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SPECIAL SECTION

BEHAVIORAL HEALTH

GUEST EDITORS: SUZANNE E. McLAUGHLIN, MD; NATALIE FENN, PhD; PAUL M. WALLACE, MD

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Behavioral Health

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Cover image reflects Mental Health Awareness Month in May, and is from the Mental Health America website, capturing this year's "green" theme and focus on "More Good Days Together" [HTTPS://MHANATIONAL.ORG/2026-MENTAL-HEALTH-MONTH-ACTION-GUIDE]

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RHODE ISLAND MEDICAL JOURNAL

BEHAVIORAL HEALTH, continued

PUBLIC HEALTH

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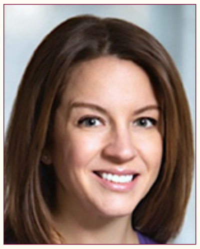

R.E. Beard, MD


T. Cotton, MD


J. Gaines, MD

PEOPLE/PLACES

OBITUARIES

Introduction: Critical Challenges in Addressing Behavioral/Mental Health Needs

SUZANNE E. McLAUGHLIN, MD; NATALIE FENN, PhD; PAUL M. WALLACE, MD
GUEST EDITORS

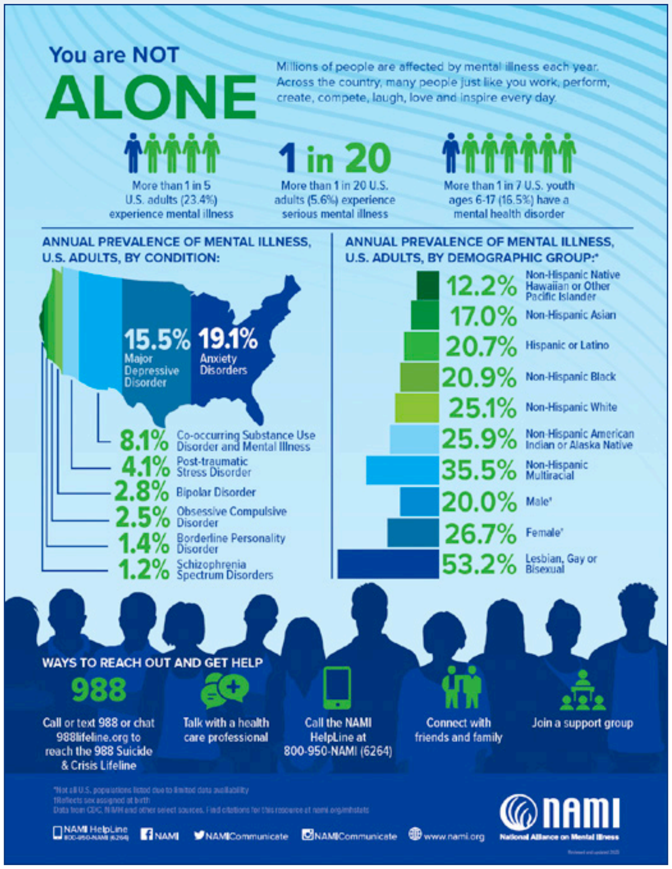
The burden of mental health disorders in the United States has reached epidemic proportions in recent years. Mental illness is now estimated to affect 1 in 5 adults and 1 in 7 adolescents [**Figure 1**].[1]

Behavioral health concerns make up roughly one-third of emergency room visits, and office visits with a primary behavioral health diagnosis have increased 50% in the past two decades.[2] With behavioral health conditions continuing to affect millions of Americans every day, additional research and programming efforts are needed to improve access to services, develop training for professionals at the forefront of care, and research underpinnings and potential treatment options for those with behavioral health needs. There are numerous barriers to identifying those with behavioral health needs and delivering time-sensitive and culturally appropriate behavioral healthcare services. These include challenges with developing and obtaining reimbursement for screening, prevention, collaborative care, and case management; competing demands on primary care providers who are typically the first touchpoint of care[3]; long wait times to see qualified behavioral health providers; and lack of provider training and comfort,[4] particularly for more complex mental health presentations, such as those necessitating multiple psychoactive medications or involving serious mental illness.[5] Fragmentation of care has been identified as a significant concern for patients seeking behavioral healthcare.[6]

Rhode Island's mental and behavioral health challenges parallel the national landscape. This Mental Health Awareness Month, we chose to highlight work conducted both nationally and locally to advance the field of behavioral health across multiple levels: behavioral healthcare programming spanning perinatal to adult care; system-wide interventions to expand resources; and research underscoring potential targets for treatment and considerations for implementing treatments effectively. Our goal in this issue was to illuminate the research and services being conducted in primary care, specialty outpatient practices, partial hospital programs, and inpatient settings across our state. We highlight programming to expand capacity and enhance training of current providers and trainees, and research expanding our care options and understanding of best practices.

