



AIMS CENTER



UNIVERSITY of WASHINGTON
PSYCHIATRY & BEHAVIORAL SCIENCES



Pediatric Collaborative Care Implementation Guide

March 2023



Acknowledgements

This guide was developed by AIMS Center faculty and staff who reviewed current literature and compiled their experiences coaching, training, and interviewing clinics working in Collaborative Care programs for children and adolescents. In addition, several individuals offered subject matter expertise and consultation on the development of this guide.

AIMS Center Contributors

- Sara Barker, MPH, Associate Director for Implementation
- Anna Hink, MSW, LICSW, Clinical Trainer
- John Kern, MD, Clinical Professor
- Steven Perez, Program Coordinator
- Juliann Salisbury, MSW, LSWAA, Materials Development & Training Manager

Collaborators

- Sheryl A. Morelli, MD, FAAP, Chief Medical Officer, Seattle Children's Care Network & Clinical Professor, Department of Pediatrics, University of Washington
- Larry Wissow, MD, MPH, Professor and Vice Chair for Child and Adolescent Psychiatry, University of Washington & Director, Child and Adolescent Psychiatry and Behavioral Medicine, Seattle Children's

Reviewers

- Rachel R Ballard, MD, Associate Professor of Psychiatry and Behavioral Sciences (Child and Adolescent Psychiatry) and Pediatrics, Lurie Children's Hospital, Feinberg School of Medicine, Northwestern University
- Patricia Beagle, LSWAIC, Behavioral Health Specialist, Skagit Pediatrics
- William P French, MD, DFAACAP, Associate Professor, University of Washington & Associate Training Program Director for Outpatient Psychiatry, Assistant Outpatient Medical Director, Seattle Children's
- Sophie King, MHA, Program Manager, Seattle Children's Care Network
- Rick Levine, MD, Pediatrician, Skagit Pediatrics
- Wendy Pringle, LMHC, Sr. Director of Pediatric Healthcare Integration, HopeSparks Family Services
- Joe Le Roy, LICSW, President & CEO of HopeSparks Family Services
- Kara Smith, LSWAIC, Pediatrics Integrated Behavioral Health Specialist Skagit Pediatrics
- Kristina Taylor, LMFT, Collaborative Care Program Clinical Lead, Optum
- Mary Ann Woodruff, MD FAAP, Pediatrics Northwest

Special Thanks

As part of developing this guide, we interviewed clinics nationwide with pediatric Collaborative Care programs. These clinics ranged from small rural practices to practices part of a larger urban health system. We are especially grateful for their time and sharing of expertise and experience.

Additional gratitude to HealthierHere, the Accountable Community of Health for King County, Washington, for funding the development of this guide.

About

This guide is for multi-disciplinary, primary care teams seeking to improve care access and behavioral health outcomes for children and adolescents through implementing Collaborative Care. Centered around the core principles of Collaborative Care, this guide serves as a roadmap to healthcare leaders, managers, clinicians, and staff in primary care as they:

- start a new Collaborative Care program, or
- expand an existing integrated care or Collaborative Care program to pediatrics, and/or
- partner with community and behavioral health agencies.

Common Abbreviations

AACAP = American Academy of Child and Adolescent Psychiatry

AAP = American Academy of Pediatrics

APA = American Psychiatric Association

BHCM = Behavioral Health Care Manager

BHA = Behavioral Health Agency

CoCM = Collaborative Care

EHR = Electronic Health Record

PCP = Primary Care Provider

SCR = Systematic Caseload Review

A Note On Terminology

Throughout this guide, there are several terms that we may use interchangeably, as follows:

- Behavioral Health and Mental Health
- Integrated Care and Integrated Behavioral Healthcare
- Patient and their family, patient and their caregiver, and patient and their parent

Recommended Citation

This guide may be freely used for non-commercial purposes with acknowledgment of the source.

AIMS Center. (2023). *Pediatric Collaborative Care Implementation Guide*. University of Washington Department of Psychiatry and Behavioral Sciences, Advancing Integrated Mental Health Solutions (AIMS) Center. <https://aims.uw.edu/>

Table of Contents

CONTEXT	5
INCREASING PREVALENCE OF BEHAVIORAL HEALTH CONDITIONS IN PEDIATRICS	5
IMPACTS OF COVID-19	5
CHALLENGES WITH TREATMENT ACCESS	5
NEED FOR CULTURALLY RELEVANT BEHAVIORAL HEALTH SERVICES	7
INTEGRATED CARE AS ONE SOLUTION	8
INTEGRATED CARE APPROACHES	8
WHY COLLABORATIVE CARE?	8
PRINCIPLES OF COLLABORATIVE CARE	8
ESSENTIAL ELEMENTS	9
EVIDENCE FOR PEDIATRIC CoCM	10
PATIENT-CENTERED TEAM	11
TEAM ROLES	12
ROLES UNIQUE TO PEDIATRIC CoCM	15
CoCM TEAM PROCESSES	16
POPULATION-BASED	19
EVIDENCE-BASED BEHAVIORAL HEALTH SCREENING FOR PEDIATRICS	19
EARLY ENGAGEMENT	21
USING A REGISTRY	22
CASELOAD SIZE	23
MEASUREMENT-BASED TREATMENT TO TARGET	23
IN PRACTICE	24
SYMPTOM MONITORING	24
SYSTEMATIC CASELOAD REVIEW	26
BARRIERS TO POPULATION-BASED AND MEASUREMENT-BASED CARE	28
EVIDENCE-BASED TREATMENTS	30
SOURCES OF EVIDENCE	30
BRIEF BEHAVIORAL INTERVENTIONS	30
PSYCHOPHARMACOLOGY	31
ACCOUNTABLE	32
CARE DELIVERY LEVEL	32
ORGANIZATIONAL LEVEL	32
SUSTAINMENT	32
CONCLUSION	39
REFERENCES	40
APPENDIX 1: ADDITIONAL RESOURCES	42
APPENDIX 2: EVIDENCE-BASED BEHAVIORAL INTERVENTIONS	42
APPENDIX 3: SUPPORT FOR COMMONLY ENCOUNTERED BEHAVIOR CONCERNS	46
APPENDIX 4: EVIDENCE-BASED PSYCHOPHARMACOLOGY	47

Context

Existing behavioral health treatment programs do not have the capacity to address growing demand for services. Limited funding, critical shortages of providers, and a fragmented healthcare system all contribute to this public health issue. Services for children and adolescents are even more scarce than those for adults.

Increasing Prevalence of Behavioral Health Conditions in Pediatrics

Prevalence of behavioral health conditions in children and adolescents is high and likely to continue to increase. Before COVID-19, behavioral health challenges were the leading cause of disability and poor life outcomes in young people, with up to 1 in 5 children ages 3-17 in the U.S. having a mental, emotional, developmental, or behavioral disorder ^(1,2). From 2009 to 2019, the share of high school students who reported persistent feelings of sadness or hopelessness increased by 40%, to more than 1 in 3 students. Suicidal behaviors among high school students also increased during the decade preceding COVID-19, with 19% seriously considering attempting death by suicide, a 36% increase from 2009 to 2019 and about 16% having made a suicide plan in the prior year, a 44% increase from 2009 to 2019. Between 2007 and 2018, suicide rates among youth ages 10-24 in the U.S. increased by 57% ⁽³⁾. Early estimates show more than 6,600 suicide deaths among this age group in 2020 ⁽⁴⁾.

In the US, death by suicide is the 2nd leading cause of death for young people ages 10-14 and the 3rd leading cause of death for those ages 15-24. In 2020, there was a 24% increase in emergency room visits for mental health reasons for those ages 5-11, and a more than a 30% increase in visits for those ages 12-17 ⁽⁵⁾.



In the US, death by suicide is the 2nd leading cause of death for young people ages 10-14.

Impacts of COVID-19

The impact of COVID-19 on the mental wellbeing of children and adolescents appears to have been considerable though scientific literature on it is still in an early stage. Children, particularly those living in poverty or from racial and ethnic minority groups, are showing increased anxiety and depression, thought to be worsened by social isolation and a lack of physical activity ⁽⁶⁾. A higher proportion of children with a COVID-19 diagnosis experienced new onset of a mental health condition compared to children without ⁽⁷⁾.

Challenges with Treatment Access

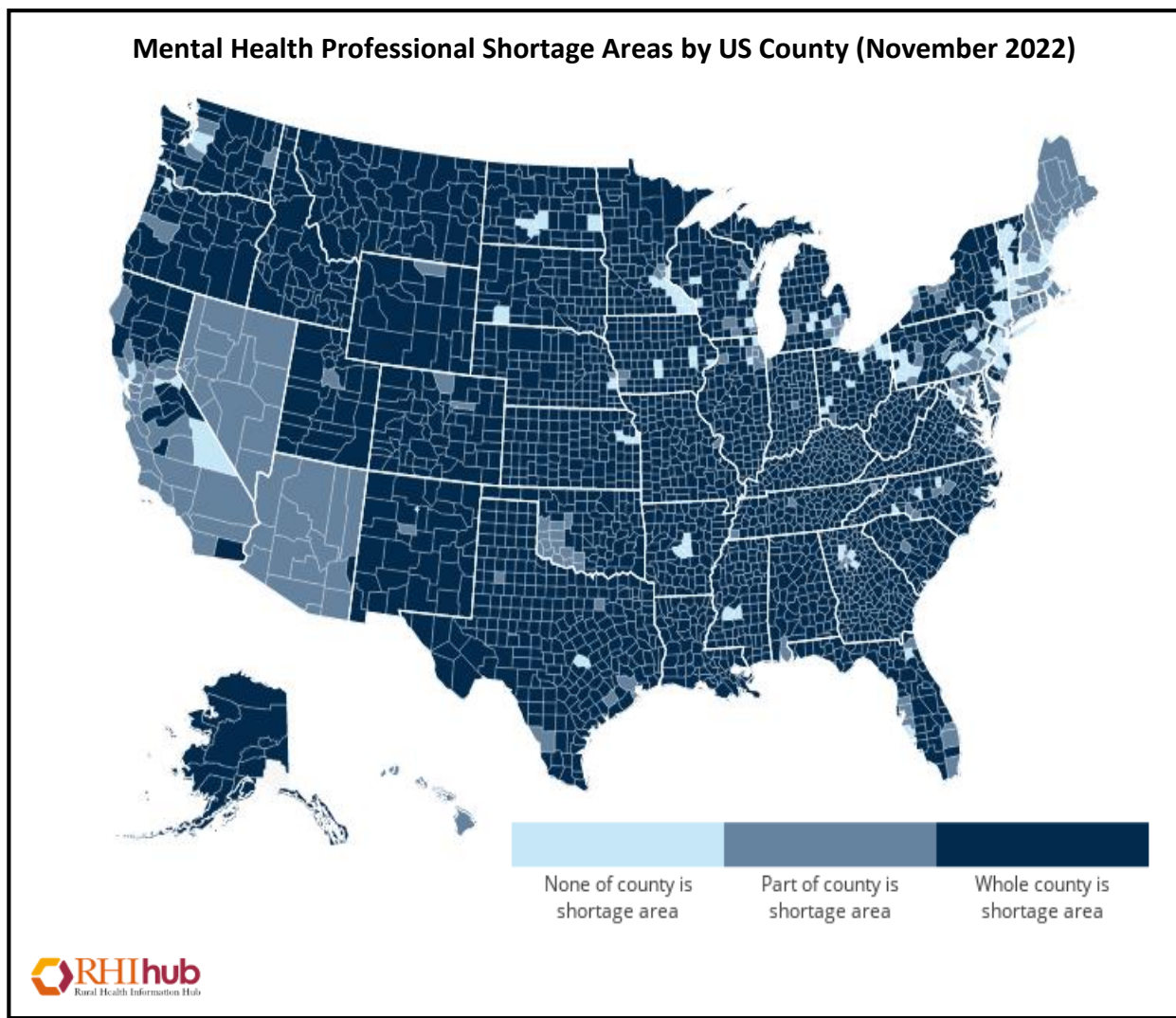
Half of all psychiatric conditions emerge by age 14, and 75% by the mid-20's. Treating persons earlier in their lifespan reduces the overall negative impact of these conditions on quality of life and reduces the chance of premature morbidity that accompanies untreated conditions ⁽⁸⁾. Despite the need for earlier and more effective behavioral health treatment for children and adolescents, lack of access is a severe and worsening problem. Only 15% to 25% of children with psychiatric conditions receive specialty care, and approximately three-quarters of children with mental health conditions were seen only by their pediatric primary care provider ⁽⁹⁻¹²⁾. Many families who seek specialty care encounter long waiting lists or discover that providers do not accept their insurance ⁽¹³⁾.

Pediatric Collaborative Care Implementation Guide

There is also a disparity in access to mental health treatment among different racial and ethnic groups compared to white persons. For example, children who identify as African-American and Hispanic/Latinx have 1.5 to 3 times higher odds of having an unmet mental health need than children who identify as white ⁽¹⁰⁾.

Furthermore, one study estimated the need for 30,000 child and adolescent psychiatrists but found that only 6,300 were in practice ⁽¹⁴⁾. The shortage of child and adolescent psychiatrists is most acute in communities of color with lower incomes ⁽¹⁵⁾. Significant shortages exist for other behavioral health providers, as well. Figure 1 displays United States county-level data on Mental Health Professional Shortage Areas (MHPSAs). It indicates counties that are entirely in a MHPSA, partially in a MHPSA, or not in a MHPSA. Health Resources & Services Administration (HRSA) defines a MHPSA as having at most one mental health provider for every 30,000 persons.

Figure 1. Map of HRSA Designated Mental Health Professional Shortage Areas in the US ⁽¹⁶⁾



Need for Culturally Responsive Behavioral Health Services

It is critical to ensure care is appropriate and culturally responsive to address the unique needs of many communities. In addition to less access to treatment, individuals from racial and ethnic minority groups are also more likely to receive poorer quality of care ⁽¹⁷⁾. Black children and adolescents are more likely to be misdiagnosed or underdiagnosed for mental health conditions, often resulting in more diagnoses involving hostility or aggression than their white peers, and less diagnoses that include internalizing conditions ⁽¹⁸⁾. Additionally, youth from communities of color and ethnic minority groups who exhibit or are thought to show behavioral or learning problems in school settings are less likely to receive high-quality mental health assessments and treatments. They are alternatively more likely to be directed toward disciplinary responses, such as detention and/or incarceration, whereas the justice systems then replaces mental health services for these children ⁽¹⁷⁾. These diagnostic misperceptions may be the result of prejudice, but also could be related to the fact that on average, teens of color spend less time being seen by the appropriate mental-health professionals ^(18,19).

It is imperative for pediatric patients and their families to have early access to providers with appropriate clinical expertise, who embody cultural humility, and have a strong understanding and sensitivity to the societal forces, including structural racism, biases, and structural inequalities that may be influencing the emotions and behaviors of children and adolescents ⁽¹⁹⁾.

