



National Landscape Scan of Integrated Behavioral Health

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PROJECT OBJECTIVES

- **Conduct** a literature review of integrated behavioral health models in pediatric primary care settings across the United States
- **Identify** best practices for program development and implementation
- **Apply** lessons learned from prior peer-reviewed research to guide the planning of innovative integrated behavioral health efforts in Georgia



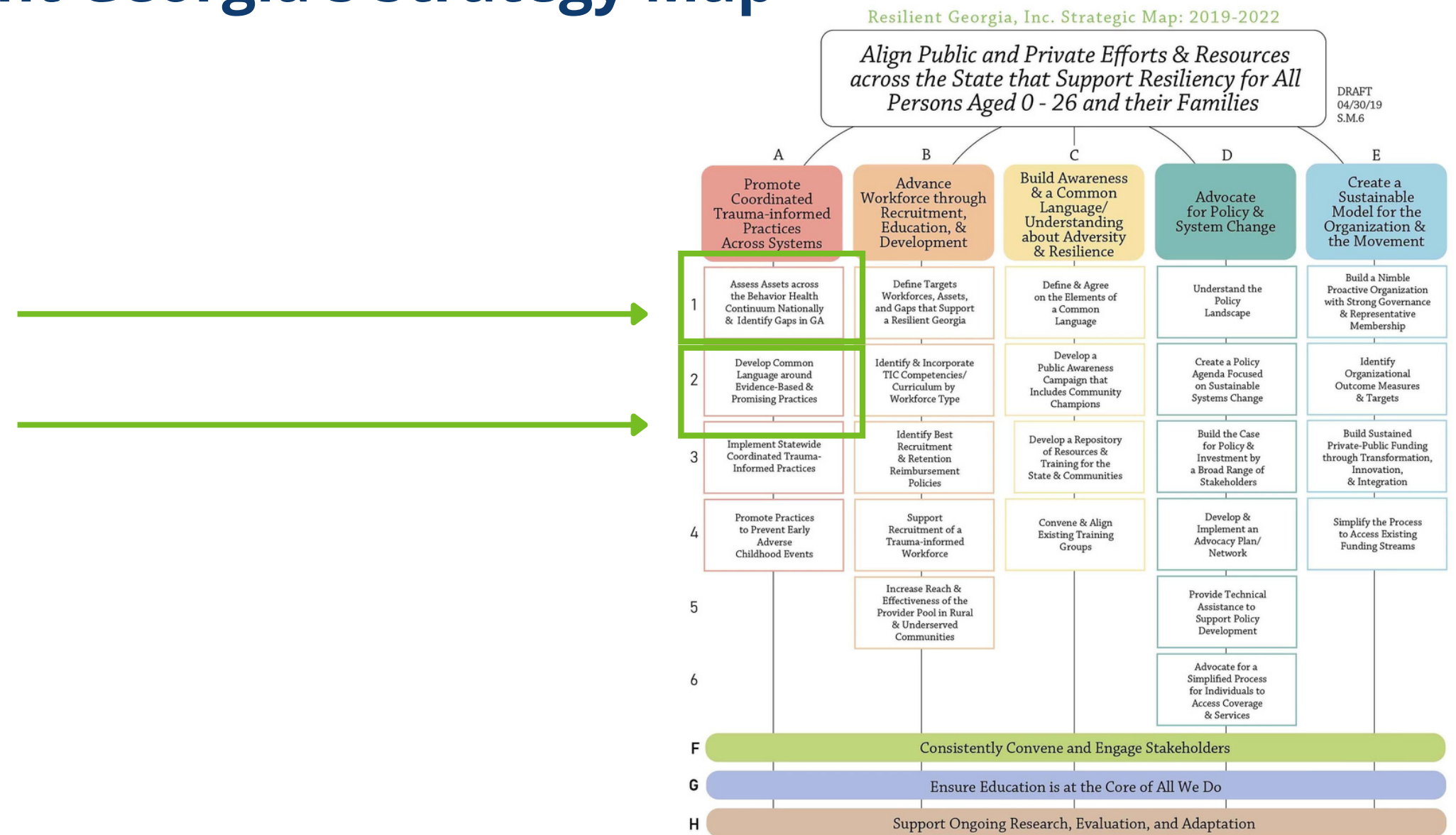
The following research efforts are in support of Strategy A1 and Strategy A2 outlined in Resilient Georgia's Strategy Map