Given the strain on existing systems to effectively address behavioral health needs, multiple authors describe interventions to improve primary care capacity to address behavioral health issues. **MICHELLE PIEVSKY, PhD**, and colleagues present on use of integrated behavioral health in primary care settings to create a more efficient and equitable autism evaluation pathway. **JULIE BOERGERS, PhD**, and colleagues describe statewide programming to increase capacity for behavioral health treatment by improving primary care clinicians' understanding of sleep issues in childhood. **ELIZABETH CANTOR, PhD**, and colleagues summarize the evolution and impact of cycles of practice transformation efforts to evolve behavioral healthcare in primary care. Finally, **NELLY BURDETTE, PsyD**, highlights lessons learned about integrated behavioral health in Rhode Island over the past decade.

Figure 1.



There are unique behavioral health needs across the nation specific to youth and their parents, and several researchers and providers presented work in this area. Looking to multiply the impact of limited child psychiatry specialists, **ALISON MANNING, MD**, and colleagues describe the work of the Pediatric Psychiatry Resource Network in improving access to mental healthcare for youth in Rhode Island. **ADAM K. LEWKOWITZ, MD**, and colleagues describe novel services being delivered at a mother-baby partial hospitalization program with a "standalone psychoeducational intervention for perinatal mood disorders for partners or family members." **KATHERINE M. TEZANOS, PhD**, and colleagues offer commentary on improving youth psychiatric hospitalization based on collective years of experience in crisis stabilization, incorporating both patient and parent perspectives.

Exploring the interaction between social determinants of health and treatment outcomes, **ERIC TIRRELL, BA**, and colleagues advance our understanding of how new techniques impact care in a transcranial magnetic stimulation patient cohort with major depressive disorder.

Authors also showcase the importance of ensuring trainees have ample exposure to and experience working with populations exhibiting behavioral health needs. **STEPHANIE J. CZECH, PhD**, and colleagues describe integrated behavioral health training in Family Medicine residency and its relevance to the pursuit of the quintuple aim of healthcare improvement. In response to new accreditation requirements for residency training to prepare our future workforce to be leading providers in behavioral healthcare, **ALISON MANNING, MD**, and colleagues present their work developing a behavioral health-specific rotation in Pediatric residency. Finally, **LYNAE CONYERS, MD**, shares a resident's perspective of what it means to address behavioral health needs among adolescent males beyond the clinic room and sometimes around a dinner table instead.

When we first planned this special issue on behavioral health for the *Rhode Island Medical Journal* (RIMJ), we had hoped for a respectable number of submissions that would showcase the diverse, multidisciplinary, and innovative efforts to address mental health needs in the state of Rhode Island. We are grateful to our colleagues for the many excellent submissions we received, which allowed us to curate an issue that highlights work being conducted across an array of settings and patient populations. We believe these submissions illustrate the importance of training, clinical practice, resources, and systems that shape the behavioral healthcare landscape and our ability to address our ongoing mental health epidemic. Given the large number of submissions we received, we will also present additional behavioral health-oriented manuscripts in later RIMJ issues.

May as Mental Health Awareness Month is another reason to appreciate the multidisciplinary teams supporting behavioral health in Rhode Island: community health workers, social workers, psychologists, psychiatrists, specialists and primary care providers, as well as systems-thinkers in government, non-profit and institutional settings, and many more. It takes a coordinated effort to provide the care and services the people of Rhode Island and beyond deserve, and we thank the authors for their unique contributions to that undertaking.

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Creating a More Efficient and Equitable Autism Evaluation Pathway Through Integrated Behavioral Health in Pediatric Primary Care

MICHELLE PIEVSKY, PhD; VIREN D'SA, MD; PAULO PINA, MD, MPH

ABSTRACT

BACKGROUND: Long wait times for autism spectrum disorder diagnostic evaluations delay access to early intervention and disproportionately affect Hispanic families and families who speak a primary language other than English. Integrated behavioral health models in pediatric primary care offer an opportunity to improve early identification, streamline referrals, and reduce inequities in access to specialty care.

METHODS: We describe the implementation of a tiered, integrated autism screening and diagnostic pathway within Hasbro Children's Pediatric Primary Care Clinic in Providence, Rhode Island. The pathway embeds behavioral health consultation and secondary autism screening into routine well-child visits for children ages 0–3. Children identified as at risk for autism receive expedited referral to specialty diagnostic evaluation using gold-standard assessment tools available in English and Spanish. Program evaluation includes comparison with two historical control groups (2018 pre-COVID and 2022 post-COVID) on wait times to specialty contact and diagnostic evaluation, as well as referral completion and connection to services. Patient experience is assessed using quantitative satisfaction measures and qualitative interviews within a quality improvement framework.

