

Evidence snapshot: Behavioral Health Integration for Pediatric Populations

Questions

(1) What are evidence-based models for behavioral health integration (BHI) in primary care for pediatric populations?

(2) What are recommended staffing approaches for BHI in primary care for pediatric populations?

Answer

Collaborative Care interventions have the most robust evidence base for improving patients' mental health outcomes as well as provider satisfaction and self-efficacy. The Collaborative Care model includes a primary care provider, a behavioral health care manager and a supervising psychiatrist or psychologist. Some versions also include a quality improvement lead. Key components of Collaborative Care include evidence-based treatment with medication and/or therapy, a shared treatment plan, and a population-based approach for tracking patients.

BH Integration for Pediatric Populations

Pediatric BH integration differs from adult BH integration in:

- Role of families
- Sensitivity to children's mental & emotional development
- Can involve evaluation of intellectual disability & developmental delays

Collaborative Care for Pediatrics

Based on two systematic reviews and 8 primary studies, there is strong consistent evidence for the effectiveness of the Collaborative Care model in pediatric populations.

Staffing: The Collaborative Care model involves a multidisciplinary team consisting of a primary care provider, a behavioral health (BH) care manager (typically a masters-level therapist or a PhD-trained psychologist), and a consulting psychiatrist or psychologist. Some versions also include a quality improvement lead and/or parent partners.

Model: The Collaborative Care model involves:

- **Screening:** Brief screening for all patients
- **Evaluation:** Patients who screen positive meet with BH care manager for structured evaluation and education on treatment options
- **Shared treatment plan:**
 - o PCP, care manager, patient/family collaborate on shared treatment plan
 - o Includes evidence-based treatment (medication, therapy, or both)
- **Consultation as needed:** Psychiatrist/psychologist available to consult with PCP or care manager

Other Evidence-Based Models

There is some evidence for the effectiveness of other BH integration interventions, which include:

- Brief interventions from PCP with referral to external BH
- Brief interventions from PCP with peer counseling
- Parenting educational classes or groups
- Technology-facilitated interventions

References

1. Asarnow JR, Jaycox LH, Duan N, LaBorde AP, Rea MM, Murray P, et al. Effectiveness of a quality improvement intervention for adolescent depression in primary care clinics: a randomized controlled trial. *Jama* 2005;293(3):311-9.
2. Asarnow JR, Rozenman M, Wiblin J, Zeltzer L. Integrated Medical-Behavioral Care Compared With Usual Primary Care for Child and Adolescent Behavioral Health: A Meta-analysis. *JAMA Pediatr* 2015;169(10):929-37.
3. Borowsky IW, Mozayeny S, Stuenkel K, Ireland M. Effects of a primary care-based intervention on violent behavior and injury in children. *Pediatrics* 2004;114(4):e392-9.
4. Clarke G, Debar L, Lynch F, Powell J, Gale J, O'Connor E, et al. A randomized effectiveness trial of brief cognitive-behavioral therapy for depressed adolescents receiving antidepressant medication. *J Am Acad Child Adolesc Psychiatry* 2005;44(9):888-98.
5. D'Amico EJ, Miles JN, Stern SA, Meredith LS. Brief motivational interviewing for teens at risk of substance use consequences: a randomized pilot study in a primary care clinic. *J Subst Abuse Treat* 2008;35(1):53-61.
6. Fleming MF, Balousek SL, Grossberg PM, Mundt MP, Brown D, Wiegel JR, et al. Brief physician advice for heavy drinking college students: a randomized controlled trial in college health clinics. *J Stud Alcohol Drugs* 2010;71(1):23-31.
7. German M, Rinke ML, Gurney BA, Gross RS, Bloomfield DE, Haliczzer LA, et al. Comparing Two Models of Integrated Behavioral Health Programs in Pediatric Primary Care. *Child Adolesc Psychiatr Clin N Am* 2017;26(4):815-828.
8. Grimes KE, Creedon TB, Webster CR, Coffey SM, Hagan GN, Chow CM. Enhanced Child Psychiatry Access and Engagement via Integrated Care: A Collaborative Practice Model With Pediatrics. *Psychiatr Serv* 2018;69(9):986-992.
9. Harris SK, Csemy L, Sherritt L, Starostova O, Van Hook S, Johnson J, et al. Computer-facilitated substance use screening and brief advice for teens in primary care: an international trial. *Pediatrics* 2012;129(6):1072-82.
10. Hides L, Carroll S, Scott R, Cotton S, Baker A, Lubman DI. Quik Fix: a randomized controlled trial of an enhanced brief motivational interviewing intervention for alcohol/cannabis and psychological distress in young people. *Psychother Psychosom* 2013;82(2):122-4.
11. Kolko DJ, Campo J, Kilbourne AM, Hart J, Sakolsky D, Wisniewski S. Collaborative care outcomes for pediatric behavioral health problems: a cluster randomized trial. *Pediatrics* 2014;133(4):e981-92.
12. Kolko DJ, Campo JV, Kilbourne AM, Kelleher K. Doctor-office collaborative care for pediatric behavioral problems: a preliminary clinical trial. *Arch Pediatr Adolesc Med* 2012;166(3):224-31.
13. Kypri K, Langley JD, Saunders JB, Cashell-Smith ML, Herbison P. Randomized controlled trial of web-based alcohol screening and brief intervention in primary care. *Arch Intern Med* 2008;168(5):530-6.
14. Kypri K, Saunders JB, Williams SM, McGee RO, Langley JD, Cashell-Smith ML, et al. Web-based screening and brief intervention for hazardous drinking: a double-blind randomized controlled trial. *Addiction* 2004;99(11):1410-7.
15. Lavigne JV, Dulcan MK, LeBailly SA, Binns HJ, Cummins TK, Jha P. Computer-assisted management of attention-deficit/hyperactivity disorder. *Pediatrics* 2011;128(1):e46-53.
16. Mason M, Pate P, Drapkin M, Sozinho K. Motivational interviewing integrated with social network counseling for female adolescents: a randomized pilot study in urban primary care. *J Subst Abuse Treat* 2011;41(2):148-55.
17. Mertens JR, Ward CL, Bresick GF, Broder T, Weisner CM. Effectiveness of nurse-practitioner-delivered brief motivational intervention for young adult alcohol and drug use in primary care in South Africa: a randomized clinical trial. *Alcohol Alcohol* 2014;49(4):430-8.