Strategy A1:

"Assess Assets across the Behavioral Health Continuum in Georgia and Nationally and Identify Gaps in GA"

Strategy A2:

"Develop Common Language Around Evidence-Based and Promising Practices"



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CURRENT MENTAL HEALTH BURDEN IN THE UNITED STATES

1 in 5

children and
adolescents
experience a
mental health
disorder each year¹

- Since the COVID-19 pandemic, there have been **significant increases in anxiety and depression among youth**²
- In 2020, the top diagnoses among youth (3-17 years old) were:²
 - **ADHD** 9.3%
 - **Anxiety** 9.2%
 - **Behavioral & conduct problems** 8.1%
 - **Depression** 4.0%

CURRENT MENTAL HEALTH BURDEN IN THE UNITED STATES (CON.)

10 %

of children (3-17 years)
receive any counseling
or treatment,
regardless of
diagnosis, from a
trained mental health
professional¹

- Primary care pediatricians (PCPs) remain the first point of contact for children and families experiencing mental health concerns
- Therefore, primary care pediatrics can serve as an **ideal** setting to address treatment gaps

OVERVIEW:

INTEGRATED BEHAVIORAL HEALTH (IBH)

Collaborative care between PCPs and mental health providers is key to addressing access barriers given that :

- Pediatricians specialize in working with families
- Many mental & behavioral health (MBH) concerns are tied to interpersonal/community-level factors that pediatricians are trained to identify
- Care in schools and other settings are often disconnected from families
- Longer-lasting relationships between providers and patients are key to success



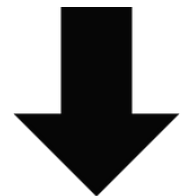


OVERVIEW: INTEGRATED BEHAVIORAL HEALTH (IBH)

What is **Integrated Behavioral Health**?

“The care that results from a practice team of primary care and behavioral health clinicians, working together with patients and families, using a systematic and cost-effective approach to provide patient-centered care for a defined population.”³

Why is **Integrated Behavioral Health** *important*?

There are a number of benefits of integrating behavioral health care in the primary care setting, including: 4,6,7,9

-  **Increased Access to Timely BH Services**
-  **Improved Health Outcomes & Overall Quality of Care**
-  **Reduced Mental Health Stigma**
-  **Decreased Provider Burnout**
-  **Reduced Healthcare Costs & Increased Practice Revenue**

IBH MODELS⁵⁻⁷

- Continuum of care with various methods of delivery
- Programs can consist of several elements across model types



Coordinated

Facilitated referrals



Co-Located

*On-site care
(within the same
building)*



Integrated

*Regular collaboration
between pediatricians
and BH providers with
active co-management
of patients*

IBH MODELS⁵⁻⁷



Coordinated Care Facilitated Referrals

Physical Setting

- Primary care in pediatric office
- BH care in separate location

Clinical Delivery

- Screening & interventions occur separately

Communication

Between Pediatrician & BH Provider

- Communication occurs as needed

Treatment Plans

- Separate for physical and mental health concerns

IBH MODELS⁵⁻⁷



Co-Located Care On-site Care

Physical Setting

- Primary care and BH care in same location (e.g. same building)

Clinical Delivery

- Separate screening & interventions with some shared communication

Communication

Between Pediatrician & BH Provider

- Enhanced, informal communication

Treatment Plans

- Separate for physical and mental health concerns

IBH MODELS⁵⁻⁷



Integrated Care

Regular collaboration between PCPs and BH providers with *active* co-management of patients

Physical Setting

- Primary care and BH care in same location (e.g. same office space)