Summary: Context

- Behavioral health services for children and adolescents in the United States are scarce and there are many challenges with access to appropriate and timely services.
- The prevalence of behavioral health conditions among pediatric populations has been increasing.
- Though literature is still emerging, COVID-19 has had considerable impact on the behavioral health of pediatric populations, including an increase in depression and anxiety.
- The shortage of child and adolescent psychiatrists is most acute in low-income communities and communities of color.
- Children and adolescents from racial and ethnic minority groups are more likely to be misdiagnosed or underdiagnosed and less likely to receive the same quality of care as white youth.

[Jump to Table of Contents](#)

Integrated Care as One Solution

Integration of behavioral health care into settings that provide care for physical health conditions is a feasible and powerful strategy to improve the behavioral health of pediatric populations ⁽¹³⁾. One meta-analysis of pediatric integrated care programs noted a 66% probability that a patient receiving any type of integrated care would have better outcomes than they would in usual care ⁽²⁰⁾. Primary Care Providers commonly mention lack of time, training, and confidence to treat pediatric behavioral health conditions in primary care ⁽²¹⁾, but with added support from integrated behavioral health providers they are more supported to deliver effective care to children and adolescents with behavioral health conditions ⁽²²⁾.

Integrated Care Approaches

PCBH, Child Psychiatry Access Programs, and Collaborative Care are pediatric integrated care approaches that reflect current efforts toward fully integrated pediatric mental health care. Though this guide focuses on Collaborative Care as one specific integrated care approach, find summaries of others as follows:

- *Primary Care Behavioral Health (PCBH)*: PCBH typically includes an onsite behavioral health consultant (BHC) co-located in a clinic. The BHC provides real-time collaboration and care coordination for patients identified by the PCP with behavioral health needs. Interventions might focus on behavior change and a physical health diagnosis such as sleep or bed wetting. A psychiatric provider might be involved through a referral or onsite access.
- *Child Psychiatry Access Programs*: These population-focused programs aim to increase geographical care access. They provide cooperative relationships between PCPs and regional child psychiatry teams that offer consultation, care coordination, and education. Consultation is offered via phone, email, telepsychiatry, among others. Some programs offer brief psychotherapy interventions or social work assistance.

Why Collaborative Care?

After examining the available integrated care approaches, Collaborative Care (CoCM) was found to be the most promising approach to date ⁽²³⁾. CoCM has the largest evidence base for improving outcomes. More than 90 randomized controlled trials support CoCMs effectiveness for treating depression and other behavioral health conditions in adults and children across a broad range of populations ⁽²⁴⁾.



Everybody should have a pediatric CoCM program. People will come. Patients feel seen and heard, families are so appreciative to bring in kids to clinic. It is so helpful to have this program in house.
- BHCM

Principles of Collaborative Care

CoCM is based on five core principles that distinguish it from other forms of integrated care.



1. Patient-centered team



2. Population-based



3. Measurement-based treatment to target



4. Evidence-based treatments



5. Accountable

Essential Elements

Across programs and organizations that have implemented CoCM, there is substantial variation in the structure and composition of teams, evidence-based brief behavioral treatments provided, the modality of Behavioral Health Care Manager (BHCM) contacts (in-person, telemedicine), and the behavioral health conditions treated. Evidence suggests that increased adherence to all five core principles in a CoCM program improves clinical outcomes ^(20,25,26). In the table below, the right column reviews essential elements for each CoCM principle and the left column indicates notable features unique to pediatric CoCM.



Patient-Centered Team

Essential Elements of CoCM

- Multidisciplinary team that includes the patient, PCP, BHCM, and Psychiatric Consultant

Features of Pediatric CoCM

- Team also includes patient's family/caregivers
- BHCM task sharing with other team members can occur
- Program partnerships with schools, community, and behavioral health agencies



Population-Based

- Systematic screening & identification of patients
- Longitudinal measurement of outcomes using validated monitoring tools tracked in a registry
- Stepped approach to care with referral options for patients who need higher levels of care

- BHCMs collaborate with patient's school or other support systems until referral connection is made
- BHCM or PCP may provide referrals for the patient's family to receive services



Measurement-based Treatment to Target

- Longitudinal measurement of treatment response
- Scheduled Systematic Caseload Review meetings between the BHCM and psychiatric consultant
- Timely treatment adjustments through regular review by a psychiatric consultant

- Monitoring symptoms may vary in frequency based on a patient's age, developmental level, caregiver involvement, and measure/tool
- Systematic Caseload Review meetings may cover fewer pediatric cases due to complex family systems



Evidence-based treatments

- Individualized structured treatment plans that include evidence-based medications and/or brief behavioral interventions
- Workforce trained to deliver brief behavioral interventions appropriate for primary care

- Treatment recommendations focus on behavioral interventions as first line
- Workforce trained to deliver brief behavioral interventions appropriate for pediatrics
- PCPs trained to use psychiatric medications for pediatric populations



Accountable

- Longitudinal measurement of provider- and practice-level performance metrics
- Use of metrics to drive quality improvement
- Plans for program sustainment

- Inclusion of Family Advocates to help with continuous quality improvement and program development

Evidence for Pediatric CoCM

Children and adolescents most commonly present with behavioral health concerns in primary care settings. Effective treatments for pediatric populations with behavioral health conditions have been shown to be successfully delivered in such settings. Early screening and follow-up of psychosocial conditions can serve as a starting point for addressing common behavioral health conditions in pediatrics ⁽²⁰⁾.



Establishing our pediatric CoCM program has been the most fulfilling part of my 17 years of work so far. Seeing relief on families faces that we can care for their mental health needs in our clinic - there is a huge burden that is lifted.
- Pediatrician

Adolescents treated for depression in CoCM have shown greater improvements in treatment when compared to usual care. CoCM's emphasis on engagement for both the patient and their family, shared decision-making on evidence-based treatment options, use of psychoeducational materials with the patient and their family, and consideration for treatment accessibility, demonstrated adolescent depression symptom improvement of 50% after 12 months in treatment, compared to 20% improvement in care as usual ⁽¹²⁾.

Treating children ages 5 and up with behavior concerns, ADHD, and anxiety in CoCM has also been found to be feasible and broadly effective ⁽²³⁾. Factors including solicitation of input from staff and family, training for PCPs on ADHD care management protocol, personalized evidence-based interventions delivered by a BHCM, and supervision from a psychiatric consultant, were all associated with higher rates of patient treatment initiation and completion, and improvements in behavioral problems and parental stress. Pediatricians also reported greater perceived practice change, efficacy, and skill to treat ADHD in CoCM, when compared to usual care ⁽²²⁾.

Additionally, when BHCMs are trained in both Motivational Interviewing skills and parent management techniques to help parents identify and initiate ADHD care in an integrated model, children's ADHD symptoms are shown to have greater improvement in treatment compared to usual care ⁽²³⁾.

Summary: Integrated Care as One Solution

- Collaborative Care is an integrated care model with a robust evidence-base that can provide effective behavioral health treatment for children and adolescents.
- Collaborative Care has five core care principles: patient-centered team, population based, measurement-based treatment to target, evidence-based treatment, and accountable.
- Adherence to all five core principles in a CoCM program improves clinical outcomes.

[Jump to Table of Contents](#)

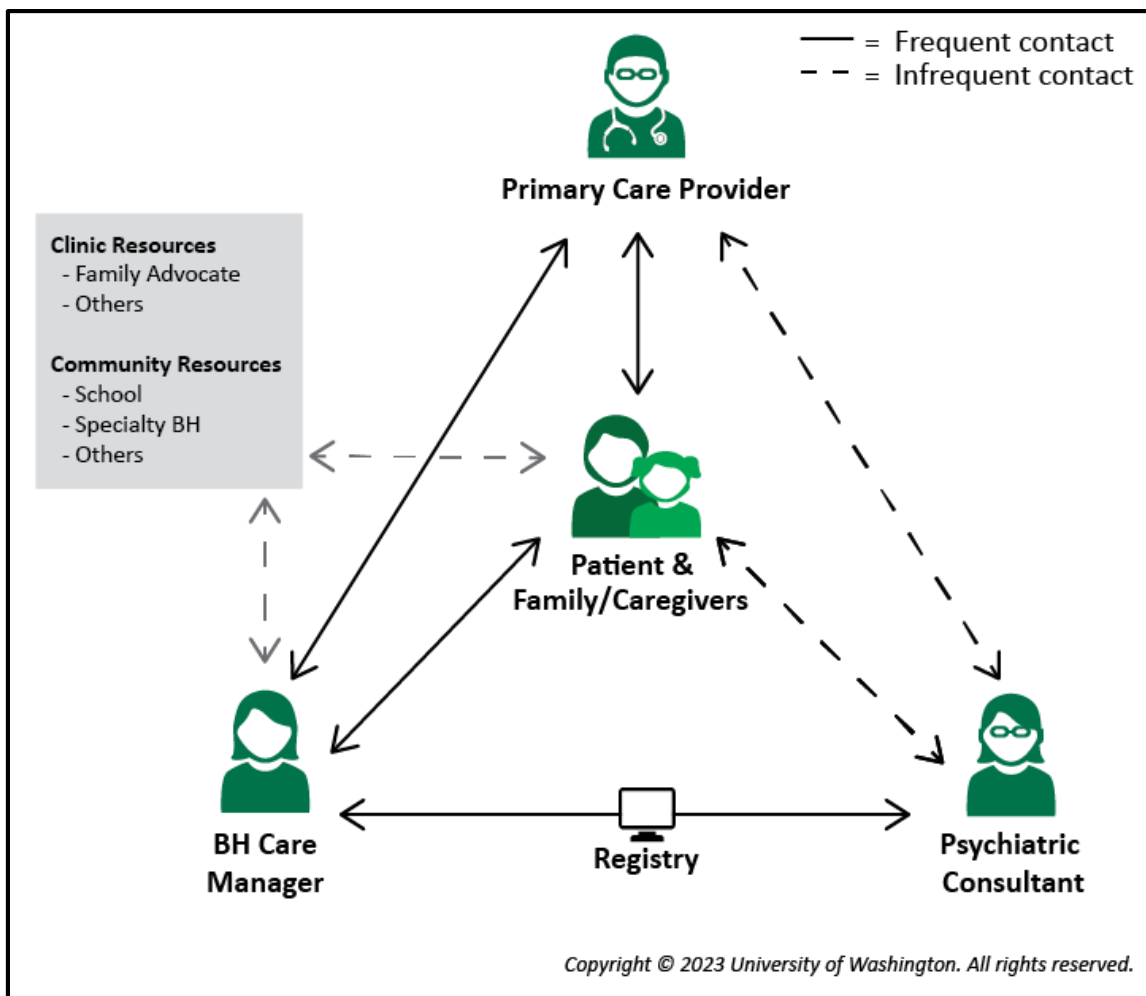


Patient-Centered Team

Every member of the Collaborative Care team plays a critical role in care delivery. Team members typically include the primary care provider (PCP), Behavioral Health Care Manager (BHCM), psychiatric consultant, and at the center, the patient and their family. All four of these roles collaborate to implement a shared care plan. In addition, some pediatric CoCM programs include Family Advocates and/or build relationships with community behavioral health agencies, schools, and social service organizations.

In all cases, clearly defined team member roles are important for a successful program. All members of the pediatric CoCM team should be able to describe the roles of the other members of the team, as well as their own. Figure 2 shows the members of the CoCM team and the frequency of their contacts with each other.

Figure 2. Pediatric Collaborative Care Team



Team Roles

The following sections explore each role on the pediatric CoCM team.

Patient & Family/Caregivers

At the center of the team is the patient and their family/caregivers. Patients and family/caregivers agree to collaborate in care planning with their PCP and BHCM, engage in treatment, report outcomes, and participate in relapse prevention planning. The patient and their family/caregiver's active involvement is critical to ensure care is family-centered and can be adjusted as needed to be most effective.



Incorporating patient and family(ies) goals for care from the beginning increases engagement and results in a better healthcare experience and improved outcomes.

Behavioral Health Care Manager

The BHCM is responsible for many core CoCM activities. They facilitate communication among all team members and act as the main point of contact for the patient and their family. The BHCM role can be filled by many different types of providers, including clinical social workers, professional counselors, clinical psychologists, and nurses.

BHCMs that are a good fit for this role:

- have a strong interest in working with children and adolescents and partnering with their families
- are comfortable with the pace and style of primary care which includes delivering brief evidence-based interventions and supporting medication management
- are willing to develop knowledge of developmental pediatrics to support facilitation of appropriate referrals and psychoeducation
- are willing to learn brief evidence-based behavioral interventions for pediatric populations
- can balance the needs of patients and their family(ies) while collaborating with other systems involved in the patients' care
- can deliver care with a diversity equity and inclusion (DEI) and trauma-informed lens



[Download a sample BHCM job description here.](#)

BHCM Tasks

Tasks for the BHCM role typically fall into two categories: care coordination and evidence-based brief behavioral interventions. In addition, many BHCMS in pediatric CoCM programs describe tasks related to program development and partner organization collaboration, particularly early on as the program is being developed.



Pediatric CoCM program staff highlight the importance of giving BHCMS time to build relationships with local schools, community organizations, and social service systems, despite this time not being billable.

The table below summarize these tasks:

Care Coordination	Evidence-Based Brief Behavioral Interventions
<ul style="list-style-type: none">• Use evidence-based tools to monitor symptoms and maintain a registry that tracks treatment progress• Facilitate ongoing communication with all members of the care team, including at times with external providers and resources (e.g., schools and legal system)• Coordinate treatment with PCPs• Follow up with patient and their family in the active caseload• Support medication treatment as indicated• Prepare for and attend Systematic Caseload Review sessions with psychiatric consultant• Assess for social determinants of health and support referrals	<ul style="list-style-type: none">• Engage patients and/or family in treatment• Provide brief behavioral interventions appropriate for primary care, e.g., Behavioral Activation (BA) or First Approach Skills Training (FAST)• Co-develop relapse prevention plans with patients and their families

BHCM Task Sharing

While BHCM tasks are often completed by one person, many successful pediatric CoCM programs have also divided the BHCM role between two people. One is the clinical provider who is assigned tasks that require a clinical license, and the other is a team member, sometimes called a care coordinator, who is assigned tasks that do not require a clinical license. A care coordinator can have a range of responsibilities that vary based on the needs of the patient population, priorities of the CoCM program, and availability of community resources. Typical tasks of a care coordinator include:

- Providing specific information about their pediatric CoCM program
- Scheduling appointments with the BHCM
- Making reminder calls for appointments with the BHCM
- Providing information about additional resources in the community when appropriate
- Assist with the assigning and collection of standardized behavioral health screening tools
- Managing or assisting with documentation in the registry
- Assisting with communication to providers involved in care, including external providers
- Facilitate specialty behavioral health referrals when appropriate

While care coordinators might not always be able to bill for their services, the task sharing role can still be a useful approach to mitigate the workforce shortage for licensed behavioral health providers



Our care coordinator is the glue between primary care and families, and the glue between the practice and different parts of the community.