RESULTS: The clinical pathway is currently active, and data collection is underway. Outcome data are not yet available. Early implementation demonstrates the feasibility of embedding secondary autism screening and care coordination within pediatric primary care and highlights the role of behavioral health integration in addressing delays in access to specialty services.

CONCLUSIONS: A tiered, integrated autism evaluation pathway within pediatric primary care has the potential to reduce diagnostic delays, improve equity, and enhance family-centered care. Findings from ongoing evaluation will inform refinement and replication of this model in other primary care settings.

KEYWORDS: Autism spectrum disorder; behavioral health integration; pediatric primary care; early identification; health equity; developmental screening

INTRODUCTION

Timely identification of autism spectrum disorder is essential for optimizing developmental outcomes and reducing family stress. Despite universal screening recommendations, children in the United States experience prolonged delays between initial concern and diagnostic evaluation, with average wait times exceeding two years.[1] During this period, many children do not access early intervention or other supportive services, limiting opportunities to promote development during a critical window of neuroplasticity.[2,3]

These delays disproportionately affect families from minoritized racial and ethnic backgrounds, particularly Hispanic families and families whose primary language is not English.[4,5] Such families face longer waits for diagnostic appointments and additional barriers to navigating specialty care systems. Efforts to improve efficiency must therefore also address equity, accessibility, and patient-centered care.

Integrated behavioral health models within pediatric primary care offer a promising approach to reducing delays and improving continuity of care. By embedding behavioral health clinicians and using tiered screening strategies, primary care practices can identify children at highest risk, provide early guidance to families, and streamline referrals to specialty services. This article describes the implementation of a tiered, integrated autism screening and diagnostic pathway within Hasbro Children's Pediatric Primary Care Clinic in Providence. The program is currently underway, with data collection in progress.

CLINICAL SETTING

The majority of the children in Hasbro Children's Pediatric Primary Care Clinic live in or near Providence, and the clinic's population reflects Providence's racial, ethnic, and linguistic diversity. Most of the children are covered by Medicaid insurance. Prior to implementation, children who screened positive for developmental or autism-related concerns were referred to specialty services at the discretion of primary care providers, resulting in variable follow-up and long waits for diagnostic evaluation.

The goal of the current initiative was to create a more efficient, equitable, and family-centered pathway from primary to specialty care, embedded within an integrated behavioral health framework.

DESCRIPTION OF THE TIERED INTEGRATED PATHWAY

All children attending well-child visits complete standardized developmental and autism-screening measures consistent with the guidelines of the American Academy of Pediatrics,[6] including the Survey of Well-being of Young Children (SWYC)'s autism-specific screener, Parent Observations of Social Interactions (POSI)[7] at 18, 24, and 30 months of age, and the Modified Checklist for Autism in Toddlers-Revised (M-CHAT-R)8 at 18 and 24 months.[8]

Children who screen positive and their families meet with their primary care provider, who explains the results and provides information about next steps in assessment. The family receives written information and a QR code to access an informational video, available in English and in Spanish, describing the assessment process [**Figure 1**]. Some families meet with members of the integrated behavioral health team, including psychologists, social workers, and community health workers, who provide caregiver education, clinical consultation, and/or care coordination, allowing concerns to be addressed during the same visit in which they are identified.

Many of the children who screen positive as having autistic traits complete the Rapid Interactive Screening Test for Autism in Toddlers (RITA-T),[9] a secondary screening assessment administered by trained clinicians within primary care. This brief, interactive tool evaluates social-communication differences commonly seen in young children with autism. The research team is conducting a validation study to assess the sensitivity and specificity of the RITA-T's suggested cutoff scores with the clinic's population, with the goal of using the RITA-T in the future to more appropriately guide referrals to specialty care for autism evaluations.

At present, all children referred through the pathway, regardless of RITA-T score, are fast-tracked to the Children's Neurodevelopment Center for an autism evaluation, using the Autism Diagnostic Observation Schedule, 2nd Edition (ADOS-2).[10] Diagnostic assessments are conducted in English or Spanish. After the assessment, families receive oral feedback about the results of the evaluation, during which time they receive a written report that includes individualized recommendations, including referrals to early intervention and other services as indicated.

Figure 1. QR Code with Link to English Video Describing Assessment Process

EVALUATION PLAN

Program outcomes will be compared with two historical clinical control groups drawn from the same primary care clinic: a 2018 pre-COVID control group and a 2022 post-COVID control group. Children in all groups screened positive as having autistic traits based on the SWYC POSI or the M-CHAT.

The two historical control cohorts were demographically similar and reflected the racial, ethnic, and socioeconomic diversity of the clinic's patient population [**Table 1**]. Children in the 2018 (n = 152) and 2022 (n = 162) cohorts were screened at a mean age of 2.11 years (SD = 0.50) and 1.97 years (SD = 0.46), respectively. In both cohorts, the majority of children were male (64.5% in 2018; 58.6% in 2022).