Clinical Delivery

- “Warm handoffs” during primary care visit
- Established protocols

Communication

Between Pediatrician & BH Provider

- Regular communication between providers
- Often share a common electronic medical record

Treatment Plans

- One treatment plan with both physical & behavioral elements

LITERATURE REVIEW

Project Objective: Conduct a literature review of integrated behavioral health models in pediatric primary care settings across the United States

- RG searched PubMed and PsycINFO for peer-reviewed articles between 2012-2022 that described IBH programs and/or program evaluations.
- As of April 2022, PubMed had 526 articles and PsycINFO had 682 articles meeting the preliminary search terms & inclusion criteria.
- RG then applied the exclusion criteria. Of the total 1,208 articles reviewed, 53 were evaluations of integrated behavioral health programs.
- More detailed descriptions of the approach and articles can be found on the companion excel document.

LITERATURE REVIEW: SUMMARY

Emerging Area of Research

- 37 out of 53 articles were published in the last 5 years

Variety of Programs Implemented

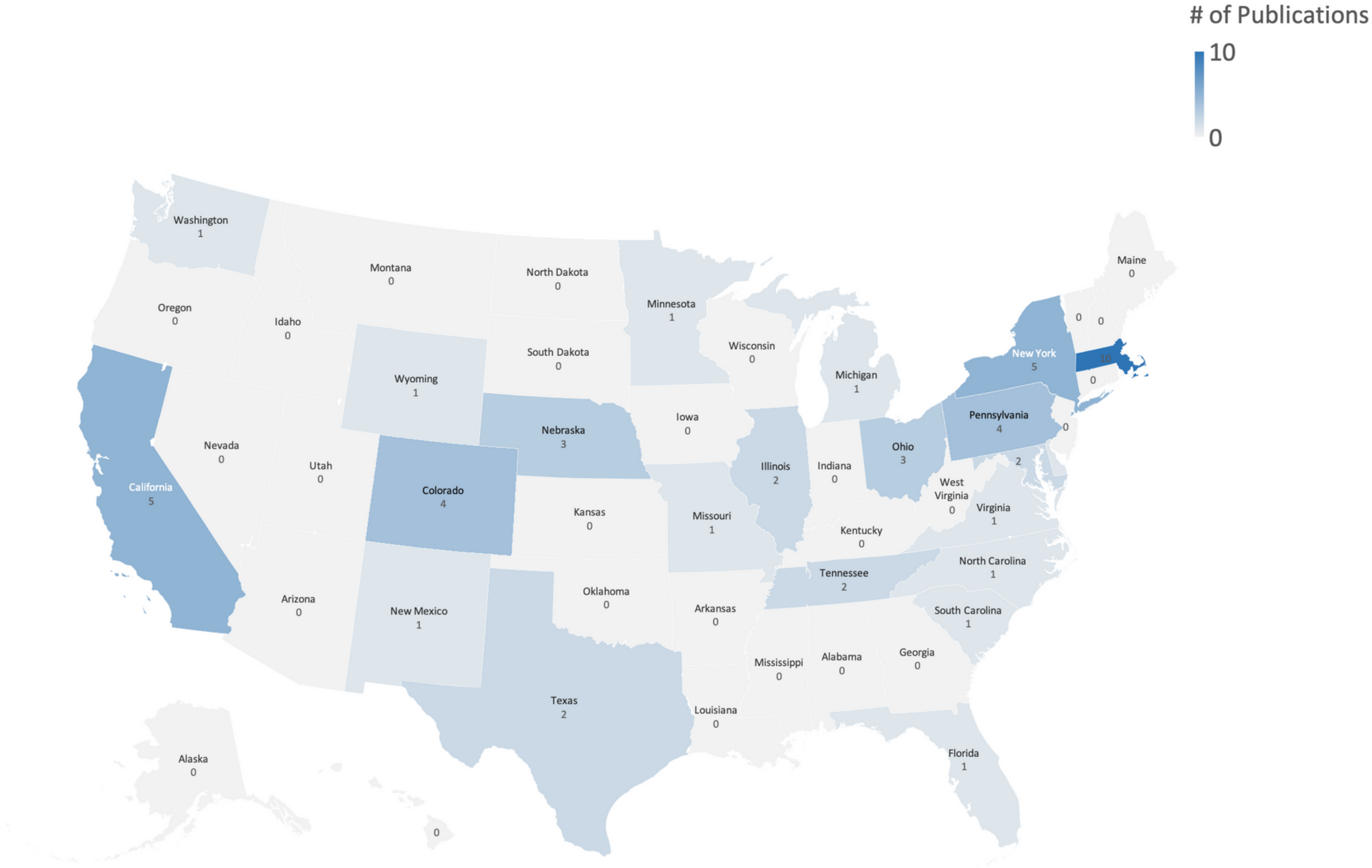
- Each model type was well-represented across states
- Article totals:
 - Coordinated Models = 13
 - Co-Located Models = 13
 - Integrated Models = 28