- PCP Champion

and can reduce costs by reserving more highly trained staff for the tasks that only they can do. We interviewed several organizations that expressed their satisfaction with having two individuals support the BHCM duties. One organization described their care coordinator as “the glue between primary care and families, and the glue between practice and different

parts of the community” while another referred to having an Integrated Care Assistant as the “special sauce” to their program.

Psychiatric Consultant

Psychiatric Consultants support both the BHCM and the PCP to deliver effective behavioral healthcare. They do not *typically* see patients or prescribe medications; however, they are available during business hours for ad-hoc patient and provider consultation as needed. They meet regularly with the BHCM for Systematic Caseload Review (SCR) sessions to discuss a caseload of patients in active treatment, prioritizing review of patients that are not improving.

Psychiatric consultants provide:

- input on diagnostic assessment,
- identification of co-morbid behavioral health conditions,
- medication recommendations,
- and overall treatment planning.



[Download a sample psychiatric consultant job description here.](#)

Treatment recommendations are communicated to the PCP, typically through the electronic health record (EHR). With training in both psychopharmacology and evidence-based psychotherapies, psychiatric consultants can support a full range of evidence-based treatments for depression, anxiety, and behavioral problems. They can serve as an educational resource as well, for example, presenting on clinical topics or advising on clinic routines related to mental health.

Psychiatric consultants may include psychiatrists, psychiatric nurse practitioners, or psychiatrically trained physician assistants, depending on state scope of practice rules. Due to limited availability of child and adolescent trained psychiatric providers, some pediatric CoCM programs choose to use an adult trained psychiatric provider and find this option effective when the psychiatric consultant can then consult with trusted colleagues trained in pediatric psychiatry. When psychiatric consultation time is especially limited, some programs use psychiatric consultants for select urgent cases while the PCPs also utilize psychiatric consultation lines, such as the [PAL line in Washington](#) or the [MC3 Program in Michigan](#) for psychiatry support on other cases.

Primary Care Provider

PCPs are critical members of the CoCM treatment team. Their role includes the identification of pediatric patients who need treatment, describing and strongly endorsing the program to patients and their families, and typically consenting patients to CoCM. The PCP's ongoing involvement in team communication regarding the patient and their care plan, and the provision of effective pharmacotherapy when indicated with support as needed from the psychiatric consultant are important for effective CoCM.



[Download a description of the PCP's role here.](#)

One PCP we spoke with commented on the positive impact of team-based care on PCP burnout. Before the implementing pediatric CoCM at their practice, the PCP noted many busy days where they would go home and worry about a complex case, such as a teenager with trauma. They would worry because they felt they did not have capacity to support the patient and their family effectively and had concerns for the patient's long-term outcomes - which in turn



Being part of a team helped me to feel like a patient's safety and wellness doesn't solely depend on just me. If I miss something there is still the rest of the team to help ensure success.
- PCP Champion

made them feel like they were ineffective at their job. After implementing pediatric CoCM and adding the BHCM and psychiatric consultant to the team, they felt like a patient's safety and wellness didn't solely depend on them and it was a relief.

Roles Unique to Pediatric CoCM

Family Advocates

Practices we interviewed sometimes included *Family Advocates* on their implementation team. A Family Advocate is typically a parent, caregiver or family member of a patient who has received care at the practice. They partner with a practice to ensure the program is inclusive and family-centered. They participate in the planning, implementation, and program evaluation activities by participating in meetings and providing feedback. Programs that can compensate Family Advocates for their time may increase the number of families available to participate and include families with more diverse experiences and backgrounds. Practices may choose to survey families who have opted to give feedback on the program rather than hiring someone into a Family Advocate role.

Family Advocates provide valuable insights from the patient/family/ caregiver perspective and give a voice to families receiving care at their specific practice by:

- Participating in program meetings
- Reviewing workflows, resources, policies, and practices
- Facilitating linkages with community organizations

Community Behavioral Health Agencies, Schools, and Social Services

Pediatric CoCM practices have the unique opportunity to build beneficial relationships with community behavioral health agencies (BHAs), schools, and social service organizations. Throughout interviews, practices emphasized the importance of developing these relationships to:

- support patients and their families,
- address family social needs,
- and coordinate behavioral health treatment not provided in primary care.

Several primary care clinic teams we interviewed, partnered with a community behavioral health agency to develop their pediatric CoCM programs. When this happens, it is important to involve a manager or supervisor from the partner organization early on. This includes inviting partners to planning meetings to develop the program goals and population served and to work out contractual and clinical relationships. Often in this partnership, the community behavioral health agency hires the BHCM role for the primary care team and then contracts with primary care to co-locate the BHCM and provide CoCM services within the primary care practice.



A key to success is to involve partner leadership early on to develop program goals, population served and otherwise define the partner relationship.

During interviews, the CEO of a BHA that partners with a pediatric CoCM program stressed the importance of their partnership to improve access to specialty care services. In their partnership, the BHA focuses on early intervention (birth to 3 years old) and certain

school-age and adolescent patients in need of intensive treatment, while the pediatric CoCM team sees school-age and adolescent patients with mild to moderate symptoms.

The table below highlights some benefits and challenges associated with this type of partnership. Challenges can often be addressed if given consideration in early planning phases.

Benefits	Challenges
Community BH Agencies can provide: <ul style="list-style-type: none">• required clinical supervision for unlicensed providers working towards licensure• support for licensed providers who want to connect with other behavioral health providers• familiarity with the credentialing and documentation processes for billing psychotherapy codes• referral relationship for patients needing more intensive treatment	CoCM programs will need to: <ul style="list-style-type: none">• train BHA staff in a new way of practicing in primary care (i.e., adapting to shorter visits and more frequent interruptions)• provide access to primary care's EHR and registry for the BHCM and psychiatric consultant• create workflows for billing the CoCM codes out of primary care

CoCM Team Processes

Patient & Family Engagement

Team members should engage the patient and their family in a culturally appropriate manner and with a trauma-informed lens. This means approaching patients in a manner that is flexible, inclusive, respectful, developmentally appropriate, sensitive to the impact of trauma, and effective. Similarly, they should use materials and deliver care that is inclusive of race, ethnicity, cultural background, immigration status, religion, disability, gender, gender identity, gender expression, sexual orientation, and sexual behavior.



Try to meet the patients and their families where they are at and see from their lens how things look.

Make the environment conducive so they can follow up and be seen, heard, and feel comfortable.

- BHCM

The team organizes treatment to be responsive to the patient and their family's goals and preferences and understands the importance of the patient's social family needs as well as how to support the patient and their family during times of stress.

Initial engagement is often done by PCPs, which can be especially helpful when patients and families already have a trusting and established relationship with the PCP. Other clinic staff, such as medical assistants and front desk staff can be great advocates for the program as well and may have significant insight into patient and family behavioral health needs. Making written information about the program available in patient spaces, such as brochures in the front lobby and exam rooms, are great tools for sharing information and the program.

Pediatric Collaborative Care Implementation Guide



Engaging both the patient and their family in care supports better outcomes.

The PCP and BHCM are almost always encouraged to engage both patients and their family. This dual engagement not only supports the patients' success in care but can also help to identify potential needs of the parent and recognize that the parent and child's needs are interconnected and interdependent. Pediatric CoCM practices have the unique opportunity to take a family-centered lens to care, which includes assessing and identifying the needs and goals of a patient's family. By assessing the needs of the patient's family and connecting them to support and services that align with their needs and goals, the CoCM team can have an even greater impact on the patient's treatment outcomes and increase impacts on the patient's family.

The pediatric CoCM practices we interviewed reported more successful treatment and engagement in care when a patient's parent is involved. Depending on the age of the patient, the PCP and BHCM may meet with the patient and their family each individually and then together to help identify the behavioral health needs of both the patient and their family.

Once a patient is identified, it's important to gather the primary contact information and ideal times to reach the patient and family. Some organizations we interviewed rely heavily on texting with HIPAA compliant apps or communicate frequently through EHR portals to reach patients instead of using the phone. These programs noted both parents and teens were less responsive to the phone. Many programs also highlighted the benefits of offering both in-person and virtual appointments; BHCMS described the benefits of parents being able to attend appointments virtually during their workday, while some schools will arrange private spaces for patients to attend remote BH sessions. Several BHCMS we spoke with offer later afternoon or early evening appointment times so patients and their families don't have to disrupt their school or workday to attend appointments. BHCMS will then use morning hours not occupied by patient appointments to complete documentation, attend meetings, work on program development, and coordinate services with other providers involved in patient care.



To maximize engagement, BHCMS can offer later afternoon or early evening appointments to minimize disruptions to the school and work schedules of patients and their families.

Treatment can be difficult when a teenager has "fired their parent" from being involved with their care, as noted by one BHCM during an interview. It's important for PCPs and BHCMS to explore a patient's acceptable care involvement from their parent/caregiver, while still honoring a teenager's desire for privacy and adhering to confidentiality laws.



Sometimes teenagers will refuse to talk to their parents about their care. It can be helpful to work with a teenager to identify just one thing they will talk to their parents about, not all of it. The goal is to get the teenager to welcome the parent back in, otherwise it is just hard.

- BHCM

Team Communication & Collaboration

Promoting trust and positive partnerships between PCPs and the psychiatric consultant is an important aspect to successful CoCM programs. In interviews with pediatric CoCM programs, we received suggestions for enhancing the relationship between PCPs and psychiatric consultant which include:

Pediatric Collaborative Care Implementation Guide

- providing the psychiatric consultant with access to the EHR,
- including the psychiatric consultant in program development and decision-making conversations,
- and building in opportunities for the psychiatric consultant to provide PCPs general psychopharmacology education.

PCPs in a clinic may differ in the preferred means of communication for patient updates and questions, and BHCMS should be flexible about communication to meet the needs of the PCP. Communication from the primary care staff back to the psychiatric consultant can be effective in engaging PCPs in the program and should be facilitated. Programs have done this successfully with the BHCM or through messaging within an electronic health record.

Some pediatric CoCM practices choose to run a monthly meeting between BHCMS and PCPs to review shared caseloads, discuss challenging cases, and otherwise touch base about patient care. BHCMS have noted this type of regular meeting has helped promote program engagement from team members and build stronger team relationships. These meetings vary in length depending on each PCP's caseload size.

Systematic Caseload Review sessions are typically between a psychiatric consultant and a BHCM. See the [Measurement-based Treatment to Target](#) section for details.

Pediatric Integrated Care Collaborative (PICC) Toolkit

The Pediatric Integrated Care Collaborative (PICC) Toolkit is a useful guide for enhancing trauma-informed integrated care, which is essential to incorporate into pediatric CoCM. The PICC Toolkit highlights services that unite primary care, mental health care, families and communities to effectively understand, prevent, detect and address trauma in the community, and focuses on six inter-related and inter-connected elements as a guiding framework for transitioning or enhancing trauma-informed care in each setting ⁽²⁷⁾.



[Download the Pediatric Integrated Care Collaborative \(PICC\) Toolkit here.](#)

Summary: Patient-Centered Team

- Hire or contract with a BHCM and psychiatric consultant with some pediatric experience and expertise.
- Consider adding other care team members to the core CoCM team including a care coordinator to assist with all of the coordination tasks and Family Advocates who can help develop a family-centered program.
- Find innovative ways to engage with families and patients after hours, on weekends, and through telehealth, texts, and patient portals to help enhance engagement.
- Promoting trust and positive partnerships between PCPs and the psychiatric consultant is an important aspect of successful CoCM programs.

[Jump to Table of Contents](#)



Population-Based

A CoCM program is designed to provide effective behavioral health treatment to a population of patients. To maximize the number of patients who can be treated, teams must systematically identify the individuals in need of care within the primary care setting. This is typically done through routine, standardized screening.

Evidence-based Behavioral Health Screening for Pediatrics

Programs should have a protocol for screening patients that specifies:

- who will be screened,
- when they will be screened,
- how they will be screened,
- who is administering the screening tool,
- where the score will be documented, and
- the action that will occur when the score is positive.

In practice, this might look like asking a patient or their family to complete the PSC-17 during a Preventive Pediatric Care Visit. The screener can be handed to the patient or their family at check-in or by a medical assistant who alerts the PCP if the score is positive.



Programs can be reimbursed for BH screening done by the PCP. The implementation team should consider how best to build screening reimbursement into their workflow.

Who Will Be Screened: Determining a Population of Focus

PCPs see patients with a wide array of mental health and substance use concerns. As your program is launching, we recommend choosing a subset of ages and/or disorders to focus on. Then, when your program has matured, expanding the program focus to include other diagnoses, ages, and perhaps clinic sites. In pediatrics, there will be different mental health needs across the age spectrum, patient, and family. In pediatrics, defining your population of focus for CoCM early will help when program drift may happen.



Most pediatric CoCM programs start with a focus on depression, anxiety, and/or ADHD.

Pediatric CoCM program staff that we talked to shared that their programs initially focused on depression, anxiety, and/or ADHD. Children and adolescents in need of ongoing care and treatment for conditions such as autism, learning disabilities, eating disorders, obsessive compulsive disorders, or substance use, among others may be better served by programs offering specialized treatment for these conditions.

How they will be Screened: Using Validated Screening Tools

Once a population of focus has been identified, pediatric CoCM programs should choose validated screening tool(s). Note that while all the tools below are validated for screening, they are not all validated to be used as symptom monitoring tools as is needed with measurement-based care. Find a table of common symptom monitoring tools in the [Measurement-based Treatment to Target section](#). Each tool will have guidance on how administration should be done, including who is qualified to administer them.

Common Behavioral Health Screening Tools

Below is a list of commonly used validated screening tools used by pediatric CoCM practices.

Condition	Tool	Ages ⁽²⁸⁾
Depression	PHQ-9 (Patient Health Questionnaire – 9 item)	12 and older
	PHQ-A (Patient Health Questionnaire – for Adolescents)	12 and older
	SMFQ (Short Mood and Feelings Questionnaire)	6 – 19
Anxiety	GAD-7 (Generalized Anxiety Disorder – 7 item)	12 and older
	SCARED (Screen for Child Anxiety Related Disorders)	8 – 18
	PROMIS (Patient-Reported Outcomes Measurement Information System)	8 and older
Behavior/ADHD	Vanderbilt (NICHQ Vanderbilt Assessment Scale) with subscales	6 – 12
Trauma	SCARED-PTS (Screen for Child Anxiety Related Disorders – Post Traumatic Stress)	7 – 19
	CATS (Child and Adolescent Trauma Screen)	7 – 17
	CTS (Child Trauma Screen)	6 – 17
Autism	CAST (Childhood Autism Spectrum Test)	5 – 11
General Mental Health/ Developmental	PSC-17 (Pediatric Symptom Checklist -17 item)	4 – 17
	PSC-35 (Pediatric Symptom Checklist – 35 item)	4 – 16
	Survey of Well-being of Young Children (SWYC) Forms	2 – 60 months
Suicide	C-SSRS (Columbia Suicide Severity Rating Scale)	6 and older
	ASQ (Ask Suicide-Screening Questions)	8 and older
Drug Use	CRAFFT	12 – 18

More information about behavioral health screening for pediatric populations can be found in [Appendix 1 Additional Resources](#).