18. Moore JA, Karch K, Sherina V, Guiffre A, Jee S, Garfunkel LC. Practice procedures in models of primary care collaboration for children with ADHD. *Fam Syst Health* 2018;36(1):73-86.
19. Mufson L, Dorta KP, Wickramaratne P, Nomura Y, Olfson M, Weissman MM. A randomized effectiveness trial of interpersonal psychotherapy for depressed adolescents. *Arch Gen Psychiatry* 2004;61(6):577-84.
20. Pbert L, Flint AJ, Fletcher KE, Young MH, Druker S, DiFranza JR. Effect of a pediatric practice-based smoking prevention and cessation intervention for adolescents: a randomized, controlled trial. *Pediatrics* 2008;121(4):e738-47.
21. Perrin EC, Sheldrick RC, McMenamy JM, Henson BS, Carter AS. Improving parenting skills for families of young children in pediatric settings: a randomized clinical trial. *JAMA Pediatr* 2014;168(1):16-24.
22. Platt R, Pustilnik S, Connors E, Gloff N, Bower K. Severity of mental health concerns in pediatric primary care and the role of child psychiatry access programs. *Gen Hosp Psychiatry* 2018;53:12-18.
23. Reid SC, Kauer SD, Hearps SJ, Crooke AH, Khor AS, Sanci LA, et al. A mobile phone application for the assessment and management of youth mental health problems in primary care: a randomised controlled trial. *BMC Fam Pract* 2011;12:131.
24. Reid SC, Kauer SD, Hearps SJ, Crooke AH, Khor AS, Sanci LA, et al. A mobile phone application for the assessment and management of youth mental health problems in primary care: health service outcomes from a randomised controlled trial of mobiletype. *BMC Fam Pract* 2013;14:84.
25. Richardson LP, Ludman E, McCauley E, Lindenbaum J, Larison C, Zhou C, et al. Collaborative care for adolescents with depression in primary care: a randomized clinical trial. *Jama* 2014;312(8):809-16.
26. Richardson LP, McCarty CA, Radovic A, Suleiman AB. Research in the Integration of Behavioral Health for Adolescents and Young Adults in Primary Care Settings: A Systematic Review. *J Adolesc Health* 2017;60(3):261-269.
27. Schlesinger AB. Behavioral Health Integration in Large Multi-group Pediatric Practice. *Curr Psychiatry Rep* 2017;19(3):19.
28. Talmi A, Muther EF, Margolis K, Buchholz M, Asherin R, Bunik M. The Scope of Behavioral Health Integration in a Pediatric Primary Care Setting. *J Pediatr Psychol* 2016;41(10):1120-1132.
29. Turner KM, Sanders MR. Help when it's needed first: a controlled evaluation of brief, preventive behavioral family intervention in a primary care setting. *Behav Ther* 2006;37(2):131-42.
30. Van Voorhees BW, Fogel J, Reinecke MA, Gladstone T, Stuart S, Gollan J, et al. Randomized clinical trial of an Internet-based depression prevention program for adolescents (Project CATCH-IT) in primary care: 12-week outcomes. *J Dev Behav Pediatr* 2009;30(1):23-37.
31. Van Voorhees BW, Vanderplough-Booth K, Fogel J, Gladstone T, Bell C, Stuart S, et al. Integrative internet-based depression prevention for adolescents: a randomized clinical trial in primary care for vulnerability and protective factors. *J Can Acad Child Adolesc Psychiatry* 2008;17(4):184-96.
32. Walter HJ, Vernacchio L, Trudell EK, Bromberg J, Goodman E, Barton J, et al. Five-Year Outcomes of Behavioral Health Integration in Pediatric Primary Care. *Pediatrics* 2019;144(1).
33. Walton MA, Bohnert K, Resko S, Barry KL, Chermack ST, Zucker RA, et al. Computer and therapist based brief interventions among cannabis-using adolescents presenting to primary care: one year outcomes. *Drug Alcohol Depend* 2013;132(3):646-53.
34. Warner CM, Colognori D, Kim RE, Reigada LC, Klein RG, Browner-Elhanan KJ, et al. Cognitive-behavioral treatment of persistent functional somatic complaints and pediatric anxiety: an initial controlled trial. *Depress Anxiety* 2011;28(7):551-9.
35. Yogman MW, Betjemann S, Sagaser A, Brecher L. Integrated Behavioral Health Care in Pediatric Primary Care: A Quality Improvement Project. *Clin Pediatr (Phila)* 2018;57(4):461-470.
36. Yu H, Kolko DJ, Torres E. Collaborative mental health care for pediatric behavior disorders in primary care: Does it reduce mental health care costs? *Fam Syst Health* 2017;35(1):46-57.