Vast Geographic Reach

- Programs exist in all major US geographic regions (i.e. Northeast, Midwest, South, and West)
- Massachusetts leads in IBH care with 19% of articles from affiliated institutions and all 3 IBH models represented

LITERATURE REVIEW:
SUMMARY (CON.)

Number of Peer-Reviewed Publications by State





SPOTLIGHT: COORDINATED CARE

Massachusetts Child Psychiatry Access Project (MCPAP)

The Massachusetts Child Psychiatry Access Project (MCPAP) is a system of regional children's behavioral health consultation teams dedicated to increasing access to scarcely available behavioral health services in primary care settings. Teams consist of full-time child and adolescent psychiatrists, independently licensed behavioral health clinicians, resource and referral specialists, and program coordinators. MCPAP provides telephone consultations and education to improve pediatric providers' comfort in screening, treating, and making effective referrals for children and adolescents with behavioral health concerns. Since its statewide implementation in 2004, MCPAP has served as a leading example of coordinated care in Massachusetts and in the United States with over 30 states developing programs based on the MCPAP model.

Additional Sources:

- MCPAP: <https://www.mcpap.com>
- Straus JH, Sarvet B. Behavioral health care for children: the massachusetts child psychiatry access project. *Health Aff (Millwood)*. 2014;33(12):2153-2161. <https://doi.org/10.1377/hlthaff.2014.0896>
- Knutson KH, Masek B, Bostic JQ, Straus JH, Stein BD. Clinicians' utilization of child mental health telephone consultation in primary care: Findings from Massachusetts. *Psychiatric Services*. 2014;65(3):391-394. <https://doi.org/10.1176/appi.ps.201200295>



SPOTLIGHT: CO-LOCATED CARE

Co-Located Behavioral Health Model in the Midwest

Six primary care pediatric clinics—across various geographic locations (urban, suburban, rural) and with various payer mixes—have embedded licensed psychologists in order to improve access to timely and effective behavioral health (BH) services. Social workers and psychiatric nurse practitioners were located on-site as well. In this model, primary care pediatricians referred families to on-site psychologists for behavioral health concerns. Furthermore, the on-site psychologist provided phone triage for BH concerns. With this model, Valleley et al. found that pediatric patients accessed services earlier, presented with less severe symptoms, had higher levels of treatment engagement, had improved outcomes, and required fewer behavioral health sessions to meet treatment goals. For those primary care organizations in which co-located care is most feasible, there is evidence-based literature to support the benefits of this model.

Additional Sources:

- Valleley RJ, Leja A, Clarke B, et al. Promoting Earlier Access to Pediatric Behavioral Health Services with Colocated Care. *J Dev Behav Pediatr*. 2019;40(4):240-248.<https://doi.org/10.1097/dbp.0000000000000662>
- Valleley RJ, Romer N, Kupzyk S, Evans JH, Allen KD. Behavioral Health Screening in Pediatric Primary Care: A Pilot Study. *J Prim Care Community Health*. 2015;6(3):199-204. <https://doi.org/10.1177/2150131914562912>
- Valleley RJ, Hine JF, Clare A, Evans JH. Phone Consultation for Behavioral Health-Related Referrals in Integrated Primary Care. *J Prim Care Community Health*. 2015;6(4):260-263.<https://doi.org/10.1177/2150131915598129>



