Collaborative Care

A Solution for Increasing Access to Psychosocial Care in Cancer Programs and Practices
Globally, mental illnesses, such as depression, anxiety, psychosis, and substance abuse, present a significant burden of disease. Individuals with cancer, in particular, experience higher rates of depression and anxiety compared with the general population, which can have adverse impacts on cancer treatment and mortality in addition to increased risk of suicide. Recognizing the critical importance of psychosocial care, it is now widely acknowledged as an essential component of population health care in the field of oncology. Notably, psychosocial distress screening has been integrated into the accreditation standards for the American College of Surgeons Commission on Cancer. While cancer programs and practices have become increasingly effective at identifying patients who require psychosocial support, they often lack the necessary systematic infrastructure to effectively provide comprehensive treatment once it is identified.

Access to Mental Health Care Can Be Challenging
The current landscape of mental health treatment reveals significant gaps in access and availability. Only 4 in 10 patients with mental health disorders receive any form of treatment, and when they do, they typically receive treatment from their primary care provider, while a smaller proportion of patients receive care from psychiatrists. Disturbingly, the supply of psychiatrists is projected to decrease by 20% between 2017 and 2030, despite a growing demand for mental health services. This workforce shortage is compounded by the fact that many psychiatrists often do not participate in insurance plans due to low reimbursement rates. Notably, while only 3% of primary care and 8% of specialty medical care practitioners are out-of-network providers, a staggering 24% of mental health prescribers are out-of-network providers. As a result, community outpatient psychiatry clinics inundated with referrals have waitlists that can extend to more than 6 months. In cancer programs and practices, limited staff with expertise in the psychosocial care of individuals with cancer face overwhelming numbers of distressed patients. The current state of psychiatry practice is fundamentally broken and needs urgent attention to address these systemic challenges.

The Answer We Need
A solution is available. In 2017, the American Psychosocial Oncology Society (APOS) established a multidisciplinary task force to assess different models of psychosocial care that could effectively assist the large number of patients identified through distress screening programs. After careful evaluation, the task force determined that the Collaborative Care Model is the approach with the strongest evidence base that is capable of efficiently providing care for a large volume of distressed patients. The model was initially developed more than 30 years ago with the aim of enhancing access to mental health services in primary care settings. Through nearly 100 randomized controlled trials conducted across diverse medical settings, the Collaborative Care Model has consistently demonstrated its effectiveness in treating depression, anxiety, PTSD (post-traumatic stress disorder), substance abuse, and other psychosocial conditions. Further, the model has proven to enhance patient outcomes, increase satisfaction for both patients and health care providers, and contribute to cost savings with a remarkable 6:1 return on investment. Therefore, the Collaborative Care Model successfully achieves the Triple Aim of health care reform by improving patient experiences, enhancing population health, and reducing health care expenses.

The traditional referral-based model still predominates in most cancer programs and practices today. However, as evidence for the Collaborative Care Model in oncology continues to emerge and more cancer programs and practices embrace its implementation, some of the barriers, such as limited awareness outside primary care and psychiatry and perceived complexity in adaptation, are expected to diminish.
Table 1. Randomized Controlled Trials of the Collaborative Care Model in Oncology

