one clinical rotation created and made use of a YouTube video to model a case review between a psychiatrist and behavioral care manager,²⁶ no other similar guides are described for interactions between other team members.

Although not specific to psychiatry trainees, a 2018 scoping review³⁸ examined literature pertaining to general CoCM education. CoCM training programs were examined and measured in 4 elements: program development, supportive environment, necessary resources, and clinical change leaders/agents. Although these elements were considered as a standard in CoCM education, the authors found that only one-tenth of programs contained all 4 elements. This review, considered together with the fact that integrated care (which may include CoCM) training experiences are required in Canadian psychiatry residency programs,³⁹ provides evidence that frameworks exist for scaling up specific CoCM educational opportunities for psychiatry trainees. Furthermore, standardization of these experiences should be considered to ensure a level of quality as more opportunities arise.

Overall, the lack of available literature belies the need for an increase in CoCM education programs and modalities for psychiatric trainees. Increasing these opportunities could help bolster the dissemination and implementation of CoCM more widely. Furthermore, these opportunities for residents to act as consultants in CoCM settings would enrich their education while also potentially providing another mechanism to meet training requirements.

It is illegal to post this copyrighted PDF on any website conclusion

CoCM has been well-studied to establish its efficacy in different settings and its ability to increase access to mental health care services, but there is a paucity of literature establishing how these skills are taught to psychiatric on describing and expanding the opportunities available for psychiatry trainees to learn CoCM skills and concepts. Particular attention should be applied to team dynamics within this framework and opportunities for collaboration between psychiatry and primary care training programs.

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REFERENCES

- 1. Archer J, Bower P, Gilbody S, et al. Collaborative care for depression and anxiety problems. Cochrane Database Syst Rev. 2012:10:CD006525.
- 2. Unützer J, Park M. Strategies to improve the management of depression in primary care. Prim Care. 2012;39(2):415-431.
- 3. Goodrich DE, Kilbourne AM, Nord KM, et al. Mental health collaborative care and its role in primary care settings. Curr Psychiatry Rep. 2013;15(8):383.
- 4. Huffman JC, Niazi SK, Rundell JR, et al. Essential articles on collaborative care models for the treatment of psychiatric disorders in medical settings: a publication by the Academy of Psychosomatic Medicine Research and Evidence-Based Practice Committee. Psychosomatics. 2014;55(2):109-122.
- 5. Fortney JC, Unützer J, Wrenn G, et al. A tipping point for measurement-based care. Focus Am Psychiatr Publ. 2018;16(3):341–350.
- 6. Baumeister H. Hutter N. Collaborative care for depression in medically ill patients. Curr Opin Psychiatry. 2012;25(5):405-414.
- 7. Eghaneyan BH, Sanchez K, Mitschke DB. Implementation of a collaborative care model for the treatment of depression and anxiety in a community health center: results from a qualitative case study. J Multidiscip Healthc. 2014;7:503-513.
- Kilbourne AM, Biswas K, Pirraglia PA, et al. Is the collaborative chronic care model effective for patients with bipolar disorder and co-occurring conditions? J Affect Disord. 2009;112(1-3):256-261.
- 9. Fortney JC, Pyne JM, Kimbrell TA, et al. Telemedicine-based collaborative care for posttraumatic stress disorder: a randomized clinical trial. JAMA Psychiatry. 2015:72(1):58-67.
- 10. Brackett CD, Duncan M, Wagner JF, et al. Multidisciplinary treatment of opioid use disorder in primary care using the collaborative care model. Subst Abus. 2022;43(1):240-244.
- 11. Howland M, Chang D, Ratzliff A, et al. C-L case conference: chronic psychosis managed in collaborative care. J Acad Consult Liaison Psychiatry. 2022;63(3):189-197.
- 12. Ho PA, Anstine B, Johns K. A case of delusional parasitosis treated in an outpatient setting using the collaborative care model. Prim Care Companion CNS Disord.