SPOTLIGHT: INTEGRATED CARE

Behavioral Health Integration Program (BHIP)

The Behavioral Health Integration Program (BHIP) serves as a leading example of an integrated care model in pediatric primary care. BHIP has been implemented in over 50 pediatric practices in Massachusetts and has served over 300,000 patients. Since 2013, BHIP has been gradually implemented in 5 phases beginning with coordinated care and progressing to fully integrated mental and behavioral health services. The program components include (1) on-site services by trained behavioral health providers (2) consultation services for primary care providers (PCPs) (3) longitudinal educational sessions for PCPs and (4) operational and clinical support for practice transformation. Significant findings from peer-reviewed research include improved primary care access to BH services, increased PCP self-efficacy and satisfaction, and an overall increase in BH integration in the primary care setting.

Additional Sources:

- Behavioral Health Integration Program - <https://www.childrenshospital.org/programs/behavioral-health-integration-program>
- Walter HJ, Kackloudis G, Trudell EK, et al. Enhancing Pediatricians' Behavioral Health Competencies Through Child Psychiatry Consultation and Education. Clin Pediatr (Phila). 2018;57(8):958-969. <https://doi.org/10.1177/0009922817738330>
- Walter HJ, Vernacchio L, Trudell EK, et al. Five-Year Outcomes of Behavioral Health Integration in Pediatric Primary Care. Pediatrics. 2019;144(1).<https://doi.org/10.1542/peds.2018-3243>
- Walter HJ, Vernacchio L, Correa ET, et al. Five-Phase Replication of Behavioral Health Integration in Pediatric Primary Care. Pediatrics. 2021;148(2).<https://doi.org/10.1542/peds.2020-001073>

BEST PRACTICES

Project Objective: Identify best practices for program development and implementation

The following best practices are based on expert consensus by the American Medical Association (AMA), American Academy of Pediatrics (AAP), and American Academy of Child and Adolescent Psychiatry (AACAP) with supporting evidence from the peer-reviewed publications in this literature review.

For additional guidance and recommendations, please review the AMA's resources on behavioral health integration.

BEST PRACTICE #1

Assess Practice Readiness for Integration

The Behavioral Health Integration Readiness Assessment (BHIRA) is one tool to assess the degree of current BH integration and opportunities for further integration.

Case Example: Walter et al. (2019) used the BHIRA tool to evaluate practices' readiness to implement their integrated care model. Over a 5-year follow-up period, there were significant increases in the degree of BH integration across various domains (e.g. care coordination, clinical management, leadership, quality improvement, family centeredness).

BEST PRACTICE #2

Identify Team Members Based on Practice Need

The IBH team will consist of both PCPs & behavioral health providers. Determining the number and training level of these providers will vary based on practice location, workforce considerations, cost, and patients' behavioral health needs.

Case Example 1: Sterling et al. (2015) implemented an integrated care model centered on substance use for adolescents in a large, pediatric primary care clinic in California. BH practitioners trained in assessing and managing substance use disorders were specifically recruited and embedded in the primary care setting.

Case Example 2: Peters et al. (2018) found that integrating care coordinators (e.g. social workers) onto the BH team increased treatment engagement. Ancillary staff can improve the overall effectiveness of collaborative care models by facilitating referrals, identifying patients' treatment readiness, and bridging gaps in care.

BEST PRACTICE #3

Establish Practice Workflow and Protocols

Streamlined protocols for *when, how, and from whom patients will receive BH services* are critical in program development. Sharing these protocols to the entire care team ensures that each member understands their role and responsibility in providing care.

Case Examples: There are several examples in the literature of protocols for screening, referral, and intervention. **Shellman et al.** (2019) propose a model (Figure 1 of article) for *co-located care* while **Walter et al.** (2019) propose a model (Figure 1 of article) for *integrated care*.

