BEHAVIORAL HEALTH INTEGRATION WITHIN PRIMARY CARE: A PRIMER

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Behavioral health symptoms are a common presenting complaint within the primary care setting. In fact, behavioral health symptoms account for 15% of chief complaints[1] and inform 50% of presentations within outpatient pediatric practices.[2] As a universal access point, primary care settings are associated with less stigma of behavioral health treatment among patients than mental health clinics, and are opportune locations to treat psychiatric conditions. Despite the convenience for patients of treating behavioral health symptoms within the primary care setting, barriers to the provision of behavioral healthcare by pediatricians exist. These barriers include short appointment times,[3] inadequate reimbursement for behavioral health services,[4] limited specialized training in behavioral health issues,[1] and challenges to accessing child psychiatrists for consultation.[5]

Integrated behavioral health programs within primary care provide both behavioral health and medical services in a primary care setting through a collaborative process that identifies patients, increases access to high-quality behavioral healthcare within the primary and tertiary care settings, and improves patient outcomes. Although most integrated behavioral health programs within primary care have been in adult clinical settings, pediatric practices are also beginning to implement integrated behavioral healthcare models.[6] Pediatric integrated behavioral health settings have demonstrated a reduction in the impact of childhood behavioral health symptoms and have increased developmentally appropriate functioning.[2] This article provides an introduction to the basic principles of integrated behavioral healthcare within a primary care setting as a means to decrease the burden of behavioral health issues in children.

Levels of Behavioral Health Integration Into Primary Care

There are many models of collaborative behavioral healthcare, with varying degrees of integration. In 2013, the Substance Abuse and Mental Health Services Administration (SAMHSA) Health Resources and Services Administration (HRSA) Center for Integrated Behavioral Health Solutions created a framework outlining six levels of behavioral health integration. These six levels are further divided into three categories, characterized by increasing integration between behavioral health and primary care (coordinated, co-located and integrated), with two levels of integration within each category.[7] The "coordinated" category, levels 1 and 2, may also be thought of as a facilitated referral model, in which behavioral health and primary care providers work in separate systems and communicate, either rarely or periodically, about shared patients.[7] The "co-located" category, levels 3 and 4, is characterized by behavioral health and primary care providers working within the same facility, and they may even work within the same space within the facility. Increased communication between providers is a key element of this category, as this is facilitated due to close physical proximity.[7] Providers may also share the same medical record. The "integrated" tier, levels 5 and 6, is characterized by having behavioral health and primary care providers located within the same physical space. In this level of integration, patients' health needs are treated by providers who work together as one team, and behavioral healthcare is interwoven seamlessly into the pediatric team. Collaboration between providers, an important element of integrated care, can be achieved at varying levels of integration.

There is no single approach to the level of integration within a health system. Collins *et al*[8] propose that the level of integration should be designed based on local circumstances, such as population being targeted, service capacity within the community, and provider availability and training. Often, programs contain aspects of more than one category. However, Sarvet and Hilt note that the "success of pediatric integrated care models in pediatric settings is dependent on the degree to which the psychiatric resources are able to participate in the delivery of primary care service as full members of the primary care team."[6]

Collaborative Care: An Approach to Beh avioral Health Integration

The basic principles of integrated behavioral healthcare within a primary care setting can be illustrated through the Improving Mood–Promoting Access to Collaborative Treatment (IMPACT) Collaborative Care (CC) model, one of the most well-studied models of integrated behavioral healthcare within primary care.[8] IMPACT CC is recognized as a best practice by the US Surgeon General and as an evidence-based practice by SAMHSA's National Registry of Evidence-Based Programs and Practices.[9] This model, developed at the Advancing Integrated Mental Health Solutions (AIMS) Center at the University of

Washington, was originally created to improve health outcomes in geriatric patients with depression.[10] IMPACT CC illustrates fundamental principles of integrated behavioral healthcare, the elements of which may also be applied to pediatric settings.