- 2022;24(6):22cr03318.
- 13. Katon WJ, Lin EHB, Von Korff M, et al. Collaborative care for patients with depression and chronic illnesses, N Enal J Med. 2010;363(27):2611-2620.
- 14. Ng TP, Nyunt MSZ, Feng L, et al. Collaborative care for primary care treatment of late-life depression in Singapore: randomized controlled trial. Int J Geriatr Psychiatry. 2020:35(10):1171-1180.
- 15. Rimal P, Choudhury N, Agrawal P, et al. Collaborative care model for depression in rural Nepal: a mixed-methods implementation research study. BMJ Open. 2021;11(8):e048481.
- 16. Li LW, Xue J, Conwell Y, et al. Implementing collaborative care for older people with comorbid hypertension and depression in rural China. Int Psychogeriatr. 2020:32(12):1457-1465.
- 17. Melville JL, Reed SD, Russo J, et al. Improving care for depression in obstetrics and gynecology: a randomized controlled trial. Obstet Gynecol, 2014:123(6):1237-1246.
- 18. Kanwal F, Pyne JM, Tavakoli-Tabasi S, et al. Collaborative care for depression in chronic henatitis C clinics, Psychiatr Serv. 2016;67(10):1076-1082.
- 19. Flicek CB, Sowa NA, Long MD, et al. Implementing collaborative care management of behavioral health for patients with inflammatory bowel disease. Inflamm Intest Dis. 2021;7(2):97-103.
- 20. Pyne JM, Fortney JC, Curran GM, et al. Effectiveness of collaborative care for depression in human immunodeficiency virus clinics. Arch Intern Med. 2011;171(1):23-31.
- 21. Kaye DL, Fornari V, Scharf M, et al. Description of a multi-university education and collaborative care child psychiatry access program: New York State's CAP PC. Gen Hosp Psychiatry. 2017;48:32-36.
- 22. Wozniak RJ, Shalev D, Reid MC. Adapting the collaborative care model to palliative care: establishing mental health-serious illness care integration. Palliat Support Care. 2021;19(6):642-645.
- 23. Courtnage T, Bates NE, Armstrong AA, et al. Enhancing integrated psychosocial oncology through leveraging the oncology social worker's role in collaborative care. Psychooncology. 2020;29(12):2084-2090.
- 24. Thielke S, Corson K, Dobscha SK. Collaborative care for pain results in both symptom improvement and sustained reduction of pain and depression. Gen Hosp Psychiatry. 2015;37(2):139-143.
- 25. Ehde DM, Alschuler KN, Sullivan MD, et al. Improving the quality of depression and pain care in multiple sclerosis using collaborative care: the MS-care trial protocol. Contemp Clin Trials. 2018:64:219-229.
- 26. Huang H, Forstein M, Joseph R. Developing a

- collaborative care training program in a psychiatry residency. Psychosomatics. 2017;58(3):245-249.
- 27. Zeidler Schreiter EA, Pandhi N, Fondow MD, et al. Consulting psychiatry within an integrated primary care model. J Health Care Poor Underserved. 2013;24(4):1522-1530.
- 28. Dobscha SK, Dandois M, Rynerson A, et al. Development and evaluation of a novel collaborative care rotation for psychiatry residents. Acad Psychiatry. 2022:46(4):491-494.
- 29. Rubenstein LV, Chaney EF, Ober S, et al. Using evidence-based quality improvement methods for translating depression collaborative care research into practice. Fam Syst Health. 2010;28(2):91-113.
- 30. Ho PA, Girgis C, Rustad JK, et al. Advancing medical education through innovations in teaching during the COVID-19 pandemic. Prim Care Companion CNS Disord. 2021;23(1):20nr02847.
- 31. Collier S. A geriatric psychiatry virtual rotation during covid-19. Am J Geriatr Psychiatry. 2020;28(8):891.
- 32. Adaji A, Fortney J. Telepsychiatry in integrated care settings. Focus Am Psychiatr Publ. 2017;15(3):257-263.
- 33. Huang H, Barkil-Oteo A. Teaching collaborative care in primary care settings for psychiatry residents. Psychosomatics. 2015;56(6):658-661.
- 34. Vestal HS, Sidelnik SA, Marcovitz D, et al. A novel resident-as-teacher rotation for second-year psychiatry residents. Acad Psychiatry. 2016;40(2):389-390.
- 35. Jetty A, Petterson S, Westfall JM, et al. Assessing primary care contributions to behavioral health: a cross-sectional study using medical expenditure panel survey. J Prim Care Community Health. 2021;12:21501327211023871.
- 36. Abed Faghri NM, Boisvert CM, Faghri S. Understanding the expanding role of primary care physicians (PCPs) to primary psychiatric care physicians (PPCPs): enhancing the assessment and treatment of psychiatric conditions. Ment Health Fam Med. 2010;7(1):17-25.
- 37. Reed E, Crane D, Svendsen D, et al. Behavioral health and primary care integration in Ohio's psychiatry residency training. Acad Psychiatry. 2016;40(6):880-886.
- 38. Shen N, Sockalingam S, Charow R, et al. Education programs for medical psychiatry collaborative care: a scoping review. Gen Hosp Psychiatry. 2018;55:51-59.
- 39. Sunderji N, Ion A, Huynh D, et al. Advancing integrated care through psychiatric workforce development: a systematic review of educational interventions to train psychiatrists in integrated care. Can J Psychiatry. 2018;63(8):513-525.