Development and Evaluation of a Novel Collaborative Care Rotation for Psychiatry Residents

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Collaborative, or integrated care, is described by the Agency for Healthcare Research and Quality [1] as generating patient experiences that are “a result of a team of primary care and behavioral health clinicians, working together with patients and families, using a systematic and cost-effective approach to provide patient-centered care for a defined population.” The Accreditation Council for Graduate Medical Education requires that psychiatry residents gain experience in providing psychiatric consultation in a variety of clinical settings [2]. To provide specific training in integrated care, some psychiatry residency training programs now offer outpatient consultation rotations in primary care [3, 4]. Such rotations often involve on-site consultation and, to a smaller extent, liaison. However, many residents lack exposure to additional core aspects of the collaborative care model [5], including population-based and measurement-based care (typically involving the use of registries), provision of decision-support to team members, and use of virtual modalities including electronic consults (e-consults). Over the past decade, the Veterans Health Administration (VHA) has implemented a national collaborative care program, Translating Initiatives for Depression into Effective Solutions (TIDES), as well as the use of e-consults for various clinical specialties. Together VHA’s TIDES and e-consult programs provide unique opportunities for training. The purpose of this manuscript is to describe the Collaborative Care Consultation Rotation (CCC) and present findings from an initial evaluation of CCC.

Collaborative Care Consultation Rotation Objectives and Structure

The CCC rotation was created to teach Oregon Health & Science University (OHSU) Postgraduate Year—three psychiatry residents core principles of collaborative care, and to augment more typical outpatient psychiatry consultation experiences. Program objectives include deepening residents’ understanding of assessment and treatment of commonly comorbid mental and physical disorders treated in primary care and allowing them to gain exposure to strategies for how mental health clinicians can better support patients and staff in primary care settings. Residents participate in the rotation for one half-day per week for 6 months, during which they are each assigned to one of two primary care sites within VA Portland Health Care System, a large VA Medical Center in Oregon and Southern Washington. The residents complete a variety of tasks including (1) working collaboratively with TIDES nurse care managers to provide decision support to primary care clinicians and their teams; (2) responding to primary care clinicians’ e-consult requests; (3) participating in CCC psychiatry resident group supervision sessions; and (4) participating in a weekly journal club in which key articles in integrated care are reviewed and discussed.

TIDES referrals are typically generated by primary care clinicians (which include physicians, nurse practitioners, and physician assistants) when they initiate or change a psychiatric medication. Nurse care managers typically work with patients enrolled in TIDES for 6 months, contacting patients periodically to administer brief psychiatric measures for anxiety (Generalized Anxiety Disorder-7), alcohol use disorder (Alcohol Use Disorders Identification Test-Concise), post-traumatic stress disorder (PTSD Checklist-5), and depression (Patient Health Questionnaire-9), as indicated; provide psychoeducation about medications; and offer additional support focused on adherence to treatment and self-care. VA Portland Health Care System TIDES nurse care managers

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use Behavioral Health Lab software [6], which facilitates tracking of patient outcomes including measure scores over time. During the CCC rotation, residents meet with nurse care managers weekly for 30 to 60 min by telephone to review the Behavioral Health Lab registry, with a focus on patients who are not responding to treatment. The authors and nurse care manager team developed a template guide for residents and nurse care managers to help structure these discussions (available from authors upon request). When treatment changes are recommended, the resident typically adds the nurse care manager's note and alerts the primary care clinician and/or primary care clinician's nurse to the recommendation. For some TIDES cases, the resident follows up with more extended medical record review or a telephone call with the patient to gather more information, then writes a separate note.

Residents also review and respond to e-consult requests from primary care clinicians. Completing e-consults involves in-depth chart review, in some cases communicating with referring primary care clinicians, and, in more select cases, conducting one-time in-person, video, or telephonic consultations with patients to gather more information in order to provide personalized recommendations. Residents alert primary care clinicians to completed e-consults which include their treatment recommendations. Some patients with more complex or ongoing treatment needs are referred to specialty mental health services at this point. CCC attendings review and sign off on each resident e-consult note. We have developed a set of e-consult template examples which are shared with residents at the beginning of the rotation. Early on, residents are given considerable feedback on note quality. Attending psychiatrists also provide weekly supervision to the residents in a group format, typically toward the end of the half-day. During group supervision, individual cases from the registry and/or e-consults are discussed, with particular emphasis placed on patients with more complex or unresolved issues. Lastly, residents participate in weekly journal club discussions of papers regarding key issues in integrated and population-based care and to discuss special topics of interest that arise in group supervision (curriculum information available from authors on request; see also Ratzliff and Basinski [7]). In the context of the coronavirus pandemic, we are using Microsoft® Teams as a platform to host supervision sessions; thus, all components of the rotation are currently occurring virtually.