The Collaborative Care Team

Fundamental to the IMPACT CC model is a CC team consisting of a primary care provider (PCP), care manager (CM), psychiatric consultant, and patient.[11] This care team can be extended for pediatric patients to include the patient's caregivers. The PCP role may be filled by a family medicine physician, pediatrician, nurse practitioner, or physician's assistant. The PCP makes an initial diagnosis, initiates treatment, and prescribes psychotropic medications as needed. The CM may be a nurse, social worker, or psychologist who provides care coordination, assesses the patient's progress in treatment, and provides brief behavioral interventions. The CM may also provide evidence-based therapies, such as cognitive-behavioral therapy. If evidence-based therapy is not provided by the CM, the patient may be referred to another provider for this treatment. The psychiatric consultant is usually a psychiatrist: the role of this provider is to act as a team leader for the treatment team. The psychiatric consultant reviews the CM's cases with the CM and consults with the CM and PCP regarding patients not making clinical improvement. The psychiatric consultant will evaluate treatment-resistant patients and those with more severe behavioral health issues in person. An important role of the psychiatrist is to act as a preceptor for the PCP and CM.

Basic Principles of Collaborative Care

The five basic principles of integrated healthcare, as proposed in the IMPACT CC model, are patient-centered care, evidence-based care, measurement-based treatment to target, population-based care, and accountable care.[11] These principles are described below;[11]

Patient-centered care refers to the element of team-based care in which all team members work together to create a shared treatment plan.[11] Central to patient-centered care is co-management of the patient. Regularly scheduled team meetings occur to discuss the patient's progress in treatment and determine next steps in care.

Evidence-based care refers to the use of treatments for which there is evidence of efficacy. Evidence-based practices are defined by the Institute of Medicine as "the integration of best-research evidence and clinical expertise with patient values."

Interventions that warrant the Evidence-Based Practices label must have shown consistent scientific evidence that they demonstrate improvement in consumer outcomes. Within pediatric settings, this includes both child-focused as well as parental and family-focused therapies. For instance, cognitive-behavioral therapy may be employed for anxiety or depression, or the Positive Parenting Program, "Triple P," may be conducted with parents to target behavior management techniques.[12]

Measurement-based treatment to target includes systematic review of patients' progress in treatment, as tracked through a registry system by the CM, in order for patients to reach their behavioral health symptom targets. Within the IMPACT CC model, adult depression is tracked through the Patient Health Questionnaire-9 (PHQ-9) (http://aims.uw.edu/resource-library/phq-9-depression-scale). To assess progress in treatment for pediatric patients, a care team may adopt a psychometrically validated measure such as the Child Depression Inventory (CDI) for children ages 7–17 (http://aims.uw.edu/resource-library/phq-9-depression-scale) or PHQ-9 modified for adolescents (PHQ-A) to monitor progress in treatment of mood symptoms. The strength of the care team is central to this principle of integrated care. The CM and psychiatrist review the CM's caseload together;

Table 1: Levels of Behavioral Healthcare Integration

Tiers	Level of Integration	
Coordinated Care	1	Minimal collaboration
	2	Basic collaboration at a distance
Co-located Care	3	Basic collaboration on-site
	4	Close collaboration on-site/some integration
Integrated Care	5	Close collaboration/approaching integration
	6	Full collaboration/integrated practice

Table adapted with permission from the SAMHSA-HRSA Center for Integrated Health Solutions

the CM utilizes the psychiatrist to discuss the care of patients who are not experiencing symptom relief as demonstrated by lack of improvement in psychometrically validated measures. Treatment recommendations are made by the psychiatrist as a consultant to the CM. Fundamental to measurement and care provision is the concept of stepped levels of care. This refers to providing care that is the least extensive needed for positive results. If the patient's level of functioning does not improve with a basic level of care, then the intensity increases. For instance, a patient may initially receive medication therapy for attention-deficit/hyperactivity disorder (ADHD) from his or her pediatrician and, if the patient does not improve, may then receive a medication evaluation from a child psychiatrist.