<table>
<thead>
<tr>
<th>STUDY</th>
<th>SETTING</th>
<th>POPULATION</th>
<th>INTERVENTION</th>
<th>OUTCOMES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strong et al (2008)</strong>&lt;sup&gt;25&lt;/sup&gt;</td>
<td>Cancer center clinic, United Kingdom</td>
<td>Adults diagnosed 6-45 months ago with cancer, and with major depression (n = 200)</td>
<td>Collaborative Care Model delivered by oncology nurse and consulting psychiatrist</td>
<td>Collaborative Care Model more effective for depression, anxiety, fatigue, and quality of life at 3 and 6 months and cost-effective over 12 months</td>
</tr>
<tr>
<td><strong>Ell et al (2008, 2011)</strong>&lt;sup&gt;26,35&lt;/sup&gt;</td>
<td>Public safety-net medical center oncology clinic, US</td>
<td>Low-income, predominantly female Hispanic patients with cancer, &gt;90 days after cancer diagnosis, with major depression, dysthmic disorder, or both (n = 472)</td>
<td>Collaborative Care Model delivered by a bilingual social worker and consulting psychiatrist, with patient navigation assistance</td>
<td>Collaborative Care Model more effective at 12 and 24 months for depression, as well as better social/family, emotional, and functional well-being; physical and mental functioning; and quality of life</td>
</tr>
<tr>
<td><strong>Fann et al (2009)</strong>&lt;sup&gt;27&lt;/sup&gt;</td>
<td>18 primary care clinics, US</td>
<td>60 years and older with cancer diagnosis and major depression, dysthmic disorder, or both (n = 215)</td>
<td>Collaborative Care Model delivered by depression care manager (nurse or clinical psychologist), supervised by psychiatrist and primary care provider</td>
<td>Collaborative Care Model more effective at 6, 12, and 18 months for depression. Functioning, quality of life, fatigue, and suicidal ideation also improved</td>
</tr>
<tr>
<td><strong>Kroenke et al (2010)</strong>&lt;sup&gt;28&lt;/sup&gt;</td>
<td>16 community-based oncology practices, urban and rural, US</td>
<td>Adults with cancer and depression, cancer-related pain, or both (n = 405)</td>
<td>Collaborative Care Model delivered by a nurse-physician specialist team with automated home-based symptom monitoring by interactive telephone voice recordings or web-based surveys</td>
<td>Collaborative Care Model more effective at 12 months for depression, pain severity, and interference</td>
</tr>
<tr>
<td><strong>Sharpe et al (2014)</strong>&lt;sup&gt;29&lt;/sup&gt;</td>
<td>3 cancer centers and associated clinics, Scotland</td>
<td>Adults with a cancer prognosis of &gt;1 year predicted survival and major depression for at least 4 weeks (n = 500)</td>
<td>Collaborative Care Model delivered by a nurse under supervision of a psychiatrist in coordination with patient’s oncology team and primary care physician</td>
<td>Collaborative Care Model more effective at 6 months in depression. Collaborative Care Model group also reporting less pain, anxiety, and fatigue and improved physical, social and role functioning, and quality of life.</td>
</tr>
<tr>
<td><strong>Walker et al (2014)</strong>&lt;sup&gt;30&lt;/sup&gt;</td>
<td>3 cancer centers, Scotland</td>
<td>Adults with primary lung cancer with a cancer prognosis of &gt;3 months predicted survival and major depression for at least 4 weeks (n = 142)</td>
<td>Collaborative Care Model delivered by a nurse under supervision of a psychiatrist in coordination with patient’s primary care physician</td>
<td>Collaborative Care Model more effective at reducing depression severity, as well as anxiety, role functioning, quality of life, and perceived quality of care</td>
</tr>
</tbody>
</table>

<sup>Adapted from Breitbart et al. Psycho-Oncology, 4th ed; 2021.</sup>
(Continued from page 32)

supporting the Collaborative Care Model in oncology,\textsuperscript{25-30} demonstrating the model’s efficacy in treating depression among diverse oncology patient populations,\textsuperscript{11} including low-income and racial and ethnic minority patient populations. Moreover, the model has shown cost-effectiveness\textsuperscript{32,33} and significant improvements in various psychosocial domains, including fatigue, pain, and overall quality of life.

**What is Collaborative Care?**

The term “collaborative care” likely evokes visions of psychiatrists sharing offices and clinical notes with oncology providers to foster increased collaboration. While co-location can promote a sense of camaraderie, it is not the defining aspect of the Collaborative Care Model, nor is it sufficient for achieving coordinated care. Rather, the model is a population-based delivery model that emphasizes a coordinated and integrated approach to patient care. Figure 1, below, illustrates a comparison of how patients and providers interact in a usual or traditional care model and in the Collaborative Care Model.

In a traditional referral-based or co-located consultation model, patients often receive treatment from multiple providers who work independently, resulting in fragmented and disconnected care. Individuals with mental health needs may be referred to psychiatry services and placed on lengthy waiting lists that fail to prioritize patient acuity and clinical needs. Additionally, there may be limited feedback if the patient fails to follow up or show improvement. In contrast, the Collaborative Care Model employs a team-based approach, involving health care professionals, such as oncology providers, psychiatrists, and care managers, who collaborate to provide efficient and comprehensive care.\textsuperscript{16} Effective communication, shared decision-making, measurement-based stepped care, and ongoing collaboration are key features of this model. Patients are assessed and managed based on their acuity and clinical needs, while those who do not show improvement or fail to follow up receive appropriate attention and tracking, which may include referral to psychiatry or psychology.