Both cohorts were racially and ethnically diverse. Over half of children in each group were identified as Hispanic or Latino (52.0% in 2018; 58.0% in 2022). A substantial proportion of children were identified as Black or African American (29.0% in 2018; 27.8% in 2022), with smaller proportions identified as White, Asian, or American Indian/Alaska Native. Many families reported racial identities categorized as "Other," reflecting the limitations of structured race fields in the electronic medical record.

The majority of families in both cohorts used English as their primary language to communicate in the healthcare setting (86.2% in 2018; 88.3% in 2022), with Spanish being the most common non-English language (9.9% in both years). Additional languages were represented in small numbers, highlighting the linguistic diversity of the clinic population.

Most children in both cohorts were publicly insured through Medicaid (88.8% in 2018; 85.2% in 2022), underscoring the socioeconomic vulnerability of the population served.

By the end of the respective calendar years, relatively few children had received a formal autism diagnosis (2.6% in 2018; 8.00% in 2022). In the years since their initial autism screens, considerably more were diagnosed with autism (13.16% from the 2018 cohort; 22.84% from 2022), underscoring the fact that most children were not formally diagnosed within the same calendar year when they were first identified as having autistic traits.

Of note, the two cohorts differed greatly in their diagnostic profiles, with the 2022 post-COVID cohort exhibiting notably more comorbid speech delays (54.94%) compared to the 2018 pre-COVID cohort (32.89%). The samples similarly differed in proportion of autism diagnoses, both within the same calendar year and lifetime (2.63% same year and 13.16% lifetime in 2018; 8.00% same year and 22.84% lifetime in 2022). The cohorts had similar proportions of children with comorbid developmental delays, however (26.32% in 2018, 25.31% in 2022). It may be that differences in the social and linguistic development of the 2022 cohort were impacted by the COVID shutdown.

Primary outcomes include time from identification of autistic traits to specialty contact, time to first specialty visit, time to diagnostic evaluation, and time to autism diagnosis for children ultimately diagnosed. Secondary outcomes include referral completion and connection to early intervention, audiology, speech therapy, and occupational therapy. Survival analysis methods will be used to compare time-to-event outcomes across groups.

Table 1. Demographic Characteristics of Children Identified as At Risk for Autism in Historical Control Groups

	2018 Control Group (Pre-COVID)	2022 Control Group (Post-COVID)
N	**152**	**162**
Age at screening		
Mean (SD)	2.11 (0.50)	1.97 (0.46)
Range	1.39–3.99	1.00–3.89
Gender, n (%)		
Male	98 (64.47%)	95 (58.64%)
Female	54 (35.53%)	67 (41.36%)
Other	0 (0.00%)	0 (0.00%)
Race (individuals can identify with more than one label), n (%)		
Black or African American	44 (28.95%)	45 (27.78%)
White or Caucasian	25 (16.45%)	32 (19.75%)
Asian	3 (1.97%)	3 (2.47%)
American Indian or Alaska Native	0 (0.00%)	1 (0.62%)
Other	85 (55.92%)	89 (54.94%)
Unknown	1 (0.66%)	0 (0.00%)
Ethnicity, n (%)		
Hispanic or Latino	79 (51.97%)	94 (58.02%)
Not Hispanic or Latino	73 (48.03%)	67 (41.36%)
Unknown	0 (0.00%)	1 (0.62%)
Primary Language, n (%)		
English	131 (86.18%)	143 (88.27%)
Spanish	15 (9.87%)	16 (9.88%)
Kunama	2 (1.32%)	0 (0.00%)
Arabic	1 (0.66%)	0 (0.00%)
Cambodian	1 (0.66%)	0 (0.00%)
Cape Verdean Creole	1 (0.66%)	0 (0.00%)
Haitian Creole	0 (0.00%)	1 (0.62%)
Hmong	0 (0.00%)	1 (0.62%)
Portuguese	0 (0.00%)	1 (0.62%)
Somali	1 (0.66%)	0 (0.00%)
Insurance Type, n (%)		
Medicaid	135 (88.82%)	138 (85.19%)
Commercial	9 (5.92%)	20 (12.35%)
Behavioral	3 (1.97%)	1 (0.62%)
HMO	2 (1.32%)	2 (1.23%)
Not Listed	2 (1.32%)	1 (0.62%)
PPO	1 (0.66%)	0 (0.00%)
Comorbid developmental diagnoses (same year)		
Speech delay, n (%)	50 (32.89%)	89 (54.94%)
Developmental delay, n (%)	40 (26.32%)	41 (25.31%)
Autism diagnosis		
Same year, n (%)	4 (2.63%)	13 (8.02%)
Lifetime, n (%)	20 (13.16%)	37 (22.84%)

Abbreviations: n = number. SD = standard deviation.