Eligibility for a Pediatric CoCM Program

Programs will need to specify the score that will serve as the threshold for referral to CoCM, and many tools include guidance about score interpretation. Screening with tools like the PSC-17, SCARED or PHQ-A should augment but not replace clinical judgment of the PCP. If the PCP determines that the patient may benefit from CoCM without meeting screening score threshold, patients should be assessed for eligibility.

Age of Patient Consent and Patient Confidentiality

Pediatric CoCM programs stress the value of engaging parents/family in their child and/or adolescent’s behavioral health treatment. The PCP and the BHCM play an important role in supporting adolescent patients to navigate conversations about their care with supportive adults. Consideration for the age of consent and confidentiality laws for behavioral health treatment is a critical part of this process.

Age of consent and confidentiality laws may differ by state and understanding the laws for behavioral health treatment in your state is essential. This process should include clear written and verbal information shared with the patient, and family when appropriate, about age of consent for treatment and the patient's rights to confidentiality. Information should be shared about when the care team would need to break a patient's confidence, such as in the case of abuse or neglect, or risk of harm to oneself or others etc. It is important to create a workflow for how to manage the consent process with a patient and their family. Obtaining consent by a PCP can be required for billing, and often preferable to patients and families who may already have an established and trusting relationship with their PCP. Consent of adolescent patients who have legal autonomy of their behavioral health care can be complicated if patients do not want their parents involved or the parents do not want to be involved. PCPs must consider the patient's insurance and if the parent will receive their child's behavioral health or medication bill and how this may impact confidentiality of the patient's care.



Understanding the laws for age of consent for behavioral health treatment in your state and creating a workflow for how to manage the process is critical.

Early Engagement

A “warm connection” is a real-time introduction of the BHCM to the patient (in-person or virtual) by the PCP. For patients who are eligible for pediatric CoCM, the PCP initiates a warm connection to the BHCM, giving a strong endorsement of the program to the patient and family. If a warm connection is not possible, finding ways to connect to the BHCM virtually soon after the patient is identified can be a way to increase patient and family engagement in care. Early engagement has been demonstrated in the literature as key to improvement in outcomes ⁽²⁹⁾.

One pediatric clinic noted the time from when the patient is identified to when a BHCM can connect with the patient averages 1.2 calendar days, with an 80% engagement rate.

This was done with the BHCM seeing patients and their family virtually!

If the clinic uses a case finding technique to identify patients in need of care (could be a report by diagnosis, social determinants of health and/or screening scores), it is important for the PCP to communicate their endorsement of this program and encouragement to engage with it. This can be accomplished through a letter, portal message or similar communication to the patient or, if the patient is scheduled for a visit with the PCP in the very near future, a cue to the PCP to do this endorsement at that visit.

After the patient is identified by the PCP, the BHCM completes an initial assessment, obtaining clinical information that can help the team confirm the diagnosis, identify co-morbid behavioral health disorders, and assess the patient's level of risk for self-harm. Additional screening instruments can be used to identify more serious and complex disorders (e.g., SCARED-PTSD or CRAFFT) for which referral to specialty mental health treatment might be more appropriate.



It is important for PCPs to endorse the pediatric CoCM program to patients and their families and encourage engagement.

Using a Registry

CoCM cannot be implemented without a registry to document care delivery. A registry is a caseload management tool used by a BHCM and psychiatric consultant to monitor caseloads of patients, track their treatment progress, identify patients that are not improving as expected and may need treatment adjustments or who are improved enough to complete an active episode of care.



Use of a registry in the SCR process has been proven to significantly improve outcomes in the treatment of depression.

An effective registry tracks three different types of information:

1. **Patient-level:** treatment delivered and progress toward reducing or eliminating symptoms
2. **Caseload-level:** data and information about the current active caseload of patients for a BHCM that facilitates Systematic Caseload Review by the BHCM and psychiatric consultant
3. **Program-level:** information that supports monitoring progress toward program goals

Figure 3 shows [an example of a registry](#) at the caseload level. Important data points that are included include the caseload size, type of contacts and engagements with the patients, whether systematic caseload review has happened, and clinical outcomes.

Figure 3. Example Registry Showing Caseload-level Data

CARE MANAGER		CURRENT CASELOAD	CARE MANAGER CONTACTS					PSYCHIATRIC CONSULTATION			AVERAGE PHQ		AVERAGE GAD		PHQ		GAD		
		PTS W/ F/U	AVG # F/U	AVG SESSION DURATION (MINS)	CONTACTS W/ SCALE	AVG # BY PHONE/VIDEO	# IN RPP	AVG WKS IN TX	# FLAGGED	# W/ P/C	NOT IMPRV W/O P/C	FIRST	LAST	FIRST	LAST	NO RESPONSE	NO REMISSION	NOT IMPROVED	SCORE OF 10+
	52	44 (85%)	3.5	45	25%	0.6 (17%)	0 (0%)	12	39 (75%)	38 (73%)	17	9.7	9.5	10.2	9.9	13 / 14 (93%)	14 / 14 (100%)	13 / 14 (93%)	13 / 14 (93%)
	9	9 (100%)	4.7	27	51%	3.7 (79%)	0 (0%)	126	0 (0%)	9 (100%)	6	9.7	7.9	10.3	8.7	4 / 4 (100%)	4 / 4 (100%)	2 / 4 (50%)	3 / 4 (75%)
	91	77 (85%)	6.5	43	85%	1.3 (20%)	7 (8%)	20	0 (0%)	90 (99%)	41	13.9	9.9	13.3	9.5	36 / 53 (68%)	47 / 53 (89%)	29 / 55 (53%)	31 / 55 (56%)
	79	67 (85%)	6.6	51	38%	3.9 (59%)	11 (14%)	18	0 (0%)	54 (68%)	22	11.2	9.6	9.9	8.3	22 / 30 (73%)	24 / 30 (80%)	15 / 25 (60%)	14 / 25 (56%)
	66	54 (82%)	4.3	54	23%	0.6 (13%)	0 (0%)	10	22 (33%)	46 (70%)	16	12.4	12.3	11.2	10.8	15 / 16 (94%)	15 / 16 (94%)	13 / 15 (87%)	15 / 15 (100%)
	77	66 (86%)	7.9	50	13%	5.0 (63%)	2 (3%)	20	1 (1%)	56 (73%)	40	13	12.9	12.2	11.7	30 / 31 (97%)	30 / 31 (97%)	34 / 37 (92%)	34 / 37 (92%)
	65	59 (91%)	5.5	47	16%	2.4 (44%)	0 (0%)	17	12 (18%)	45 (69%)	41	12.1	12.1	10.8	10.8	31 / 31 (100%)	31 / 31 (100%)	29 / 29 (100%)	29 / 29 (100%)
All	439	376 (86%)	5.9	48	38%	2.4 (41%)	20 (5%)	19	74 (17%)	338 (77%)	183	12.2	11.0	11.4	10.1	151 / 179 (84%)	165 / 179 (92%)	135 / 179 (75%)	139 / 179 (78%)

Organization : (Aggregated by Care Manager)
Report Created on : Wednesday, November 30, 2022, 9:59 AM

Copyright © 2010–2022 University of Washington. All Rights Reserved.

Some practices use the cloud-based [AIMS Caseload Tracker \(ACT\)](#) alongside an EHR that allows for tracking of PHQ-9 and GAD-7 scores with minimal double data entry. There is also an EHR interoperable version. Other practices have created tools using Microsoft Access, REDCap, and directly in their EHRs.

Pending the creation of a definitive registry in their EHR, some use a simple Excel-based registry, tracking patients' dates of visits, measurement scores, and dates of psychiatric consultation.



The [CoCM Registry Requirements Guide](#) further details important considerations for a registry.

Pediatric Collaborative Care Implementation Guide

Some organizations have found the process of tracking scores (or navigating a registry) so burdensome that they discontinued the regular weekly use of a registry, just pulling data for quarterly funding purposes. This is unfortunate, as the use of a registry in the SCR process has been proven to significantly improve outcome in the treatment of depression ⁽²⁵⁾.

In addition, data tracked in the registry can provide information that can demonstrate progress towards goals of the program to provide improved access to effective behavioral health care. In pediatrics, determining which measures to track over time without overwhelming the CoCM team, including the patient, is an important consideration since there are many validated tools depending on the age of the patient and diagnosis. Review the [Measurement-based Treatment to Target section](#) of this guide for details.

Caseload Size

Balancing a BHCM caseload that is large enough to sustain a CoCM program and small enough to maintain quality clinical care and model fidelity can be difficult. In practices we interviewed, pediatric CoCM caseloads were smaller than those for adult patients, given the need for engagement with family, caregivers, schools, social service organizations. In our sample of pediatric practices we interviewed, caseloads varied from 25 - 75, though about 40 - 65 was most common for a full time BHCM. The size of the caseload for a given clinic also depends on several key factors related to the clinic population, including the prevalence of the target mental health conditions, complexity (rate of co-morbidities and psychosocial needs), availability and wait times for specialty behavioral health care, social determinants of health, and whether one BHCM performs all aspects of the job or shares the role with another team member. To maximize access to care, an episode of care with CoCM is time limited and lasts six months on average, though the actual duration is clinically determined.



Learn more with the [AIMS Center's BHCM Caseload Guidelines](#).

Summary: Population-Based

- Programs should start narrow when choosing a population of focus for their program and can eventually expand this scope as the pediatric CoCM program matures.
- Programs should have an evidence-based behavioral health screening protocol using validated screening measures.
- Design a registry that is actionable for the CoCM team and not overly burdensome, plan carefully what measures to track over time.
- Understanding the age of consent and confidentiality laws for behavioral health treatment in your state is essential and should inform the creation of a workflow to manage the consent process.
- Consider the social determinants of health and care coordination needs of your population of focus when setting your optimal caseload size. In pediatrics, we have found caseloads closer to 40 - 65 to be more realistic than caseloads for adults.

[Jump to Table of Contents](#)



Measurement-Based Treatment to Target

Measurement-based care is the evidence-based practice of systematic monitoring of the patient's symptoms through self or caregiver report scales. Patient progress is reviewed by the BHCM and treatment is adjusted based on patient's response to care. There is robust evidence that measurement-based care improves outcomes in treatment of depression in adolescents, and evolving evidence to show support for measurement-based care for children under age 12 as well ⁽³⁰⁾.

Anecdotally, many patients and their caregivers appreciate seeing how symptom scores change over the course of treatment. It can help them remember where they started once they are feeling better or that things have improved even if they don't feel like they have. Further, measures can provide an excellent frame for providing psychoeducation about symptoms. Teaching self-monitoring skills can empower patients and their caregivers and increase their engagement in care.



Teaching self-monitoring skills can empower patients and their caregivers while also increasing engagement in care.

In Practice

At the initial CoCM visit and throughout care, the BHCM works collaboratively with the patient and their caregiver to identify and review their goals for treatment. These goals are individualized and should reflect the patient and their caregivers' values, preferences, and culture. The BHCM also works with the patient and their caregiver to select quantitative targets for the patient's treatment that can be tracked through measurement-based care.

For example, for adolescents, a clinically significant response to treatment or "response" is defined as 50% or greater reduction in PHQ-9 score from baseline or a PHQ-9 score <5 (remission of depression). Such measurement is not intended to be a substitute for clinical judgment, but rather to provide more objective evidence of response to treatment (or lack thereof).

The BHCM reviews the clinical symptom monitoring tool in the session, observing together with the patient and caregiver which symptoms have (or have not) improved, and enters this information into the registry. The scores are then used in deciding next steps in care and can be reviewed during the Systematic Caseload Review session with the psychiatric consultant.

For children who have multiple comorbid diagnoses or clinical symptoms that cut across domains, the clinician should take into consideration the patient's most important identified goals and then use the most relevant measure and focus on a particular impairment or a specific group of symptoms or behaviors related to the main treatment goal ⁽³¹⁾.



Measures do not need to be comprehensive, nor do they need to precisely match the complexity of the clinical presentation to be useful as an adjunct to the clinical examination ⁽³¹⁾.

Symptom Monitoring

Ideally, ongoing measurement of symptoms with a validated symptom monitoring tool is best completed immediately before or during every patient encounter. Due to the length of some of the screening tools in

Pediatric Collaborative Care Implementation Guide

pediatrics and possible challenges in collecting symptom monitoring responses, this is not always a realistic expectation. However; practices should do their best to collect symptom monitoring tool responses as close to the appointment as possible, and results should be reviewed in collaboration with the patient and/or their families to guide treatment ⁽³⁰⁾.

Many pediatric measurement scales include both caregiver and patient versions. This is helpful for gathering collateral information about how the patient is doing. It's important for clinicians to recognize that there are often discrepancies in patient and caregiver responses and to monitor changes in both patient and caregiver reports to assess treatment progress ⁽³²⁾.

For children under age 12, most of the practices that we spoke with aim to collect symptom monitoring tool responses from both the caregiver and the patient for baseline information. Depending on the age, cognitive level of the patient, and level of the caregiver's involvement in care, ongoing measures may then be completed by either the caregiver or the patient, but generally not both. This is done to minimize monitoring response fatigue and to be efficient with time.

Some programs we spoke with also adjusted the frequency of administering the symptom monitoring response tools based on their patient's situation and the length of the tool. For example, when using longer symptom monitoring tools like the 41-question SCARED, several practices we spoke with administer these tools monthly rather than at every clinical contact.

Most Common Symptom Monitoring Tools

Condition	Tool	Ages ⁽³³⁾
Depression	PHQ-9 (Patient Health Questionnaire – 9 item)	12 and older
	PHQ-A (Patient Health Questionnaire – for Adolescents)	12 and older
	SMFQ (Short Mood and Feelings Questionnaire)	6 – 19
Anxiety	GAD-7 (Generalized Anxiety Disorder – 7 item)	12 and older
	SCARED (Screen for Child Anxiety Related Disorders)	8 – 18
	PROMIS (Patient-Reported Outcomes Measurement Information System)	8 and older
Behavior/ ADHD	Vanderbilt (NICHQ Vanderbilt Assessment Scale) with subscales	6 – 12

More information about symptom monitoring tools for pediatric populations can be found in [Appendix 1 Additional Resources](#).

Individualized Assessments

Some pediatric BHCs also include individualized (non-standardized) assessments to track patient and/or parent goals over times. An example is the TOP Problems Assessment, which involves the patient



[Find more information about the Top Problems Assessment approach here.](#)

and/or parent identifying one to three “top problems” they want to work on. Once identified, the specific problems are re-assessed for severity throughout care, typically at each clinical contact ⁽³⁴⁾.