BEST PRACTICE #4

Encourage Ongoing PCP Education

PCPs report limited training and low confidence in assessing and managing BH concerns.⁸ Embedding trained behavioral providers in IBH models is not enough. BH education can empower PCPs to provide more comprehensive and higher quality of care to their patients within the medical home.

Case Example: Several of the models in the literature implemented educational components either formally or informally. One example is the **Behavioral Health and Learning Community** (BHLC) program implemented in an integrated care model in Massachusetts. BHLC is delivered in-person and virtually over a series of 10 sessions and is led by a multi-disciplinary team of child and adolescent mental health providers. Over a 6-year period, there were significant improvements in PCPs' knowledge, self-efficacy, and quality of care in assessing and managing BH concerns.

BEST PRACTICE #5

Engage Patients and Families in The Integrated Model

Patients and caregivers are key players on the BH team. Direct family engagement can promote the success of integrated care models. Best practices include *introducing the concept of integrated BH early, directly involving patients in their care, providing ongoing BH education & resources, and facilitating strong relationships between BH providers and families.*

Case Example: A “warm handoff” is when members of the primary care medical team (e.g. pediatrician, nurse, medical assistant) directly introduce a patient to the BH provider at the time of care. These handoffs can occur in-person or virtually. While “warm handoffs” are traditionally categorized as a component of fully integrated models, implementation in coordinated and co-located models can improve overall treatment acceptability and engagement.

For additional details on the literature search methodology and descriptions of the peer-reviewed publications, please refer to the companion excel document.

References

1. Mental Health Surveillance Among Children —United States, 2013–2019. Atlanta, GA: Centers for Disease Control and Prevention 2022.
2. Lebrun-Harris LA, Ghandour RM, Kogan MD, Warren MD. Five-Year Trends in US Children's Health and Well-being, 2016-2020. JAMA Pediatr. 2022.
3. Peek CJ. Lexicon for Behavioral Health and Primary Care Integration: oncepts and definitions developed by expert consensus (AHRQ 13-IP001-EF). 2013.
4. Behavioral Health Integration Compendium. (2021). American Medical Association. <https://www.ama-assn.org/system/files/bhi-compendium.pdf>
5. Six Levels of Collaboration/Integration (Core Descriptions). https://www.thenationalcouncil.org/wp-content/uploads/2020/01/CIHS_Framework_Final_charts.pdf.
6. Lynch S, Greeno C, Teich JL, Heekin J. Pediatric integrated behavioral health service delivery models: Using a federal framework to assess levels of integration. Soc Work Health Care. 2019;58(1):32-59.
7. Njoroge WF, Hostutler CA, Schwartz BS, Mautone JA. Integrated Behavioral Health in Pediatric Primary Care. Curr Psychiatry Rep. 2016;18(12):106.
8. Horwitz SM, Storfer-Isser A, Kerker BD, et al. Barriers to the Identification and Management of Psychosocial Problems: Changes From 2004 to 2013. Acad Pediatr. 2015;15(6):613-620.
9. Gouge, N., Polaha, J., Rogers, R., & Harden, A. (2016). Integrating Behavioral Health into Pediatric Primary Care: Implications for Provider Time and Cost. South Med J, 109(12), 774-778. <https://doi.org/10.14423/smj.00000000000000564>.