Key components that distinguish collaborative care typically include:\textsuperscript{16}

- **Care manager.** Typically a social worker, the care manager supports medical providers in addressing the mental health needs of their patients while working closely with a consulting psychiatrist. Care managers play a crucial role in providing psychoeducation, delivering evidence-based brief behavioral health interventions, and facilitating effective communication among team members and patients, which may include communicating psychiatric medication recommendations and monitoring adherence.

- **Population-based care.** The collaborative care team assumes responsibility for the well-being and health outcomes of a defined group of patients. This approach involves using a registry to track and monitor the progress of these patients, ensuring comprehensive and targeted care.

- **Measurement-based care.**\textsuperscript{18} Collaborative care employs measurement-based care, where validated patient-reported outcome measures are used to guide shared clinical decision-making. By collecting and analyzing data, this approach ensures that timely

---

**Figure 1. Comparison of Traditional Care vs Collaborative Care Model**

A. Traditional Care Model

- **Oncology Providers**
- **Psychiatrist**
- **Patients**

B. Collaborative Care Model

- **Oncology Providers**
- **Care Manager (eg Social worker)**
- **Consulting Psychiatrist**
- **Patients**
treatment-to-target is delivered, based on the individual patient’s needs and progress.

**Regular case reviews.** Regular (eg, weekly) meetings between the care manager and consulting psychiatrist are held to review patients’ treatment plans and monitor their progress, focusing attention on patients with high distress or who are not responding to treatment. During these meetings, the psychiatrist provides treatment recommendations, including whether to adjust the treatment. If necessary, referrals to psychiatry or other specialists can be made.

In 2023, the American Society of Clinical Oncology updated its guidelines for managing anxiety and depression in patients with cancer, and it now recommends the implementation of a stepped care approach. The Collaborative Care Model incorporates the stepped care model to effectively address the varying levels of patient needs and optimize resource utilization. Considering the limited availability of psychiatrists both nationally and in cancer programs and practices, the stepped care approach allows for the effective extension of these resources and enhanced accessibility for the population in need. Figure 2, below, illustrates how the Collaborative Care Model makes use of the stepped care approach, enabling a flexible and personalized treatment approach that aligns with each patient’s specific needs. By initiating with less intensive interventions and escalating the level of care as necessary, while also stepping down when appropriate improvements are observed, this model maximizes resource efficiency, optimizes patient outcomes, and enhances the overall delivery of health care services.

To illustrate how collaborative care with a stepped care approach is implemented, let’s consider an example. A patient may enter the Collaborative Care Model through referral by oncology providers or a distress screening. A care manager with mental health expertise, most commonly a clinical social worker, conducts a comprehensive evaluation that includes standardized validated instruments, such as the Patient Health Questionnaire-9 (PHQ-9) and General Anxiety Disorder-7 (GAD-7). Based on the patient’s presentation, the care manager may set goals together with the patient and initiate brief evidence-based behavioral interventions, such as cognitive-behavioral therapy, behavioral activation, or motivational interviewing. During weekly case review meetings, the care manager discusses the patient with a consulting psychiatrist (in person or remotely). If the patient is experiencing major depression, for example, the psychiatrist may suggest additional behavioral strategies and make a recommendation that is communicated by the care manager for the oncology team to prescribe a first-line antidepressant medication, such as a selective serotonin reuptake inhibitor. The care manager continues to provide

Figure 2. Stepped Care Model

---

**Severe or treatment-related mental illness.** Referral to psychiatry and/or psychology consultation.

**Moderate mental illness.** Oncology care team providers are supported by collaborative care team, backed up by case reviews with psychiatrist, with systematic treatment to target.

**Mild mental illness.** Oncology care team provides first-line treatment interventions; supported by evidence-based behavioral health interventions from care managers.

**At-risk groups.** Provide resources and early intervention with evidence-based behavioral health interventions from care managers.

**Whole population.** Distress screening.

*Adapted from A stepped care approach to mental health. Murray Primary Health Network; 2023.*
behavioral treatment and to systematically monitor treatment response with the standardized validated instruments. Patients who do not improve receive timely adjustments in the treatment plan, with potential referral to the psychiatrist and other support services, if needed. This approach optimizes resource utilization, allowing psychiatrists to focus on complex cases while providing consultation for others. By employing a population health approach that includes screening, tracking, stepped care, and treatment to target, the Collaborative Care Model enhances overall health outcomes, reduces access barriers, and promotes equitable health care delivery for a broader population.