Preliminary Evaluation of the CCC Rotation

This project was designated a quality improvement project by VA Portland Health Care System. Electronic medical records of patients who were referred for e-consults were reviewed to be able to describe patient demographics, psychiatric diagnosis, consult questions from primary care clinicians, residents'

recommendations, whether recommendations were implemented by primary care clinicians, and how long it took for recommendations to be implemented. Initial codes reflecting the reason for consult and recommendation categories were created by authors SD and EB after review of the first 50 patients. The authors asked the TIDES nurse care managers for formal feedback via email every 6 months, in addition to asking them to informally evaluate their interactions with individual residents early on in the rotation. We also reviewed de-identified resident evaluations of their CCC experiences, which the authors obtained from the OHSU Psychiatry Residency Training Office. Analyses are descriptive.

During the first 12 months of CCC, nine residents worked with 10 different nurse care managers and completed 96 e-consults overall. An average of nine days ($sd=5.9$) elapsed between submission of e-consult requests and resolution. The average patient age was 58 ($sd=15.2$), and 86% of patients were male. This demographic profile aligns with that of other veterans who live in Oregon [8]. Psychiatric diagnoses that were addressed included depression (49% of patients), posttraumatic stress disorder (24%), anxiety (10%), substance use disorder (5%), and insomnia (5%). Most e-consult questions focused on lack of response to current psychiatric medications (41%) and guidance-seeking around initiating psychiatric treatment (23%) (Table 1). The most common treatment recommendation was a medication change (82%). Consult recommendations were followed fully by primary care clinicians 73% of the time and partially 14% of the time. Referrals to TIDES or other mental health clinicians were initiated following e-consults in 57% of the cases. When recommendations were followed, the majority (57%) were implemented immediately by primary care clinicians.

Feedback obtained from TIDES nurse care managers indicates overall high satisfaction with the program. Eleven of 12 resident evaluations completed, dating from when CCC began in July 2018 through June 2020, rated the program/teaching as very good to excellent. Ongoing challenges noted by the residents, faculty, and nurse care managers include the limitations of not being able to develop closer working relationships

Table 1 Most common consult questions ($n=96$ e-consult requests)

	<i>n</i>	%
Lack of response to current psychiatric medications	39	41
Initiate psychiatric treatment	22	23
Medication side effect	11	11
Insomnia, sleep, nightmares	9	9
Seasonal affective disorder lamp	7	7
Transferring psychiatric medications to VA	6	6
Medication discontinuation	6	6
Benzodiazepine management	4	4

between residents and individual primary care clinicians; variation in primary care teams' understanding and use of e-consults and TIDES; and turnover among TIDES nurse care managers.

This initial evaluation suggests that CCC holds promise as a model for training residents in key aspects of integrated and population-based care. Residents gain exposure to several key aspects of collaborative care, in particular, measurement-based care, provision of decision-support to team members, and e-consultation, activities which are not typically included in clinical rotations. Knowledge and skills in these topic areas are increasingly important as mental health care is increasingly provided in non-mental health specialty settings. Additionally, the residents gain exposure to working virtually with other members of the treatment team—an advantage for working across larger, more dispersed (e.g., rural) areas or, currently, in the context of the coronavirus pandemic.

This approach also shows promise as a means of delivering clinical care. Patients often have to wait substantial periods of time for initial in-person specialty mental health consults [9]. In CCC, patients waited an average of 9 days. Consult recommendations were usually implemented, and when implemented, the majority were implemented immediately. We note that each of the care components, as well as supervision, can be delivered virtually; this has been especially useful in the context of the current pandemic.

Clearly, more information regarding the satisfaction of clinicians, nurses, and patients is needed. In general, e-consults have been associated with improved access to specialty care and high provider and patient satisfaction [9, 10], including in psychiatry [11, 12]. However, prior research has also documented challenges to psychiatric e-consultation, including the complexity of many presentations and of consult questions, and patient desire for in-person interactions [12]. Indeed, Hensel et al. call for specific education of primary care clinicians regarding how and when to utilize e-consults [12]. We also believe that 9 days is too long to wait for e-consult resolution. Delays during the first year of CCC sometimes occurred when residents were not available due to vacation or when a large number of e-consult requests came in during a single week; we currently ask attendings to participate in addressing e-consults so that the wait is no longer than one week.

When we began the program, we were concerned that some nurse care managers might not appreciate residents providing guidance around medications due to residents' limited amount of outpatient experience; however, the response has been very positive overall. The nurses feel supported and find resident input to be very helpful. In group supervision sessions, while we review specific cases discussed with the nurse care managers, we also spend considerable time discussing how to most efficiently and effectively work within a multidisciplinary team. CCC provides opportunities to acquire additional education in interprofessional communication, in particular,

in cultural humility, valuing diversity, and conflict resolution [13].

CCC is in its early stages, exists at only one training site, and is designed to fit specifically within the VHA care system. Our findings may therefore not generalize to other groups of primary care teams, patients, or other residency programs. The small amount of data we have obtained thus far preclude sophisticated analysis. Nonetheless, this initial evaluation suggests that CCC holds promise as a model for training residents in key aspects of integrated care—that it is a feasible and acceptable approach. There is a need to collect more quantitative and qualitative data over time including primary care clinician, TIDES nurse, and resident perceptions and feedback. It would also be helpful to gain information about patient perceptions and outcomes related to the use of these modalities, and residents' acquisition of knowledge and skills.

Declarations

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

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