APPENDIX: Summary Table of Peer-Reviewed Publications

	Title (First Author, Year)*	Model Type	State
1	Strategic Implementation Planning for Integrated Behavioral Health Services in Pediatric Primary Care (Mautone, 2021)	Integrated	Pennsylvania
2	Four Innovations: A Robust Integrated Behavioral Health Program In Pediatric Primary Care (Herbst, 2020)	Integrated	Ohio
3	Adoption And Reach Of Behavioral Health Services For Behavior Problems In Pediatric Primary Care. (Polaha, 2018)	Integrated	Tennessee
4	Utilization of Integrated and Colocated Behavioral Health Models in Pediatric Primary Care (Hoff, 2020)	Co-Located and Integrated	Delaware
5	Enhancing Pediatricians' Behavioral Health Competencies Through Child Psychiatry Consultation and Education (Walter, 2018)	Coordinated	Massachusetts
6	Five-Year Outcomes of Behavioral Health Integration in Pediatric Primary Care (Walter, 2019)	Integrated	Massachusetts
7	Five-Phase Replication of Behavioral Health Integration in Pediatric Primary Care (Walter, 2021)	Integrated	Massachusetts
8	Effect of Mental Health Screening and Integrated Mental Health on Adolescent Depression-Coded Visits (Rinke, 2019)	Integrated	New York
9	Effect of Pediatric Behavioral Health Screening and Colocated Services on Ambulatory and Inpatient Utilization (Hacker, 2015)	Co-Located	Massachusetts
10	Perceptions of the Implementation of Pediatric Behavioral Health Integration in 3 Community Health Centers (Fong, 2019)	Integrated	Massachusetts
11	Integrating Behavioral Health Care into an Urban Hospital-Based Pediatric Primary Care Setting (Owens, 2021)	Integrated	North Carolina
12	Integrating Behavioral Health In The Pediatric Medical Home (Lauerer, 2018)	Integrated	South Carolina
13	Integrated Behavioral Health for Preschool Children in Pediatric Primary Care (Yogman, 2021)	Co-Located	Massachusetts
14	Collaborative Care Outcomes for Pediatric Behavioral Health Problems: A Cluster Randomized Trial (Kolko, 2014)	Integrated	Pennsylvania
15	Trauma-Informed Pediatric Primary Care: Facilitators and Challenges to the Implementation Process (Sala-Hamrick, 2021)	Co-Located	New Mexico
16	Behavioral Health Integration in Large Multi-group Pediatric Practice (Schlesinger, 2017)	Integrated	Pennsylvania
17	Promoting Earlier Access to Pediatric Behavioral Health Services with Colocated Care (Valleley, 2019)	Co-Located	Nebraska
18	Integrated Behavioral Health Care in Pediatric Primary Care: A Quality Improvement Project (Yogman, 2018)	Co-Located	Massachusetts

***Additional details in companion excel document**

APPENDIX: Summary Table of Peer-Reviewed Publications

	Title (First Author, Year)*	Model Type	State
19	Behavioral Health Integration in Health Care Settings: Lessons Learned from a Pediatric Hospital Primary Care System (Godoy, 2017)	Integrated	Washington, D.C.
20	Addressing Adolescent Depression in Primary Care: Building Capacity Through Psychologist and Pediatrician Partnership (Costello, 2021)	Coordinated	Colorado
21	Behavioral Health Service Utilization: Trends In Utilization Within A Patient-Centered Medical Home For Low-Income Children And Women (Abu-Ghname, 2019)	Integrated	Texas
22	The Effects Of Integrating Behavioral Health Into Primary Care For Low-Income Children (Cole, 2019)	Integrated	Massachusetts
23	Comparing Two Models of Integrated Behavioral Health Programs in Pediatric Primary Care (Germán, 2017)	Coordinated	New York
24	Impact Of Location and Availability Of Behavioral Health Services for Children (Wildman, 2012)	Co-Located	Ohio
25	An Electronic Referral and Social Work Protocol to Improve Access to Mental Health Services (Peters, 2018)	Integrated	Pennsylvania
26	Behavioral Health Screening in Pediatric Primary Care: A Pilot Study (Valleley, 2015)	Co-Located	Nebraska
27	Exploring the Telepsychiatry Experience: Primary Care Provider Perception of the Michigan Child Collaborative Care (MC3) Program (Malas, 2019)	Coordinated	Michigan
28	Physician Utilization of a Universal Psychosocial Screening Protocol in Pediatric Primary Care (Shellman, 2019)	Co-Located	Texas
29	Academic-Community Partnership to Improve Pediatric Mental Health Access: Missouri Child Psychiatry Access Project (Ramtekkar, 2022)	Coordinated	Missouri
30	Behavioral Health Care For Children: The Massachusetts Child Psychiatry Access Project (Straus, 2014)	Coordinated	Massachusetts
31	Improving Pediatrician's Behavioral Health Competencies Through the Project ECHO Teleconsultation Model (Hostutler, 2020)	Coordinated	Ohio
32	Phone Consultation for Behavioral Health-Related Referrals in Integrated Primary Care (Valleley, 2015)	Co-Located	Nebraska
33	Integrated Behavioral Health Services: A Collaborative Care Model For Pediatric Patients In A Low-Income Setting (Aguirre, 2013)	Co-Located	California
34	Implementation of Screening, Brief Intervention, and Referral to Treatment for Adolescents in Pediatric Primary Care: A Cluster Randomized Trial (Sterling, 2015)	Integrated	California
35	Severity Of Mental Health Concerns In Pediatric Primary Care And The Role Of Child Psychiatry Access Programs (Platt, 2018)	Coordinated	Maryland
36	Specialty Addiction And Psychiatry Treatment Initiation And Engagement: Results From An SBIRT Randomized Trial In Pediatrics (Sterling, 2017)	Integrated	California