Footnotes: Children in both groups were identified as at risk for autism based on standardized screening results obtained during well-child visits between ages 0–3 years.

Data were obtained via retrospective chart review of patients seen in pediatric primary care in 2018 (pre-COVID) and 2022 (post-COVID).

PATIENT EXPERIENCE AND QUALITY IMPROVEMENT

Patient and caregiver experience is a central focus of the pathway. Satisfaction data are collected following primary care and specialty visits, and families are invited to participate in qualitative interviews to identify barriers to care and unmet needs. These data will contribute to quality improvement projects using a Plan–Do–Study–Act framework to iteratively refine workflows, communication strategies, and supports for families. Particular attention is paid to understanding barriers faced by families who do not attend scheduled specialty visits, including logistical, linguistic, and socioeconomic challenges.

CURRENT STATUS AND FUTURE DIRECTIONS

The pathway is currently active, and data collection is underway. The first evaluation was completed on August 1, 2025, and since then 18 patients have received expedited autism evaluations under this pathway. While outcome data are not yet available, early implementation demonstrates the feasibility of embedding secondary autism screening and expedited referral processes within routine pediatric primary care.

Future directions for this work focus on refining the clinical pathway and ensuring that it is both evidence-based and responsive to community needs. One ongoing line of research is a validation study of the RITA-T within this clinic population. This study will evaluate the sensitivity and specificity of proposed cutoff scores and examine how secondary screening results can most effectively guide referral decisions. Establishing local validity is a critical step toward using the RITA-T to more precisely triage referrals, reduce unnecessary specialty evaluations, and further decrease wait times without compromising diagnostic accuracy.

In parallel, our team has received funding to conduct a community-engaged study aimed at extending the pathway beyond expedited diagnosis toward sustained, equitable longitudinal care. Using group concept mapping, a highly participatory mixed-methods approach, we will collaborate with autistic self-advocates, caregivers, educators, and primary care providers to co-develop a prioritized action plan for how primary care can better support children with autism and their families across the course of childhood. Outputs from this work will directly inform quality-improvement initiatives in the clinic and guide future intervention development.

If the current pathway is shown to reduce diagnostic delays and improve family experiences, a longer-term goal is to expand this model to additional primary care clinics across Rhode Island. Under this model, clinicians at the Children's Neurodevelopment Center would serve as a hub for expedited autism assessments and provide training and ongoing consultation to primary care teams, implementing primary and secondary screening, care coordination, and post-diagnostic support. This hub-and-spoke approach has the potential to extend the reach of specialty expertise, reduce geographic and linguistic barriers, and strengthen the capacity of pediatric medical homes to provide integrated, developmentally informed care.

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Behavioral Sleep Education in Pediatric Primary Care: Building Capacity Through the Extension for Community Healthcare Outcomes (ECHO) Model

JULIE BOERGERS, PhD; ELIZABETH CANTOR, PhD; LINDA CABRAL, MM; PHOS IVESTEI, BA; LINDSAY STAGER, PhD; RICHARD MILLMAN, MD

ABSTRACT

BACKGROUND: Sleep disorders are prevalent in children yet significantly underdiagnosed and undertreated in primary care. The Extension for Community Healthcare Outcomes ("Project ECHO©") is a telementoring model that connects healthcare specialists with generalists, combining brief didactic presentations and case-based learning. In this one-year project, the ECHO© model was employed to train primary care pediatricians in Rhode Island in behavioral sleep management strategies.

METHODS: Monthly teleconference sessions included a didactic presentation by a pediatric behavioral sleep expert, followed by a case presentation and discussion. Practices also designed and completed a Quality Improvement project, supported by monthly meetings with a facilitator. Six practices enrolled; 10 clinicians completed both pre- and post-program evaluations.

RESULTS: Providers reported increased knowledge about pediatric sleep, particularly in the areas of sleep training in infants, and addressing sleep in patients with Autism Spectrum Disorder and Attention Deficit Hyperactivity Disorder. Improvements in overall confidence and comfort to address sleep in primary care were reported. After the project, providers reported an increase in systematic tracking of sleep concerns, and an increase in frequency of follow-up visits to address sleep.

CONCLUSIONS: Project ECHO© is a promising model for diffusion of practice-based behavioral sleep knowledge to primary care pediatricians. An expanded clinical skillset helps primary care pediatricians feel empowered to identify and address sleep problems in their practices, which has the potential to improve sleep care and preserve healthcare resources.