Population-based care refers to the registry system as related to measurement-based treatment to target. For instance, for childhood depression, PHQ-9 A scores may be tracked and monitored by the CM. In addition to tracking progress in care, the registry system also serves to ensure patients aren't lost to follow-up. In addition to tracking progress in treatment, another key component of population-based care includes population-based screening for behavioral health issues.[13] For instance, the PHQ-9 A may be used as a screening tool for adolescent depression by PCPs.

The liaison relationship between primary care and child and adolescent psychiatry becomes more important in a population-based healthcare system. Children and families are more comfortable receiving mental health services in their local pediatric practices, and there is evidence that for some psychiatric disorders, treatment compliance and outcome improve when care is provided in these settings.[14] It is, therefore, critical that patients are appropriately identified in primary care and appropriately triaged to more intensive services when necessary. Child and adolescent psychiatry must take an active and responsible role in this process through programs that emphasize integrated care.

Accountable care concerns the concept that behavioral health providers are reimbursed for providing quality care and achieving treatment outcomes.

Conclusion

Behavioral health symptoms commonly present in pediatric settings. Integrated behavioral health programs within pediatric settings increase access to high-quality behavioral healthcare and improve patient outcomes. Although created for adult care settings, the basic principles of integrated behavioral healthcare as exemplified by the IMPACT CC model can also be applied to pediatric care settings. Key principles of CC include patient-centered care, evidence-based care, measurement-based treatment to target, population-based care, and accountable care.

Take Home Summary

The goal of integrated care is to ensure access to high-quality behavioral healthcare. Although there is no single approach to integration, the key principles of integrated care, as exemplified by the IMPACT CC model, may be adapted and applied to pediatric populations.

About the Authors

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References:

1. Williams J, Klinepeter K, Palmes G, Pulley A, Meschan-Foy J. Diagnosis and treatment of behavioral health disorders in pediatric practice. *Pediatrics*. 2004;114:601-6.
2. Martini R, Hilt R, Marx L, *et al*. Best principles for integration of child psychiatry into the pediatric health home. Washington, DC: American Academy of Child and Adolescent Psychiatry; 2012.
3. Meadows T, Valleley R, Kelly-Haack M, *et al*. Physician "costs" in providing behavioral health in primary care. *Clin Pediatr (Phila)*. 2011;50:447-55.
4. Connor DF, McLaughlin TJ, Jeffers-Terry M, *et al*. Targeted child psychiatric services: a new model of pediatric primary clinician-child psychiatry collaborative care. *Clin Pediatr (Phila)*. 2006;45:423-34.
5. Koppelman J. The provider system for children's mental health: workforce capacity and effective treatment. Washington, DC: George Washington University; 2004.
6. Sarvet B, Hilt R. Child and adolescent psychiatry in integrated care settings. In Raney L, ed. Integrated care: working at the interface of primary care and behavioral health. Washington, DC: American Psychiatric Publishing; 2015: 63-90.
7. Heath B, Wise Romero P, Reynolds K. A review and proposed standard framework for levels of integrated healthcare. Washington, DC: SAMHSA-HRSA Center for Integrated Health Solutions; 2013.
8. Collins C, Levis-Hewson D, Munger R, Wade T. Evolving Models of Behavioral Health Integration in Primary Care. New York: Milbank Memorial Fund; 2010.

9. United States Department of Health and Human Services. Mental health: a report of the Surgeon General. Rockville, MD: United States 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; 1999.
10. Unützer J, Katon W, Callahan C, *et al*. Collaborative care management of late-life depression in the primary care setting: a randomized controlled trial. *JAMA*. 2002;288:2836-45.
11. Unutzer J, Ratzliff A. Evidence-base and core principles. In Raney L, ed. Integrated care: working at the interface of primary care and behavioral health. Washington, DC: American Psychiatric Publishing; 2015: 3-16.
12. 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;37:131-42.
13. Raney L. The collaborative care team in action. In Raney L, ed. Integrated care: working at the interface of primary care and behavioral health. Washington, DC: American Psychiatric Publishing; 2015: 17-41.
14. 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-e992.

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