***Additional details in companion excel document**

APPENDIX: Summary Table of Peer-Reviewed Publications

	Title (First Author, Year)*	Model Type	State
37	Health Care Use Over 3 Years After Adolescent SBIRT (Sterling, 2019)	Integrated	California
38	Sustaining Integrated Behavioral Health Practice Without Sacrificing The Continuum Of Care. (Herbst, 2018)	Integrated	Colorado
39	An Innovative Model Of Integrated Behavioral Health: School Psychologists In Pediatric Primary Care Settings. (Adams, 2016)	Integrated	Florida
40	Utilization And Emergency Department Diversion As A Result Of Pediatric Psychology Trainees Integrated In Pediatric Primary And Specialty Clinics. (Pereira, 2021)	Integrated	New York
41	Integrated Pediatric Behavioral Health: Implications For Training And Intervention Models. (Briggs, 2016)	Integrated	New York
42	Launching Forward: The Integration Of Behavioral Health In Primary Care As A Key Strategy For Promoting Young Child Wellness. (Oppenheim, 2016)	Integrated	Maryland
43	Incorporating Trainees' Development Into A Multidisciplinary Training Model For Integrated Behavioral Health Within A Pediatric Continuity Clinic. (Kelsay, 2017)	Integrated	Colorado
44	BHIPP:0–5: Primary Care Practice Transformation In Early Childhood Behavioral Health Integration. (Talmi, 2022)	Coordinated	Colorado
45	Extending Collaborative Care To Independent Primary Care Practices: A Chronic Care Model. (Parkhurst, 2022)	Integrated	Illinois
46	Collaborative Care For Behavioral Health Problems (Murray, 2014)	Coordinated	Minnesota
47	Integration Of Mental Health Services Into An Innovative Health Care Delivery Model For Children With Chronic Conditions. (Glassgow, 2018)	Co-Located	Illinois
48	Promoting Behavioral Health Equity Through Implementation Of The Incredible Years Within Primary Care. (Carson, 2019)	Co-Located	California
49	Delivery Of Behavioral Health Services In A Pediatric Primary Care Setting: A Case Illustration With Adolescent Depression. (Borschuk, 2015)	Integrated	Virginia
50	Clinicians' Utilization Of Child Mental Health Telephone Consultation In Primary Care: Findings From Massachusetts. (Knutson, 2014)	Coordinated	Massachusetts
51	A Statewide Pediatric Psychiatry Consultation To Primary Care Program And The Care Of Children With Trauma-Related Concerns. (Barclay, 2016)	Coordinated	Washington & Wyoming
52	The Recruitment And Acceptability Of A Project ECHO® Eating Disorders Clinic: A Pilot Study Of Telementoring For Primary Medical And Behavioral Health Care Practitioners. (Tantillo, 2020)	Coordinated	New York
53	Increasing Access To Autism Spectrum Disorder Diagnostic Consultation In Rural And Underserved Communities: Streamlined Evaluation Within Primary Care. (Hine, 2020)	Integrated	Tennessee

*Additional details in companion excel document