KEYWORDS: pediatric sleep; pediatric primary care; provider education; Project ECHO

INTRODUCTION

Pediatric sleep disorders are highly prevalent, affecting approximately 25% to 30% of children and adolescents.[1] A large body of literature has linked poor sleep to a variety of negative consequences, including behavioral dysregulation,[2] impaired cognitive development and academic performance,[3] and health issues such as obesity and decreased immune function.[4] Despite the critical importance of sleep for optimal child and family functioning, pediatric sleep disorders remain underdiagnosed and undertreated.[5]

The primary care setting is considered an essential environment for the screening and management of sleep issues because nearly all children attend regularly scheduled well-child visits. However, a substantial "sleep-care gap" exists, in that high prevalence rates of sleep disorders contrast sharply with lower rates of clinical identification and treatment.[6] For example, a review of medical records in a large primary care network showed that only 3.7% of children received a sleep-related diagnosis.[5] This discrepancy is largely attributed to a pervasive lack of formal education in sleep medicine. Globally, medical schools dedicate an average of less than three hours to sleep-related topics, with only 17 minutes focused specifically on pediatric sleep.[7] Only 1.5% of pediatric residencies in the United States require a sleep medicine rotation.[8] Consequently, many pediatric residents complete their training with very limited dedicated sleep instruction.

This educational deficit can result in low provider knowledge and a lack of clinical confidence. In one community survey of primary care providers, respondents reported low levels of confidence in evaluating (34%) or treating (25%) pediatric sleep disorders.[9] Conversely, in another survey, primary care providers who had received training in pediatric sleep had higher knowledge scores, reported greater confidence in addressing sleep problems, and reported more regularly screening their patients for sleep disorders.[10] Beyond knowledge gaps, primary care teams face significant structural barriers, including demanding workloads and severe time constraints during consultations. Additionally, providers often rely on the assumption that parents will volunteer sleep concerns, yet parents frequently fail to report these issues because they lack the knowledge to recognize them or assume they are a normal part of development.[6] Therefore, a lack of systematic screening can miss sleep concerns. The International Pediatric Sleep Association has recently highlighted the urgent need for targeted, accessible sleep education programs to enhance provider competence.[11]

To address these barriers, innovative training models such as telementoring have been proposed to bridge the gap between specialty sleep care and primary practice. Project Extension for Community Healthcare Outcomes (Project ECHO©) is a telementoring model established in 2003 at the University of New Mexico School of Medicine to improve access to specialized care for underserved populations.[12] It utilizes a "hub-and-spoke" structural design that connects an interprofessional team of specialists (the "hub") with community-based generalists (the "spokes") via a virtual videoconferencing platform to create virtual "communities of practice." A core feature of Project ECHO© is the "all teach, all learn" principle, which ensures that knowledge sharing is bidirectional and participatory. Sessions typically consist of two main components: a brief specialist-led didactic presentation on a specific clinical topic and case-based learning, where generalists present anonymized, complex patient cases for multidisciplinary discussion and telementoring. Both specialists and generalists contribute their unique expertise to clinical discussions.

The ECHO© framework has been used with a wide range of different health conditions and populations, often focusing on increasing the capacity of generalists to manage cases that would otherwise require long waiting times for specialists. The model has been successfully applied to sleep in adult veterans within the U.S. Department of Veterans Affairs healthcare system.[13,14] Providers in the Sleep VA-ECHO© program reported increased skills and comfort in managing common sleep complaints,[13] with nearly all reporting utilizing their new knowledge monthly to care for patients, and two-thirds reporting sharing their new knowledge with colleagues at least once a month.[14] The greatest increase in comfort was reported with non-pharmacologic (behavioral) management of insomnia and patient education,[14] suggesting a need for specific training in these areas.

Evidence-based behavioral interventions such as graduated extinction or stimulus control are the gold standard for treating insomnia and other sleep problems in children and adults, yet many primary care providers feel ill-equipped to provide behavioral strategies.[6] To our knowledge, ECHO© programs specifically addressing pediatric sleep have not previously been described in the literature, though management of sleep problems was a dedicated didactic topic in a broader ECHO© program focused on childhood autism spectrum disorder (ASD).[15]

In this project, we aimed to implement and assess a novel pediatric sleep Project ECHO© program for primary care providers in Rhode Island. The curriculum focused on behavioral sleep medicine principles to equip frontline providers with the tools necessary to effectively screen, diagnose, and treat the most common sleep challenges encountered in pediatric primary care, in order to expand capacity to treat pediatric sleep problems.

METHODS

"Optimizing a Behavioral Health Approach for Children's Sleep in Pediatrics" was a year–long ECHO© telementoring program developed by the Care Transformation Collaborative of Rhode Island (CTC-RI), which is an ECHO© hub. CTC-RI has previously successfully leveraged this training model to other pediatric behavioral health topics. Any primary care practice in Rhode Island serving pediatric patients (age 0–22) was eligible to apply to participate in this initiative. The project was advertised on the CTC-RI website and newsletter, and by outreach to practices. Interested practices completed an application requesting practice-level information (e.g., size of panel, payor mix) and how they would benefit from participation.