This type of assessment creates another opportunity, in combination with standardized assessments, to track change over time and adjust strategies if needed. Some BHCMS we interviewed appreciated the option to incorporate individualized assessments into their practices. They noted for some patients, especially adolescents with frequent mood changes, monitoring a specific behavior such as the frequency with which they argued with their family in a week, provided beneficial information in combination with standardized assessments.

Example individualized assessment:

A parent and the patient identify the problem as the patient feeling anxious about attending school thus resulting in frequent tardiness. The patient, parent, and BHCM would then track how often the patient is able to get ready on time and arrive to school before the bell rings.

Symptom Monitoring Workflows

Successful CoCM programs develop efficient symptom monitoring tool workflows. For telehealth appointments, some programs have the patient or caregiver complete the tool shortly before they login to their virtual follow up appointment, while others have processes for patients and caregivers in clinic to complete the tool before their appointment begins. See the [Using a Registry section](#) for more information on documenting symptom monitoring tool scores.

Suicide Prevention Protocols

It is critical for practices to develop a process to respond to suicidal ideation in a timely manner, which is more difficult when symptom monitoring tools are completed virtually. Practices should weigh the risks and benefits of administering tools asynchronously and have a protocol for how to identify and respond to

those positive scores in a clinically appropriate manner. From the beginning of treatment, providers should be communicating with patients about their rights and explain confidentiality protocols when conducting suicide screening and crisis response, including the sharing of clinical information in emergency situations and mandated

reporting scenarios. Resources for developing or enhancing your current suicide prevention protocols including guidance around adolescents’ confidentiality can be found in Appendix 1 [Additional Resources](#).



[Download a suicide prevention protocol development or refinement guide here.](#)

Systematic Caseload Review

A core CoCM activity is the Systematic Caseload Review (SCR). During an SCR session, the psychiatric consultant and BHCM meet to review a caseload of patients and discuss specific patient cases. The psychiatric consultant provides recommendations based on data from the rating scale scores, as well as clinical information from the BHCM, EHR, and/or PCP. SCR sessions are typically 60 minutes. However, they can vary in length depending on the complexity of patient cases,



[Read more about SCR best practices and download templates from the article appendix here.](#)

Pediatric Collaborative Care Implementation Guide

the number of patients on the caseload, the rate patients are coming off the caseload, and the experience of the team.

Both the psychiatric consultant and the BHCM should have access to the registry and EHR. They should use data from the registry at the meeting to mutually prioritize patients for review and track action items from the meeting. Both should reserve time before meetings for preparation and after for documentation and follow-up. Meetings should begin with agenda setting, followed by discussion of individual patients in order of priority.

A typical 60-minute session for pediatric patients involves the discussion of three to six patients on the caseload. New or complex patients may require longer discussion. SCR sessions should be held consistently regardless of caseload size; research suggests that ad hoc case review meetings lead to poor outcomes⁽³⁵⁾.

Making time in a busy practice for this regular meeting can be challenging, but studies in adults have shown that the addition of the SCR doubled response to depression treatment, and it is not unreasonable to conclude that the meeting has significant clinical value.

Prioritizing Patient Cases

When reviewing the registry to identify patients to prioritize for SCR discussion, consider the following:

- patients with elevated rating scale scores who have not been reviewed in the past 8 weeks (the time it would typically take to see a treatment response, though it can occur earlier),
- those who are not consistently engaged in care (e.g., no BHCM contact for 4 weeks),
- patients who are not tolerating treatment or who have had recent emergency visits or hospitalizations,
- new patients (if need diagnostic clarification or recommendations for initial treatment planning),
- and patients who are ready to end an active episode of care.

Pediatric teams we spoke with are finding that consultation recommendations often focus more on behavioral interventions, social factors, and interactions with family and school rather than psychopharmacology. One BHCM we interviewed also mentioned bringing to the SCR details on developmental milestones and parent's pregnancy history that is unique with a pediatric population.

At the completion of an SCR session, the team should have arrived at clear plans for ongoing treatment. These should be forwarded to the PCP, especially when action by the PCP is required, like changes in the medication regimen or requests for laboratory testing. This transmission of recommendations should be made in a way that is clearly agreed upon by all parties – this can be as simple as the psychiatric consultant writing brief consultation note in the EHR for the PCP. Some PCPs may feel more engaged with a more personal means of communication, and request that the BHCM speak with them briefly about the treatment recommendations.



[Download an outline for what a BHCM should be prepared to discuss about prioritized patients during SCR.](#)

Barriers to Population-Based and Measurement-Based Care

Despite evidence showing support for population-based and measurement-based care, there are several challenges to recognize and address with pediatric populations. Barriers include a range of categories that interact across patient, provider, infrastructure, and organizational factors.

Patient-level Barriers

Patient-level barriers include motivation to complete measures, time to complete measures, concerns about confidentiality between patients and families, and comfort level of navigating technology used for administering symptom monitoring tools ⁽³⁶⁾. Additionally, youth and their families may incur cultural barriers, such as differences from providers in interpreting the cultural equivalence of the screening and monitoring questions, which may impact their engagement with the measures ⁽³⁷⁾. To support patient and family engagement, it is beneficial for staff to orient patients and families to the screening and symptom monitoring tools and process for the first time. Though time consuming, walking patients and families through the tools often helps the BHCMS assess for cognitive or language barriers, can support patient and families' understanding of its values and facilitation of the tool, and save time in the long run. Additionally, it is important that the symptom rating scales have been culturally validated with communities who are underserved by mental health resources ⁽³⁸⁾, and for providers to attend to the development of culturally tailored education interventions for measurement-based care that may offer supportive approaches to addressing cultural barriers to measurement-based care. With regular administration of symptom monitoring tools and collaborative review of symptoms, patients and families generally become quickly independent, efficient, and accustomed to the process.

Provider-level barriers

Provider-level barriers can range from a provider's preference for their own clinical assessment, lack of recognition of the value of measurement-based care, perceived administrative burden, impact on payments and coverage, and lack of training ⁽³⁶⁾. Further, choosing which symptom monitoring tool to use can be challenging as many are available that are free, in multiple languages and validated for monitoring.

Efficient workflows that promote administration of assessment tools prior to appointments and scores automatically entered in the EHR, as mentioned before, can help alleviate some of these administrative burdens. Collaborative conversations that involve the CoCM team and clinic management can help with provider buy-in and decisions around which screening and symptom monitoring tools will be the best fit for each setting. It's important to consider if providers are already familiar with the tool, if the tool is already available in your EHR, and what populations your program has chosen to serve and track.

Organizational and Infrastructure Barriers

Organizational and infrastructure barriers include the identification and installation of a suitable registry, which can be complex when a program wants to incorporate it into an existing EHR. Experience has shown that registries most effective at guiding the care of a caseload have a small number of entry fields. We found that some practices try to include many different conditions in their registry, including information on complex social needs whose conditions aren't being tracked with measurement-based tools. This can result in confusion over how to monitor and organize the caseload and reduce the usefulness of the

Pediatric Collaborative Care Implementation Guide

registry. It's recommended that practices choose a population for their registry whose symptoms can be tracked with measurement tools, such as anxiety tracked with the SCARED tool, to support efficient management of the caseload, productive use of the registry, and clear gathering of data to guide treatment to target. Practices that have the capacity to work with patients with complex social needs separate from mental health needs could consider a second basic registry, such as a HIPPA Compliant Excel sheet that allows them to track on those patients as well without combining with the CoCM caseload.

Financial Barriers

For nearly all practices, the most significant barriers are financial, these will be discussed in the [Accountable](#) section.

Summary: Measurement-Based Treatment to Target

- There is robust evidence that measurement-based care improves outcomes in treatment of depression in adolescents.
- To be most effective in assessing patient's response to treatment, ongoing measurement of symptoms with a validated symptom monitoring tool is best completed immediately before or during every patient encounter.
- Systematic Caseload Review for a pediatric population should also include reviewing the family and behavioral interventions, social factors, and interactions with family and school.

[Jump to Table of Contents](#)



Evidence-Based Treatments

The treatments offered to patients and their families by the pediatric CoCM team should be based on research evidence demonstrating their effectiveness in treating behavioral health conditions in children and adolescents. When the research evidence is inconclusive or incomplete, treatments offered should be directed by expert clinical guidelines. Children and adolescents in pediatric CoCM may receive brief behavioral treatment, medications, or both as part of their care.

Sources of Evidence

Some sources of evidence that are pre-appraised for scientific merit and clinical relevance include [ACCESSSS from McMaster University](#), [Cochrane Database of Systematic Reviews](#) and [UpToDate.com](#). In addition, practice guidelines published by major practice organizations (like the AAP or AACAP) are also helpful to reference.

Resource	Author
Primary Care Principles for Child Mental Health Care Guide	Seattle Children’s
Guidelines for Adolescent Depression in Primary Care Toolkit	The REACH Institute
Guidelines, Updates, and Parameters	American Academy of Child and Adolescent Psychiatry (AACAP)
Pediatric Psychopharmacology for Primary Care (3rd Ed)	American Academy of Pediatrics (AAP)
Pediatrics Journal	American Academy of Pediatrics (AAP)
Patient Care: Mental Health Initiatives	American Academy of Pediatrics (AAP)

Brief Behavioral Interventions

Commonly used evidence-based, brief behavioral interventions that we came across in our interviews with practices include Behavioral Activation (BA) for adolescents, Cognitive Behavioral Therapy (CBT) for children and adolescents, Behavioral Parent Training (BPT), and Solution Focused Therapy for children and adolescents. These approaches can be delivered by the BHCM or others on the care team who have clinical training, supporting the behavioral health needs of the patient and family.

We recommend that organizations provide specialized training to BHCMs in the specific evidence-based brief behavioral interventions offered by your CoCM program. Implementing brief interventions can often be a shift in thinking for those unfamiliar with or not trained to practice in primary care.

Additionally, organizations should plan to check in with the CoCM team on the use of the specific interventions, as there can be “drift” away from standardized provision of these practices. Program leadership and the psychiatric consultants can support these practices and their implementation.

In [Appendix 2](#) we summarize evidence-behavioral approaches and link to supporting materials or training resources. These approaches can be delivered by the BHCM or others on the care team, supporting the behavioral health needs of the patient and family.

See [Appendix 3](#) for resources for commonly encountered behavioral management issues.

Psychopharmacology

There is limited evidence for the use of psychiatric medications in children and adolescents. [Appendix 4](#) provides an overview of recent psychopharmacology guidance for common behavioral health conditions for pediatric populations. Find more practical guidance in Seattle Children’s Hospital’s [Primary Care Principles for Child Mental Health Care Guide](#) or in [Pediatric Psychopharmacology for Primary Care \(3rd Edition\)](#), published by the American Academy of Pediatrics.

Summary: Evidence-Based Treatment

- Children and adolescents in pediatric CoCM may receive brief behavioral treatment, medications, or both as part of their care.
- Commonly used evidenced-based, brief behavioral interventions used in a pediatric CoCM program include BA, CBT, BPT, and Solution Focused Therapy for children and adolescents.
- Specialized training for behavioral health providers and PCPs in the evidence-based brief interventions is recommended.
- There is limited evidence for the use of psychiatric medications for children and adolescents. When the research evidence is inconclusive or incomplete, treatments offered can be directed by expert clinical guidelines.

[Jump to Table of Contents](#)



Accountable

Accountable care happens at both the care delivery and organizational levels.

Care Delivery Level

The treatment team is accountable to the patient and their family for proactive follow-up and making treatment changes if the patient is not improving. In addition, teams must recognize when patients may be better treated by specialty care or with community and school resources and refer them appropriately. Lastly, members of the treatment team are accountable to *each other* for performing their roles and communicating effectively with each other.

Organizational Level

The organization is accountable to the program for developing and regularly monitoring program quality metrics. This is to ensure care is achieving the clinic's vision and meeting achievable benchmarks based on the evidence-base for CoCM. An ideal method for this is continuous quality improvement using the Plan, Do, Study, Act (PDSA) approach. In addition, the organization is accountable to payers for the quality of care delivered.

Sustainment

To sustain a program, teams must decide how to demonstrate the value of their program, build the business case, and plan for sustainment over time. This includes specifying which process and outcomes quality measures to track at the program and caseload level, funding for the program to be sustainable, and whether patient and provider satisfaction data will be gathered. Teams then utilize continuous quality improvement strategies such as the [Plan, Do, Study, Act approach](#) to work to improve program accountability metrics over time.



[Review guidance on how to Build a Business Case for CoCM here.](#)



[Download the guide to Broadly Defining Value here.](#)

In CoCM, it is important to think of sustainment across three categories: financial, program, and clinical sustainment. These concepts should be discussed early in program design and throughout program implementation.

Financial Sustainment

Upfront Costs of Starting a CoCM Program

The upfront costs to starting a pediatric CoCM program include hiring and training team members, developing a registry, building EHR templates, and creating communication pathways across teams. In addition, there is time and effort spent fostering and maintaining relationships with community mental health, schools, and social service partners. In pediatric CoCM, relationships and pathways for adults to access primary care and mental health services is important, too. Often families (particularly the postpartum population) may need their own referrals for mental health treatment and for ongoing parenting education and support.

Most of the pediatric practices we interviewed talked about how their programs were jumpstarted with government, health insurance payor, health system investments, and/or grant funding. This financial support provided the practices with the ability to fully develop a CoCM team and partnerships in the community. An article that reviewed innovative community partnerships with primary care CoCM programs, noted that the most successful partnership teams also spent the most time planning their programs. Success in a partnership team meant that there was time spent to build the infrastructure and workflows, planning meetings across the partnership, and ongoing training and collaboration. In these programs, initial planning and implementation costs ranged from \$39,280 to \$60,575. After the program was implemented, the cost per patient ranged from \$154 to \$544 ⁽³⁹⁾.

One PCP champion at a rural pediatric clinic, talked about her role and the commitment it took to develop the program. She became an advocate amongst her colleagues and in the community and learned to be okay failing when trying new things with the program. She worked beyond the primary care walls by attending partnership meetings and helping to secure funding with the local government, schools, and social services to meet the youth mental health needs of the community. One marker of success was the “symbiotic relationship” where community organizations supported their program and primary care reached out to community organizations on behalf of patients.

“

You have to be willing to stick your feet and arms out into the community and reach out on behalf of young people.

-- PCP Champion and Advocate

A CEO of a community behavioral health agency that partners with primary care talked about seeing these upfront funds as a critical “runway” for developing a sustainable program and partnership. Emphasizing that one can’t underestimate the time needed from a dedicated PCP champion to help early with program design and implementation, and the importance of building this time and resource into the upfront costs. Their program and partnership took a solid two years to be able to spread to additional clinics and sustain the program. Even after four and a half years the implementation team continues to meet regularly while the leadership across the two agencies meet monthly to review finances and sustainment plans.



This time investment by a PCP champion to work within the clinic and out in the community is a real upfront cost to be considered in pediatric integrated care.

Ongoing Financial Costs and Sustainment

Once you have hired and trained your CoCM team, developed workflows and referral pathways into the community and within your health system, and the infrastructure for population-based care, there are the ongoing maintenance costs that programs hope to sustain through financial revenue.