Implementation Examples
To provide an overview of how the Collaborative Care Model has been implemented in real-world settings, let’s look at cancer programs that have adapted this approach partially or fully. By examining these models, we can gain insights into the practical aspects and unique features of the model’s implementation. This will shed light on the diverse ways in which institutions have tailored their approaches to suit their specific patient populations, health care systems, and organizational structures.

Fred Hutchinson Cancer Center (Fred Hutch), Seattle
More than a decade ago, Fred Hutch was the first cancer program to transition mental health services to the Collaborative Care Model. Psychiatry and clinical oncology social work joined together to create an integrated psychosocial oncology program that incorporated the fundamental principles of the model:

- Patients are screened and followed with the PHQ-9 and GAD-7 (and other validated instruments, as appropriate for an individual patient).
- Oncology social workers function as the care managers, conducting assessments, delivering behavioral interventions, monitoring clinical progress, and collaborating with the oncology team and consulting psychiatrists, as well as psychologists, advanced practice providers, and patient navigators on the psychosocial team.
- The consulting psychiatrists provide treatment recommendations and individual consults when needed.

This model has expanded to include a dual diagnosis clinic and community-based satellites, including rural sites with the addition of telerehabilitation.

Dana-Farber Cancer Institute, Boston
This cancer program consists of 2 main campuses and 6 community-based satellite sites in Massachusetts and New Hampshire. To address the challenges of staffing the community-based satellite sites with psychiatrists, the implementation of the Collaborative Care Model used the existing workforce, incorporating a consulting psychiatrist from the main campus and care managers (social workers) from the satellite sites as integral members of the Collaborative Care Model team. To further optimize limited resources at the satellite locations, the model is expanded to include a consulting psychologist, as well as a palliative care physician from the main campus who partners with a palliative care nurse practitioner or physician assistant from the satellite site to address pain and the management of complex symptoms. This model was feasible because these supportive services are all part of the Department of Psychosocial Oncology and Palliative Care at Dana-Farber. The multidisciplinary approach enhances the capacity to provide comprehensive psychosocial and palliative care, leveraging the expertise of different professionals across campuses and satellite sites to better meet the needs of patients throughout the network.

Looking Forward
In March 2023, the Association of Community Cancer Centers (ACCC)—with its partners, the Association of Oncology Social Work and APOS, and with support from BeiGene—held a multistakeholder summit meeting, “A Call to Action: Delivery of Psychosocial Care in Oncology.” The meeting’s primary objective was to bring together key leaders from advocacy organizations, academic medical centers, and community cancer programs to establish priorities and develop strategies aimed at overcoming barriers to access and delivering psychosocial care in oncology. Among the top priorities identified during this meeting was the promotion of the Collaborative Care Model. Recognizing this model as the solution to many barriers of patients accessing psychosocial care, ACCC and its leadership are committed to developing resources on how this model can be implemented in the community cancer setting.

Carrie C. Wu, MD, is an instructor of psychiatry at Harvard Medical School and the clinical director of collaborative care and satellites at Dana-Farber Cancer Institute, both in Boston, Massachusetts. Jesse R. Fann, MD, MPH, is medical director of the Department of Psychosocial Oncology at Fred Hutchinson Cancer Center and a professor in the Department of Psychiatry and Behavioral Sciences at the University of Washington School of Medicine, both in Seattle. Krista Nelson, MSW, LCSW, OSW-C, is the manager of oncology social work at Providence Cancer Institute in Portland, Oregon, and a past president of the Association of Community Cancer Centers. Abby R. Rosenberg, MD, MS, MA, is the chief of pediatric palliative care at Dana-Farber Cancer Institute, director of palliative care at Boston Children’s Hospital, and associate professor of pediatrics at Harvard Medical School, all in Boston, Massachusetts; her research focuses on psychosocial programs that improve mental health and quality of life for youth with serious illnesses like cancer. William F. Pirl, MD, MPH, is the vice chair for psychosocial oncology in the Department of Psychosocial Oncology and Palliative Care at the Dana-Farber Cancer Institute and professor of psychiatry at Harvard Medical School, both in Boston, Massachusetts.

References