This project focused on increasing knowledge about sleep across childhood, developing skills in provision of developmentally targeted guidance to families on healthy sleep using behavioral health principles, facilitating exchange of information and ideas on how to improve sleep problems in pediatric patients, sharing empirically supported behavioral treatments for sleep problems, and improving comfort and confidence in treating sleep problems among non-specialty providers. The curriculum was developmentally structured and focused on specific skills to implement with patients (i.e., "clinical pearls") at each developmental stage. Although the focus was on pediatric behavioral sleep principles, sessions also covered screening and preliminary testing (e.g., labwork) for common organic sleep disorders, use of medication, and when to consider referring to a specialist. Based on feedback from participants about common challenges in their practices, the curriculum also covered topics such as sleep in children with ASD, Attention Deficit Hyperactivity Disorder (ADHD), and managing electronics use at night.

The program was comprised of 10 monthly, 60-minute teleconference sessions, combining a 25-minute didactic presentation by a pediatric sleep expert, followed by a challenging case presentation by one of the practices (related to the topic of the month), and discussion by the entire group. Didactics were presented by psychologists with expertise in pediatric behavioral sleep medicine, and a physician board-certified in sleep medicine. Sessions were recorded and available to participants and their practices on an online platform. Resources such as handouts were provided for practices to use with their patients as appropriate, and were available on the online platform.

Participating practices were also expected to complete a Quality Improvement (QI) project, with the support of a psychologist who served as the practice facilitator and met with practice representatives monthly. Practices presented the results of their QI projects, as well as a patient success story at the final two monthly meetings of the year.

Each practice identified a provider champion, a nurse care manager/care coordinator, a behavioral health clinician (if applicable to the practice), and a practice/office manager to participate. A stipend was provided at the practice level to account for staff participation time. CME credit was also available. After each session, participants were sent a link to an electronic survey assessing their satisfaction with the program. In addition, before the first and after the last session, participants were sent a link to an electronic survey, assessing their knowledge, comfort, and confidence in addressing specific aspects of pediatric sleep problems. To analyze the survey results, we calculated descriptive statistics and compared pre-post changes using paired samples t-tests.

RESULTS

CTC-RI was able to enroll all six practices that applied. Participating practices were all community-based primary care pediatrics practices (i.e., serving pediatric patients only). Practice size ranged from a solo practice to a large practice of eight providers (mean=4.8 providers). Practices had between 1200 and 7903 active pediatric patients in their panels (mean=3723.5). The percentage of patients served by Medicaid ranged from 16% to 72% (mean=33.3%). All practices had Primary Care Medical Home certification.

Sixteen clinical team members participated in the program, attending an average of 8.6 sessions (range 3 to 12 sessions). Participants included 11 pediatricians, three nurse practitioners, and two integrated behavioral health (IBH) clinicians embedded in these practices. Ten of the clinical team members (63%) completed both the pre- and post-program surveys; all practices were represented. Respondents were seven pediatricians (70%), one nurse practitioner (10%), and two IBH clinicians (20%). Prior to the project, no participants rated themselves as very confident in their overall ability to effectively address sleep disorders and other sleep challenges in children; 38% reported moderate confidence in their ability. Participants also answered an open-ended question about barriers they encountered in addressing sleep. The most commonly reported barriers fell into the following categories: limited parental or teen receptivity to sleep recommendations ($n = 9$), lack of time ($n = 4$), lack of resources (e.g., reliable assessment and tracking tools, $n = 6$), comorbid diagnoses (e.g., ADHD, anxiety, $n = 3$), and sleep hygiene issues (e.g., electronics, napping, $n = 2$).

Paired samples t-tests comparing responses before and after the program indicated that participants reported significantly increased knowledge about pediatric sleep in all domains measured, with greatest improvement in knowledge about sleep training in infants ($t=-4.44$, $p<.01$), children with ADHD ($t=-3.41$, $p<.01$), and children with ASD ($t=-4.91$, $p<.01$). Significant improvement in overall confidence in their ability to address sleep problems was reported ($t=-3.59$, $p<.01$), as well as specific improvement in confidence to address sleep in infants ($t=-3.59$, $p<.01$) and children with ASD ($t=-4.60$, $p<.01$). After the program, providers reported significantly greater comfort in all domains of addressing pediatric sleep problems, with the greatest gains in conducting a sleep assessment and/or using a sleep screening tool ($t=-7.23$, $p<.001$), providing guidance about healthy sleep habits across developmental stages ($t=-5.25$, $p<.001$), empowering parents to play an active role in addressing their child's sleep ($t=-4.13$, $p<.01$), and identifying risk factors for organic sleep disorders (e.g., Obstructive Sleep Apnea, Restless Legs Syndrome) ($t=-3.81$, $p<.01$). The project did not increase self-reported frequency of referrals to sleep specialists, but rather increased the frequency of offering a follow-up visit with the provider to address sleep disorders or problems ($t=-4.58$, $p<.01$). Providers also reported an increased frequency of using a system for tracking sleep concerns by their practices ($t=-5.01$, $p<.001$).