Depending on financial payors, many of the pediatric clinics interviewed are also billing the Psychiatric CoCM codes first introduced by Medicare in 2017. These codes bundle the payment under the medical treating provider as “incident to” under “general supervision” for all CoCM activities that take place in a month by the BHCM.

A BHCM tracks activities such as:

- the outreach and engagement of patients and families,
- assessments and follow-ups (in person, by phone, virtual or through a portal),
- time spent during SCR with the psychiatric consultant,
- and updating the registry throughout the month.



[Find quick guides for bundled BHI payments here.](#)

Different codes are billed depending on number of minutes in a month and whether a clinic qualifies as a FHQC/RHC or other type of health care provider. Depending on the payor, the CoCM codes allow for a broader level of education backgrounds for staffing the BHCM role so

that primary care practices can hire associate level behavioral health clinicians and nurses to fulfill the BHCM role.

Washington State Medicaid covers the CoCM codes. Providers need to attest that they have a CoCM program before submitting claims for reimbursement. Additional details can be found in the [Washington State Physician-Related Services/Health Care Professional Services Guide](#). The Meadows Institute also published [a paper reviewing Medicaid CoCM billing for youth across the country](#).

Billing and Sustainment Challenges

In our interviews, some of the challenges with CoCM billing and financial sustainment of pediatric CoCM programs include the following:

- Caseload sizes are generally lower in pediatric CoCM, yet the reimbursement amount is the same as adult populations.
- Programs stressed the importance of treating the social determinants of health, community outreach with social service providers, and engagement with schools. This type of outreach and engagement is not reimbursable with FFS billing. Some teams have used care coordinators, community health workers, and outreach workers for this support, but these positions are not currently a reimbursable service under a FFS model and are mostly grant funded.
- Several pediatric practices that we interviewed are small independent practices and don't have a full billing team to advocate with payors for CoCM reimbursement and to track denials, particularly early on, with payors. There continues to be much payor education required about CoCM billing codes.
- There may be times when it's clinically appropriate for a BHCM to see the family separately from their child (the patient.) In these circumstances, billing can be more complicated if the patient is absent for the entire visit.
- In States where adolescents may receive mental health treatment without parental consent, it can be difficult to get billing consent from the family if care is first initiated with the adolescent. One pediatric practice talked about the extra burden and challenge for providers to then track down the caregiver for this consent.



[Find the APA's Payor Advocacy Toolkit here.](#)

Other financial payment options that practices are using to cover the program costs include:

- Many practices incorporate developmental, social determinants of health, and behavioral health screening codes (including postpartum depression) into their workflows and are finding payors are paying for screening as they take a population approach to screening. Washington State Medicaid has a thorough guide on [Early and Periodic Screening, Diagnosis, and Treatment \(EPSDT\)](#) and nationally providers can review the [AAP resource](#).
- Fee-For-Service psychotherapy codes if the organization has hired a licensed behavioral health clinician to be in the BHCM role.
- General Behavioral Health Integration codes (99484/G0511) (not covered under Washington Medicaid) for non-CoCM brief interventions happening in the clinic.
- Health and Behavior Codes (for which the primary diagnosis is a physical health condition) when their CoCM teams work on behavior change and brief interventions around topics such as anger management, bed wetting, sleep, etc.
- Exploring [Alternative Payment Models](#) that might include quality metrics and incentive funding. One practice talked about a contract with a managed care organization that included quality incentive funding for meeting the HEDIS mental health treatment penetration measure along with immunization and well child check visit quality measures. These contracts and relationships that include quality incentive funding for a CoCM program take time to develop, particularly when you have a diverse payor mix.



[Find a summary of the Health and Behavior Codes Guidelines for Use and Billing here.](#)



[Find a brief overview of basic CPT and Medicare billing codes for CoCM here.](#)

Program Sustainment

Program sustainment is defined as the methods and systems that will be used to monitor metrics that demonstrate program success. It is important for the team to consider how they will evaluate whether the program is maintaining fidelity to CoCM and providing effective treatment according to their vision and goals for the program. A program evaluation plan should include program metrics that monitor processes of care, patient clinical outcomes, and help identify potential areas for improvement in the program.

Selecting Metrics & Targets

We recommend selecting three to five measures to start with; ideally ones for which data is readily accessible. Teams will also need to specify the targets for their metrics. The targets in *Table 7* are based on benchmarks from published literature ^(35,40,41), when available, or practice experiences, but there is likely to be wide variation in program performance ⁽⁴²⁾.

Select metrics that:

- reinforce the core principles of CoCM
- align with the goals and vision of the program as well as the organization's broader quality reporting goals
- consider health equity and ways to disaggregate metrics to allow tracking of metrics for diverse populations (i.e., stratified by race, ethnicity, language)

Pediatric Collaborative Care Implementation Guide

An organization's goals should be informed by data from their current practice, regional and national data. For example, the target for depression and anxiety screening should be informed by current rates of screening. Mature programs should aim to screen 80-90% of their population of focus—but new programs that are currently doing little to no screening might aim initially to double their current rate. The table below reviews example program performance metrics by relevant CoCM principle.

Example Program Performance Metrics



Population-Based		
Evaluation Question	Metric	Target
Does the screening workflow have adequate reach?	<ul style="list-style-type: none"> % of patients screened for developmental milestones, ex) postpartum depression, and anxiety Screening data by race, ethnicity, language, and age 	80% of population
Is there adequate access to the program?	<ul style="list-style-type: none"> Average time between identification and first BHCM visit 	<2 weeks
Is the referral rate of new patients adequate to build and sustain the program?	<ul style="list-style-type: none"> % of eligible patients who enroll in CoCM Enrollment data by race, ethnicity, language, and age 	≥50%
	<ul style="list-style-type: none"> % of active caseload that began treatment in the past month (caseload reach) 	10-20%
Are enrolled patients being followed regularly with proactive outreach?	<ul style="list-style-type: none"> % of pts. with ≥ 1 contact/month 	≥80%
	<ul style="list-style-type: none"> % of pts. with no contact for ≥ 2 months 	≤10-15%



Measurement-based Treatment to Target		
Evaluation Question	Metric	Target
Is the BHCM monitoring treatment with an evidence-based screening tool?	<ul style="list-style-type: none"> % of contacts with BHCM that include a PHQ-9, GAD-7, SCARED, etc. in past month 	≥75%
Is the team meeting for SCR?	<ul style="list-style-type: none"> Average # of SCR sessions per month 	≥3-4
Are the appropriate patients prioritized for review?	<ul style="list-style-type: none"> % of patients without adequate improvement who have been discussed during SCR within the previous 60 days 	90%
How effective is the treatment provided?	<ul style="list-style-type: none"> % of patients with baseline score >10 who achieve clinically significant response (≥50% decrease in PHQ-9 score) or remission (PHQ-9 ≤5) % of patients who achieve anxiety improvement (5-point improvement in GAD-7 score) and baseline score is >10 Symptom improvement on Vanderbilt ADHD Assessment ⁽⁴²⁾ Missed school days and workdays by patients/family 	45-65% ^(40,41)



Evidence-based treatments		
Evaluation Question	Metric	Target
Are evidence-based psychotherapeutic treatments being used?	<ul style="list-style-type: none"> Among patients treated with behavioral treatments, % of those who are not receiving evidence-based treatments 	<10%

Routine Metric Review

A clearly articulated process and plan for the implementation team to routinely review these metrics will ensure regular attention to areas needing improvement and support metric reporting goals. The team will need to define the frequency of review, which clinic/organization members will be involved in reviewing these metrics, and what corrective action will take place when areas for improvement are identified. Developing a structured approach to implementing this corrective action aligns with evidence-based approaches to continuously improving the quality of clinical programs, such as the Plan, Do, Study, Act model ⁽⁴³⁾.

Clinical Sustainment

As your program matures and grows, it is important to meet periodically to revisit whether the program is continuing to maintain fidelity to the [core principles of CoCM](#). The following are some commonly encountered challenges and potential solutions as you work to clinically sustain your program.

Staff and Provider Turnover

Effective implementation teams proactively plan for turnover, especially for the BHCM role, by developing an onboarding protocol (include training materials) for newly hired team members. There are a variety of online resources for foundational training in CoCM from the AIMS Center and the American Psychiatric Association (APA).



Consider the following online trainings:

- [For BHCMs \(AIMS Center\)](#)
- [For Psychiatric Consultants \(APA\)](#)
- [For PCPs \(APA\)](#)

Anticipating turnover, vacations, or extended leave, some teams train more than one staff member as BHCMs. If turnover becomes a pattern, teams should investigate the root causes. If burnout is cited as a common reason for turnover of the BHCM role, consider the following:

- ensure caseload size is appropriate for patient complexity and size of the clinic
- ensure the BHCM does not have many non-CoCM program responsibilities
- consider a task-sharing collaboration between a BHCM and care coordinator type role as [discussed in the Patient-Centered Team section](#)



Care coordinators typically have more capacity to address the social needs of patients and their families which can enhance engagement in CoCM overall.

Programmatic Drift

As mentioned previously, it is important that an implementation team clearly define the vision, goals, and population of focus for the pediatric CoCM program. As the program grows and matures, these should be revisited and revised regularly. If this does not occur, programs can drift from the core principles of CoCM. Drift can cause BHCM burnout/turnover, delays in care access, and negatively impact the quality of care delivery.

Pediatric CoCM programs can intervene early and potentially change the trajectory of a patient's symptom development. With this profound impact, many programs want to expand their program scope to support patients and their families through the many developmental stages, or as one PCP champion described, the "developmental arc". However, each developmental stage comes with unique programmatic challenges. Some pediatric practices noted challenges specifically with meeting the needs of perinatal/postpartum parents, children under age 6, and patients with complex diagnoses without adequate referral options or long waits for specialty services. In these cases, consider the following:

- develop and nurture partnerships with community agencies, specialty behavioral health, and adult primary care to streamline the referral process
- for more mature programs, add team members such as, care coordinators, care navigators, or another behavioral provider to increase capacity of the pediatric CoCM program

Inconsistent Registry Use

Several practices we spoke with consider the registry to be more an administrative/data entry tool and less a clinical tool to drive care and treatment decisions. To capitalize on efficiency, the registry becomes most functional when a BHCM uses it daily to track patient outcomes, organize their daily work (e.g., which patients need outreach, which patients are ready for relapse prevention planning, which patients are ready for completing the episode of care), and when both the BHCM and psychiatric consultant use it to support Systematic Caseload Review. A team consistently reviewing the registry data and using the registry during SCR can help enforce the population-based care principle of CoCM.

Summary: Accountable

- Financial, clinical, and program sustainment should be discussed early in program design and throughout program implementation.
- Initial funding to help with upfront costs allows time to build a CoCM team and community partnerships, including pathways for adults to access behavioral health services.
- As your program matures and grows, it is important to continue to meet periodically to revisit whether the program continues to maintain fidelity to the core principles of CoCM.
- Select 3-5 program metrics with readily accessible data that reinforce the core principles of CoCM, align with the goals and vision of the program, align with the organization's broader quality reporting goals and take into consideration health equity. These should include ways to disaggregate data to allow for tracking of metrics for diverse populations (e.g., data stratified by race, ethnicity, age, language).
- A clearly articulated process for the implementation team to routinely review these metrics will ensure regular attention to areas needing improvement and support metric reporting goals.

[Jump to Table of Contents](#)

Conclusion

Around the country primary care practices are addressing the need for more timely culturally responsive behavioral health care by developing robust Collaborative Care programs that partner with community, schools, and behavioral health agencies.

Collaborative Care is a promising model for providing behavioral health services to pediatric populations in primary care. Based on the meta-analysis of treatment outcomes for over 13,000 pediatric patients, CoCM was better at improving outcomes compared to usual care ⁽²⁰⁾. There is still much work to be done at a policy level to help pediatric practices transform care. As outlined in “Policy Recommendations to Promote Integrated Mental Health Care for Children and Youth,” there needs to be financial incentives and policy barriers removed as we transform pediatric practices to support a family’s psychosocial needs ⁽²¹⁾. We need to expand our workforce to include a variety of educational backgrounds and experiences, including lay community health workers who bring critical skills working with families across racial, ethnic, and socioeconomic backgrounds. With both new emerging roles and current primary care roles in integrated care settings, comes the need for robust training programs and pathways for financial sustainment of this workforce.

Collaborative Care is a powerful evidence-based approach to improving access and treatment outcomes in pediatric populations. We look forward to continued innovation in the field to make care increasingly accessible and effective for pediatric populations.

References

1. Angold, A., Erkanli, A., Farmer, E. M., Fairbank, J. A., Burns, B. J., Keeler, G., & Costello, E. J. (2002). Psychiatric disorder, impairment, and service use in rural African American and white youth. *Archives of general psychiatry*, 59(10), 893–901. <https://doi.org/10.1001/archpsyc.59.10.893>
2. Hoover, S., Lever, N., Sachdev, N., Bravo, N., Schlitt, J., Acosta Price, O., Sheriff, L. & Cashman, J. (2019). *Advancing Comprehensive School Mental Health: Guidance From the Field*. Baltimore, MD: National Center for School Mental Health. University of Maryland School of Medicine. www.schoolmentalhealth.org/AdvancingCSMHS
3. National Center for Health Statistics, Division of Vital Statistics. & Curtin, C. S. (2020). State suicide rates among adolescents and young adults aged 10–24: United States, 2000–2018. *National vital statistics reports*; v. 69, no. 11; DHHS publication ; no. (PHS) 2020–1120; <https://stacks.cdc.gov/view/cdc/93667>
4. Leeb, R. T., Bitsko, R. H., Radhakrishnan, L., Martinez, P., Njai, R., & Holland, K. M. (2020). Mental Health-Related Emergency Department Visits Among Children Aged <18 Years During the COVID-19 Pandemic - United States, January 1-October 17, 2020. *MMWR. Morbidity and mortality weekly report*, 69(45), 1675–1680. <https://doi.org/10.15585/mmwr.mm6945a3>
5. National Alliance on Mental Illness. (N.D.). Infographic - It's Okay to Talk About Suicide. <https://www.nami.org/mhstats>
6. Meade J. (2021). Mental Health Effects of the COVID-19 Pandemic on Children and Adolescents: A Review of the Current Research. *Pediatric clinics of North America*, 68(5), 945–959. <https://doi.org/10.1016/j.pcl.2021.05.003>
7. Ali, M. M., Schreier, A., West, K. D., & Plourde, E. (2022). Mental Health Conditions Among Children and Adolescents With a COVID-19 Diagnosis. *Psychiatric services (Washington, D.C.)*, 73(12), 1412–1413. <https://doi.org/10.1176/appi.ps.202100646>
8. U.S. Department of Health and Human Services. (1999). *Mental Health: A Report of the Surgeon General*. U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Mental Health Services, National Institutes of Health, National Institute of Mental Health. <https://profiles.nlm.nih.gov/spotlight/nn/catalog/nlm:nlmuid-101584932X120-doc>
9. American Academy of Child and Adolescent Psychiatry Committee on Collaboration with Medical Professions, AACAP Committee on Healthcare Access and Economics & AACAP Committee on Community-Based Systems of Care (2012). *Best Principles for Integration of Child Psychiatry into the Pediatric Health Home*. AACAP. https://www.aacap.org/App_Themes/AACAP/docs/clinical_practice_center/systems_of_care/best_principles_for_integration_of_child_psychiatry_into_the_pediatric_health_home_2012.pdf
10. American Academy of Child and Adolescent Psychiatry Committee on Health Care Access and Economics Task Force on Mental Health (2009). Improving mental health services in primary care: reducing administrative and financial barriers to access and collaboration. *Pediatrics*, 123(4), 1248–1251. <https://doi.org/10.1542/peds.2009-0048>
11. McCance-Katz E. & Lynch C. (2019). *Guidance to States and School Systems on Addressing Mental Health and Substance Use Issues in Schools*. Substance Abuse and Mental Health Services Administration (SAMHSA) and the Centers for Medicare & Medicaid Services (CMS). <https://store.samhsa.gov/product/guidance-states-and-school-systems-addressing-mental-health-and-substance-use-issues>
12. Elizabeth Tobin Tyler, JD, MA, Rachel L. Hulkower, JD, MSPH, and Jennifer W. Kaminski, PhD. (2017). *Behavioral Health Integration in Pediatric Primary Care: Considerations and Opportunities for Policymakers, Planners, and Providers*. Milbank Memorial Fund. <https://www.milbank.org/publications/behavioral-health-integration-in-pediatric-primary-care-considerations-and-opportunities-for-policymakers-planners-and-providers/>
13. Health Resources and Services Administration/National Center for Health Workforce Analysis; Substance Abuse and Mental Health Services Administration/Office of Policy, Planning, and Innovation. 2015. *National Projections of Supply and Demand for Behavioral Health Practitioners: 2013-2025*. Rockville, Maryland. <https://bhw.hrsa.gov/sites/default/files/bureau-health-workforce/data-research/behavioral-health-2013-2025.pdf>
14. Thomas, C. R., & Holzer, C. E., 3rd (2006). The continuing shortage of child and adolescent psychiatrists. *Journal of the American Academy of Child and Adolescent Psychiatry*, 45(9), 1023–1031. <https://doi.org/10.1097/01.chi.0000225353.16831.5d>
15. Goodwin, R. D., Dierker, L. C., Wu, M., Galea, S., Hoven, C. W., & Weinberger, A. H. (2022). Trends in U.S. Depression Prevalence From 2015 to 2020: The Widening Treatment Gap. *American Journal of Preventive Medicine*, 63(5), 726–733. <https://doi.org/10.1016/j.amepre.2022.05.014>
16. Rural Health Information Hub & Health Resources & Services Administration. (2022). *Map of Health Professional Shortage Areas: Mental Health, by County*. <https://www.ruralhealthinfo.org/charts/7>
17. Bussing, R., & Gary, F. A. (2012). Eliminating mental health disparities by 2020: everyone's actions matter. *Journal of the American Academy of Child and Adolescent Psychiatry*, 51(7), 663–666. <https://doi.org/10.1016/j.jaac.2012.04.005>
18. Ballentine, K. L. (2019). Understanding Racial Differences in Diagnosing ODD Versus ADHD Using Critical Race Theory. *Families in Society*, 100(3), 282–292. <https://doi.org/10.1177/1044389419842765>
19. Richtel, M. (2022). 'Disruptive,' or Depressed? Psychiatrists Reach Out to Teens of Color. *New York Times*. <https://www.nytimes.com/2022/12/13/health/adolescents-mental-health-psychiatry.html>
20. Asarnow, J. R., Rozenman, M., Wiblin, J., & Zeltzer, L. (2015). Integrated Medical-Behavioral Care Compared With Usual Primary Care for Child and Adolescent Behavioral Health: A Meta-analysis. *JAMA pediatrics*, 169(10), 929–937. <https://doi.org/10.1001/jamapediatrics.2015.1141>

Pediatric Collaborative Care Implementation Guide

21. American Academy of Child and Adolescent Psychiatry (AACAP) Committee on Collaborative and Integrated Care and AACAP Committee on Quality Issues (2023). Clinical Update: Collaborative Mental Health Care for Children and Adolescents in Pediatric Primary Care. *Journal of the American Academy of Child and Adolescent Psychiatry*, 62(2), 91–119. <https://doi.org/10.1016/j.jaac.2022.06.007>
22. Dillon-Naftolin, E., Margret, C. P., Russell, D., French, W. P., Hilt, R. J., & Sarvet, B. (2017). Implementing Integrated Care in Pediatric Mental Health: Principles, Current Models, and Future Directions. *Focus (American Psychiatric Publishing)*, 15(3), 249–256. <https://doi.org/10.1176/appi.focus.20170013>
23. Burkhart, K., Asogwa, K., Muzaffar, N., & Gabriel, M. (2020). Pediatric Integrated Care Models: A Systematic Review. *Clinical pediatrics*, 59(2), 148–153. <https://doi.org/10.1177/0009922819890004>
24. Archer, J., Bower, P., Gilbody, S., Lovell, K., Richards, D., Gask, L., Dickens, C., & Coventry, P. (2012). Collaborative care for depression and anxiety problems. *The Cochrane database of systematic reviews*, 10, CD006525. <https://doi.org/10.1002/14651858.CD006525.pub2>
25. Blackmore, M. A., Carleton, K. E., Ricketts, S. M., Patel, U. B., Stein, D., Mallow, A., Deluca, J. P., & Chung, H. (2018). Comparison of Collaborative Care and Colocation Treatment for Patients With Clinically Significant Depression Symptoms in Primary Care. *Psychiatric services (Washington, D.C.)*, 69(11), 1184–1187. <https://doi.org/10.1176/appi.ps.201700569>
26. Unützer, J., Carlo, A. C., Arao, R., Vredevoogd, M., Fortney, J., Powers, D., & Russo, J. (2020). Variation In The Effectiveness Of Collaborative Care For Depression: Does It Matter Where You Get Your Care?. *Health affairs (Project Hope)*, 39(11), 1943–1950. <https://doi.org/10.1377/hlthaff.2019.01714>
27. Pediatric Integrated Care Collaborative. (2017). Improving the Capacity of Primary Care to Serve Children and Families Experiencing Trauma and Chronic Stress: A Toolkit. Johns Hopkins University Bloomberg School of Public Health. <https://picc.jhu.edu/the-toolkit.html>
28. Hilt, R. & Barclay, R. (2023). Primary Care Principles for Child Mental Health: Washington Care Guide (Version 11). Seattle Children's. <https://www.seattlechildrens.org/healthcare-professionals/access-services/partnership-access-line/resources/>
29. Bao, Y., Druss, B. G., Jung, H. Y., Chan, Y. F., & Unützer, J. (2016). Unpacking Collaborative Care for Depression: Examining Two Essential Tasks for Implementation. *Psychiatric services (Washington, D.C.)*, 67(4), 418–424. <https://doi.org/10.1176/appi.ps.201400577>
30. Parikh, A., Fristad, M. A., Axelson, D., & Krishna, R. (2020). Evidence Base for Measurement-Based Care in Child and Adolescent Psychiatry. *Child and adolescent psychiatric clinics of North America*, 29(4), 587–599. <https://doi.org/10.1016/j.chc.2020.06.001>
31. Sarvet, B. (2020). Measurement-Based Care in the Pediatric Primary Care Setting. *Child and adolescent psychiatric clinics of North America*, 29(4), 691–702. <https://doi.org/10.1016/j.chc.2020.06.009>
32. Romba, C., Lavigne, J., Walkup, J., & Ballard, R. (2020). Measurement-Based Care in the Treatment of Anxiety. *Child and adolescent psychiatric clinics of North America*, 29(4), 645–661. <https://doi.org/10.1016/j.chc.2020.06.004>
33. American Academy of Pediatrics. (2021). Mental Health Tools for Pediatrics. American Academy of Pediatrics. https://downloads.aap.org/AAP/PDF/Mental_Health_Tools_for_Pediatrics.pdf
34. Weisz, J. R., Chorpita, B. F., Frye, A., Ng, M. Y., Lau, N., Bearman, S. K., Ugueto, A. M., Langer, D. A., Hoagwood, K. E., & Research Network on Youth Mental Health. (2011). Youth Top Problems: using idiographic, consumer-guided assessment to identify treatment needs and to track change during psychotherapy. *Journal of consulting and clinical psychology*, 79(3), 369–380. <https://doi.org/10.1037/a0023307>
35. Bauer, A. M., Williams, M. D., Ratzliff, A., & Unützer, J. (2019). Best Practices for Systematic Case Review in Collaborative Care. *Psychiatric services (Washington, D.C.)*, 70(11), 1064–1067. <https://doi.org/10.1176/appi.ps.201900085>
36. Krishna, R., Jeffrey, J., & Patel, P. D. (2020). Implementing Measurement-Based Care in Various Practice Settings. *Child and adolescent psychiatric clinics of North America*, 29(4), 573–586. <https://doi.org/10.1016/j.chc.2020.06.007>
37. Boswell, J. F., Hepner, K. A., Lysell, K., Rothrock, N. E., Bott, N., Childs, A. W., Douglas, S., Owings-Fonner, N., Wright, C. V., Stephens, K. A., Bard, D. E., Aajmain, S., & Bobbitt, B. L. (2022). The need for a measurement-based care professional practice guideline. *Psychotherapy (Chicago, Ill.)*, 10.1037/pst0000439. Advance online publication. <https://doi.org/10.1037/pst0000439>
38. Fortney, J. C., Unützer, J., Wrenn, G., Pyne, J. M., Smith, G. R., Schoenbaum, M., & Harbin, H. T. (2017). A Tipping Point for Measurement-Based Care. *Psychiatric services (Washington, D.C.)*, 68(2), 179–188. <https://doi.org/10.1176/appi.ps.201500439>
39. Hoefft, T. J., Wilcox, H., Hinton, L., & Unützer, J. (2019). Costs of implementing and sustaining enhanced collaborative care programs involving community partners. *Implementation science : IS*, 14(1), 37. <https://doi.org/10.1186/s13012-019-0882-6>
40. Blackmore, M. A., Patel, U. B., Stein, D., Carleton, K. E., Ricketts, S. M., Ansari, A. M., & Chung, H. (2022). Collaborative Care for Low-Income Patients From Racial-Ethnic Minority Groups in Primary Care: Engagement and Clinical Outcomes. *Psychiatric services (Washington, D.C.)*, 73(8), 842–848. <https://doi.org/10.1176/appi.ps.202000924>
41. Powers, D. M., Bowen, D. J., Arao, R. F., Vredevoogd, M., Russo, J., Grover, T., & Unützer, J. (2020). Rural clinics implementing collaborative care for low-income patients can achieve comparable or better depression outcomes. *Families, systems & health: the journal of collaborative family healthcare*, 38(3), 242–254. <https://doi.org/10.1037/fsh0000522>
42. Kolko, D. J., Campo, J., Kilbourne, A. M., Hart, J., Sakolsky, D., & Wisniewski, S. (2014). Collaborative Care Outcomes for Pediatric Behavioral Health Problems: A Cluster Randomized Trial. *Pediatrics (Evanston)*, 133(4), E981–E992. <https://doi.org/10.1542/peds.2013-2516>
43. Knudsen, S. V., Laursen, H. V. B., Johnsen, S. P., Bartels, P. D., Ehlers, L. H., & Mainz, J. (2019). Can quality improvement improve the quality of care? A systematic review of reported effects and methodological rigor in plan-do-study-act projects. *BMC Health Services Research*, 19(1), 683–683. <https://doi.org/10.1186/s12913-019-4482-6>

Appendix 1

Additional Pediatric Collaborative Care Resources

Implementation Support Resources

- [Using CoCM for Pediatric Populations \(APA\)](#)
Provides a brief overview about how CoCM can be used to treat pediatric populations.
- [Pediatric Integrated Care Resource Center \(AACAP\)](#)
Designed to promote the integration of medical and behavioral/mental health services for children, adolescents, and their families through resources to professionals working in a variety of settings.
- [Resources for Primary Care \(AACAP\)](#)
Compilation of materials include pediatric practice parameters, pediatric resource centers, information for patients and their families, and resources for integrated care and Collaborative Care.
- [Guidelines for Adolescent Depression in Primary Care Toolkit \(The Reach Institute\)](#)
Toolkit for providers to implement best practices in adolescent depression care, including screening information, intervention guides, and psychoeducation tools.
- [Improving The Capacity of Primary Care to Serve Children and Families Experiencing Trauma and Chronic Stress Toolkit \(Pediatric Integrated Care Collaborative\)](#)
Describes the importance of trauma-informed pediatric integrated care, while encouraging adaptive practices and customization.

Suicide Prevention

- [Zero Suicide for Children and Youth \(Zero Suicide\)](#)
Suicide prevention resources for pediatric populations.
- [Blueprint for Youth Suicide Prevention \(AAP\)](#)
This resource was designed to support pediatric clinicians in advancing equitable youth suicide prevention strategies in all settings.
- [Supporting Adolescent Patients in Crisis Toolkit \(Washington Chapter AAP\)](#)
This toolkit is designed to: (1) support the development of a process for managing a suicidal patient in primary care practices, (2) offer a foundation from which practices can adapt and refine their workflow for responding to suicidal patients, and (3) provide resources and strategies for how pediatric primary care providers can support suicidal adolescents as they wait for care.

Pediatric Collaborative Care Implementation Guide

Measurement-Based Care

- [Measurement Based Care in the Treatment of Mental Health and Substance Use Disorders \(Meadows Mental Health Policy Institute\)](#)
Appendix 2 of this report includes recommended pediatric measures.
- [Screening Technical Assistance and Resource \(STAR\) Center \(AAP\)](#)
Resource that specifies screening tools with pediatrics.
- [Mental Health Tools for Pediatrics \(AAP\)](#)
Compilation to help determine what tools might be most appropriate for each stage of screening, evaluating, and treating pediatric mental health needs.
- [Pediatric Integrated Care Resource Center: Instruments \(AACAP\)](#)
A repository for instruments useful for measuring outcomes in pediatric integrated care.
- [Self-Report Rating Scales to Guide Measurement-Based Care in Child & Adolescent Psychiatry](#)
This article provides a summary of self-report rating scales for measurement-based care.

For Patient's and Their Families

- [HealthyChildren.org \(AAP\)](#)
Provides general information related to child health and specific guidance on parenting issues.
- [Kids, Teens and Young Adults Resources \(NAMI\)](#)
Compilation of essential information and resources intended to help young people get the mental health support they need.

Washington State Resources

- [Reporting Guide for Research and Evidence-based practices in Children's Mental Health \(UW CoLab\)](#)
This guide offers instruction on how to report research- or evidence-based practices for children's public mental health care (under 18) in Washington State, including encounter types and documentation requirements.
- [Partnership Access Line Care Guides and Resources \(Seattle Children's\)](#)
Guides with resource for screening tools, evidence-based behavioral treatment, and pharmacology options for pediatric behavioral health care.

Appendix 2

Evidence-Based Behavioral Interventions for Children & Adolescents

Commonly used evidence-based, brief behavioral interventions that we came across in our interviews with practices include Behavioral Activation (BA) for adolescents, Cognitive Behavioral Therapy (CBT) for children and adolescents, Behavioral Parent Training (BPT), and Solution Focused Therapy for children and adolescents. These approaches can be delivered by the BHCM or others on the care team who have clinical training, supporting the behavioral health needs of the patient and family.

Below we summarize common evidence-based brief behavioral intervention for primary care. For each, we provide links to supporting materials or training resources. They are in alphabetical order.

Acceptance & Commitment Therapy (ACT)

ACT is an extension of traditional CBT which focuses on acceptance and mindfulness strategies. It has been shown to be useful in supporting families with children with psychological and physical difficulties. Direct treatment for mental health difficulties is described as “promising.” Learn more in the book [Acceptance and Commitment Therapy. The Process and Practice of Mindful Change](#).

Behavioral Activation (BA)

BA is a core CoCM behavioral intervention, addressing depression by increasing engagement in rewarding activities and decreasing avoidant behavior. [Learn more about training](#) or in the book [A Clinician’s Guide to BA with Adolescents](#).

Behavioral Parent Training (BPT)

BPT has been found effective in reducing ADHD symptoms, aggression, disruptive behaviors. BPT helps parents learn ways to help their child improve their behavior by introducing concepts such as routines, clear instructions, praise and ignoring of certain behaviors, planning with children for public outings, and using systems with rewards and consequences. Mental health professionals meet with parents individually or in groups to teach these skills. There are several training resources, including: [Parent Training in Behavior Management for ADHD \(CDC\)](#), [12 Behavioral Programs for Managing ADHD \(CHADD\)](#), [Choosing a Parent Training Program \(Child Mind Institute\)](#).

Cognitive Behavioral Therapy (CBT)

For children, meta-analyses have shown large effect sizes for treatment of anxiety disorders, in particular for OCD, where it is shown to be more effective than medication, medium effect sizes for depression, and some efficacy for ADHD, though not superior to medication. It is widely cited as a treatment modality used in the programs surveyed for this toolkit. Find CBT Training from [the Beck Institute](#) or [the Academy of Cognitive and Behavioral Therapies](#).

First Approach Skills Training (FAST)

FAST is a brief behavioral approach for youth and families, intended to address behavioral issues commonly encountered in primary care settings. There are specific materials for anxiety, behavioral issues, depression, trauma, and for parenting teens. [Find resources and training from Seattle Children's here.](#)

Interpersonal Therapy for Adolescents (IPT-A)

IPT-A is an intervention developed to address depression symptoms experienced by adolescents. The focus of IPT-A is to explore and address how relationship issues are related to the onset or ongoing occurrence of depressive symptoms. [Learn more about this intervention here.](#)

Motivational Interviewing (MI)

Motivational Interviewing is a widely implemented evidence-based approach for addressing behavior change. There is evidence for positive outcomes in children for obesity, asthma, medication adherence and HIV. It is thought to be especially promising within the adolescent population when increasing independence can contribute to poorer health outcomes. Read more in [this book](#) or in [this article](#).

Psychoeducation

Psychoeducation can be defined as providing information about a behavioral health condition to patients and their family to improve their understanding of the condition, their engagement with treatment, and their clinical outcomes. Providing information in several different formats has been shown to improve outcomes. Definition of the term psychoeducation is variable in the literature. Practical approaches to several frequently encountered clinical situations can fall under the heading of psychoeducation^(35,36). Research evidence for some of these is incomplete. See [Appendix 3](#) for example psychoeducation resources.

Safety Planning Intervention

Safety planning is an evidence-based and effective technique to reduce suicide risk. Working with the patient and their family, clinicians can guide patients to identify effective coping techniques to use during crisis events. [Learn more here.](#) Additional Suicide Prevention resources are found in Appendix 1 [Additional Resources](#).

Solution Focused Therapy

Solutions focused therapy is a brief psychotherapy model shown to be useful for children and adolescents with externalizing problems, such as conduct disorder, and internalizing problems such as depression, anxiety, and self-esteem. [Learn more here.](#)

Appendix 3

Support for Commonly Encountered Behavior Concerns in Children and Adolescents

Many pediatric patients and their families present to primary care with concerns around specific behavior, such as poor sleep, overuse of screens, nutrition, exercise, and/or general health habits. While these issues may not always correlate with a positive score on a symptom rating scale like the PHQ-9, they may still be concerning for the patient and family and meet criteria for support from the CoCM team.

Below are some psychoeducation resources for commonly encountered behavior concerns in primary care.

Sleep Disturbance

- [General Sleep Medicine Resources \(Seattle Children's\)](#)

A compilation of handouts for parents and families that include, Sleep Hygiene for Children, Sleep Tips for Teenagers, and Bedtime Problems.

Problems with Screen Use

- [Screen Time & Technology \(Child Mind Institute\)](#)

A compilation of resources for parents and families to guide setting technology limits and teaching children and adolescents how to use screens in a healthy way.

- [How Using Social Media Affects Teenagers \(Child Mind Institute\)](#)

An article for parents and families about minimizing the risks associated with technology.

- [Screen Time \(Seattle Children's\)](#)

A brief handout for families about the effects of screen time and strategies for reducing time spent in front of screens.

Nutrition Concerns

- [Take Charge of Your Health: A Guide for Teenagers \(NIDDK\)](#)

An overview of nutrition, exercise, and sleep for teens.

- [Healthy Eating Habits \(Seattle Children's\)](#)

A brief handout for families about improving healthy eating habits.

Behavior Change Around Exercise

- [Exercise and Children \(Seattle Children's\)](#)

An overview for families about healthy exercise for children and teens.

Appendix 4

Evidence-Based Psychopharmacology for Pediatrics

The following is an outline of the evidence base for pediatric psychopharmacology as of February 2022. The goal is to facilitate a quick review by busy pediatric practitioners as well as provide linkage to more definitive literature and resources. The sections are organized by clinical frequency.

Find practical guidance and dosing information in Seattle Children's Hospital's [Primary Care Principles for Child Mental Health Care Guide](#) or in *Pediatric Psychopharmacology for Primary Care*. Riddle M et al, American Academy of Pediatrics, 3rd ed., 2022.

ADHD

Standard prescribing with stimulants and non-stimulant medications is well-described in the standard child psychiatry literature. First line treatment is stimulant medication, all of which are versions of amphetamine or methylphenidate. Secondary options, though also FDA-approved, are alpha-2 adrenergic agonists such as guanfacine and clonidine, and norepinephrine reuptake inhibitors such as atomoxetine and viloxazine.

There has been interest in pharmacogenetic tools to predict best treatment for each child, but available scientific literature does not support their clinical utility.

Resources

- A compact visual guide to the currently available, FDA-approved medications for ADHD is available online at www.ADHDMedicationGuide.com.
- Wolraich ML, Hagan JF, Allan C, et al; Subcommittee on Children and Adolescents with Attention-Deficit/Hyperactive Disorder. Clinical Practice Guideline for the Diagnosis, Evaluation, and Treatment of Attention-Deficit/Hyperactivity Disorder in Children and Adolescents. *Pediatrics*. 2019;144(4):e20192528. (2020). *Pediatrics*, 145(3), e20193997. <https://doi.org/10.1542/peds.2019-3997>

Anxiety

The SSRIs sertraline, fluoxetine, citalopram and escitalopram are safe and effective treatment for anxiety in children and adolescents. SNRIs have some empirical support as an additional treatment option: duloxetine is an SNRI that is FDA approved for treatment of Generalized Anxiety Disorder. Combination treatment of Cognitive Behavioral Therapy and SSRI could be offered preferentially over CBT or SSRI alone in anxiety disorders. There is no increased risk of suicidality in meta-analyses of RCTs of SSRIs for anxiety only.

Resources

- Walter, H. J., Bukstein, O. G., Abright, A. R., Keable, H., Ramtekkar, U., Ripperger-Suhler, J., & Rockhill, C. (2020). Clinical Practice Guideline for the Assessment and Treatment of Children and Adolescents With Anxiety Disorders. *Journal of the American Academy of Child and Adolescent Psychiatry*, 59(10), 1107–1124. <https://doi.org/10.1016/j.jaac.2020.05.005>

Aggression and Irritability, or “Emotional Outbursts” and Use of Antipsychotic Medications

Antipsychotic medications are often used off-label to manage aggression and irritability or emotional outbursts in several conditions, including Oppositional Defiant Disorder, Conduct Disorder, Disruptive Mood Dysregulation Disorder (DMDD), Tics/Tourette’s Disorder, and Autism Spectrum Disorder.

Atypical antipsychotics present even higher risk for weight gain, glucose metabolism issues and movement disorder, including tardive dyskinesia than when used in adults. Weight checks, fasting glucose and lipids and assessment of movement status using the AIMS (Abnormal Involuntary Movement Scale) are indicated semiannually, and weight check at every visit.

Less commonly used for these clinical situations are alpha-2 agonists, such as guanfacine, described in the section on ADHD, and antidepressant medications.

Treating comorbid ADHD, depression or anxiety can improve oppositional behavior, especially when combined with parent management training.

Resources

- “Group 2 Medications: FDA-Approved Antipsychotics and Mood Stabilizers.” In Pediatric Psychopharmacology for Primary Care. Riddle M et al, American Academy of Pediatrics, 3rd ed., 2022.
- [Impairing Emotional Outbursts: Parents’ Medication Guide](#). AACAP / American Psychiatric Association, 2021.

Depression

SSRI’s (except paroxetine), preferably fluoxetine, could be offered to adolescents and children with major depressive disorder.

Treatment with fluoxetine in combination with cognitive behavioral therapy (CBT) accelerates response. All SSRIs have a boxed warning for suicidal thinking and behavior through age 24 years, but treatment guidelines continue to support their use, as the reduction in suicide risk in treated populations is much greater than the risk of suicidal ideation associated with SSRIs. Close monitoring for suicidality is recommended by the FDA, especially in the first months of treatment and following dosage adjustments.

Continued fluoxetine alone or cognitive behavioral therapy plus continued fluoxetine could be offered to adolescents and children responding to acute treatment with fluoxetine to prevent relapse/recurrence of major depressive disorder.

Resources

- Walter, H. J., Abright, A. R., Bukstein, O. G., Diamond, J., Keable, H., Ripperger-Suhler, J., & Rockhill, C. (2022). Clinical Practice Guideline for the Assessment and Treatment of Children and Adolescents With Major and Persistent Depressive Disorders. *Journal of the American Academy of Child and Adolescent Psychiatry*, S0890-8567(22)01852-4. Advance online publication. <https://doi.org/10.1016/j.jaac.2022.10.001>

Post-Traumatic Stress Disorder (PTSD)

More evidence exists for trauma-focused psychotherapy than for medication treatments. However, medications are often prescribed for children with PTSD symptoms. Prazosin may be effective in treating sleep disturbances in youth with PTSD. SSRIs, propranolol, and clonidine have shown benefit in small open trials. No randomized trials of alpha-2 adrenergic agonists, such as guanfacine, or for antipsychotic or anticonvulsant medications exist.

Resources

- Judith A. Cohen and Anthony P. Mannarino, “Posttraumatic Stress Disorder and Persistent Complex Bereavement Disorder”, in [Dulcan’s Textbook of Child and Adolescent Psychiatry](#), 3rd edition, American Psychiatric Press, 2022.

Autism Spectrum Disorder (ASD)

There is no medication approach to the core symptoms of ASD. Pharmacotherapy may be offered to children with ASD when there is a specific target symptom or comorbid condition (e.g., anxiety, depression) or other features, such as aggression, self-injurious behavior, hyperactivity, inattention, compulsive-like behaviors, repetitive or stereotypic behaviors, or sleep disturbances. Medications may have more side effects and more limited therapeutic effects than when used in patients without ASD.

Risperidone and aripiprazole have been approved by the FDA for the treatment of irritability, consisting primarily of physical aggression and severe tantrum behavior, associated with autism. If there is an ADHD comorbidity, trial of low dose of methylphenidate may be of benefit. SSRI’s may be considered if an anxiety or depression comorbidity appears to be present. Melatonin has been shown to be useful for sleep disturbances associated with ASD.

Resources

- Hyman, S. L., Levy, S. E., Myers, S. M., & Council On Children with Disabilities, Section on Development Pediatrics (2020). Identification, Evaluation, and Management of Children with ASD. *Pediatrics*, 145(1), e20193447. <https://doi.org/10.1542/peds.2019-3447>

Bipolar Disorder

There are limited controlled treatment trials in pediatric patients; most treatment recommendations are derived from the adult literature. For mixed or manic episodes, aripiprazole, risperidone, and quetiapine are FDA approved for patients aged 10 to 17, olanzapine is FDA-approved for patients aged 13 to 17 and lithium is FDA-approved for the treatment of acute mania in patients aged 7 to 17. Mood stabilizers such as carbamazepine, divalproex, and lamotrigine are *not* FDA approved and have not been shown to be effective. Bipolar depression has at present no treatment guidelines for children. Based on studies in adults, lithium is recommended as a treatment option for children with bipolar depression. Other mood stabilizers, such as divalproex and lamotrigine have also shown benefits but are not FDA approved.

Resources

- Gabrielle A. Carlson, Caroly Pataki, Anne Duffy, “Bipolar Disorder” in [Dulcan’s Textbook of Child and Adolescent Psychiatry](#), 3rd edition, American Psychiatric Press, 2022.

Disrupted Sleep

The evidence for pharmacotherapeutic approaches with children for insomnia only supports the use of melatonin, with most efficacy found in children with neurodevelopmental conditions such as autism spectrum disorder or ADHD. Data supporting use of melatonin in developmentally normal children are limited. Dosages in studies ranged from 1-12 mg per night. The standard sleep medications used in adults, such as zolpidem, eszopiclone and diphenhydramine were not found to be effective and were associated with significant side effects. As in adults, in spite of a limited evidence base, trazodone is commonly used in older adolescents.

Resources

- McDonagh, M. S., Holmes, R., & Hsu, F. (2019). Pharmacologic Treatments for Sleep Disorders in Children: A Systematic Review. *Journal of child neurology*, 34(5), 237–247.
<https://doi.org/10.1177/0883073818821030>



Research has shown that clinics receiving implementation support from the AIMS Center have significantly better patient outcomes.

For training support and technical assistance implementing Pediatric Collaborative Care, reach out to the AIMS Center: uwaims@uw.edu



AIMS CENTER



UNIVERSITY of WASHINGTON
PSYCHIATRY & BEHAVIORAL SCIENCES