QI projects developed by the practices were practice-centered and ranged from improving detection of sleep problems in a particular age group (by integrating sleep screening instruments into the regular clinic workflow), to creating an automated clinical decision support tool for sleep within the electronic health record to improve quality of sleep care and improve provider efficiency. Qualitative comments suggested that the QI projects helped participants disseminate resources and information learned to the rest of the providers in their practices.

DISCUSSION

This paper describes the content and evaluation of a novel Project ECHO© to train pediatric primary care providers in behavioral sleep management strategies. The project was well-received by clinicians. Data from two time points were examined to compare change in provider knowledge, comfort, and confidence in addressing pediatric sleep problems. Prior to the program, only 38% of participants rated themselves as moderately or very confident in their overall ability to effectively address sleep challenges in children; in contrast, after the program, 100% rated themselves as moderately or very confident. Providers reported increased knowledge about pediatric sleep, particularly in the areas of sleep training strategies in infants, and behavioral sleep strategies for patients with ASD and ADHD. Sleep issues that are comorbid with neurodevelopmental disorders are often complex to manage, and providers appreciated specific tools and behavioral strategies to use with patients. Many of the skills the providers developed helped them address common challenging sleep behaviors across childhood development. After the project, providers reported an increase in systematic tracking of sleep concerns, and an increase in frequency of follow-up visits to address sleep. Importantly, participating providers reported sharing their knowledge with colleagues, thereby increasing the reach of the project. Providers were also able to benefit from other practice's QI projects, given that lessons learned were shared within the community of learners.

Limitations of this project included a small sample size that might not represent providers outside of Rhode Island, or providers practicing in other settings such as hospital-based clinics or community health centers. Because the participating sites were community-based, primary care pediatrics practices, the generalizability (and therefore the upper limit of the project's impact) may be constrained. At the same time, it is important to note that the ECHO model has been implemented successfully across a wide range of practice types and geographic locations, suggesting broader applicability beyond this sample. Respondent bias was possible, as individuals who chose to participate likely had greater interest or motivation related to sleep health. Another possible issue is that self-assessed confidence or comfort does not necessarily translate to knowledge gains or consistent application in clinical practice. Finally, it would have been beneficial to survey participants again at a later time, to assess whether positive impacts of the project were durable.

In conclusion, Project ECHO© demonstrated high efficacy in improving clinicians' knowledge, confidence, and comfort in addressing behavioral sleep concerns in primary care. Project ECHO© is a valuable model for diffusion of practice-based knowledge of pediatric sleep for primary care pediatricians and could be scaled to other locations. Its telementoring format is accessible, engaging, and leads to increases in knowledge, which is anticipated to improve identification and behavioral management of sleep problems in children. ECHO© also enhances collaboration and communication between pediatricians and sleep specialists, creating a more coordinated care system. Lastly, improving pediatrician comfort and competence with management of sleep problems has the potential to reduce unnecessary referrals to sleep specialists, saving healthcare resources.

Upcoming ECHO series

Given the positive feedback on the ECHO model as a valuable education and learning format for primary care providers, CTC-RI has undertaken other pediatric-focused ECHO topics such as anxiety, ASD, and perinatal mental health. An upcoming ECHO series on managing complex ADHD in pediatrics will launch in Spring 2026. For future offerings, visit https://ctc-ri.org/news-events/pcmh-news-and-articles.

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Pediatric Integrated Behavioral Health: A Primary Care Transformation Effort in Rhode Island

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ABSTRACT

In 2021, the U.S. Surgeon General issued an advisory on youth mental health, stating that the challenges that youth are facing are unprecedented, hard to navigate, and significantly impacting their mental health.[1] Through statewide quality improvement and collaborative learning models, the Care Transformation Collaborative of Rhode Island (CTC-RI) and PCMH-Kids have implemented innovative, pediatric integrated behavioral health (IBH) models to support pediatric medical homes in addressing youth mental health needs, reduce stigma, increase access, and improve care coordination. Early efforts focused on a traditional IBH model and practices were financially responsible for the IBH clinician; despite clinical successes, smaller practices could not sustain the model financially, so CTC-RI shifted its focus to an innovative model that removed financial risk from the practice. More recently, CTC-RI has launched initiatives to expand the pediatric team's capacity to manage the behavioral health needs of its patients and families by providing specialty skill building (e.g., sleep, anxiety, autism), and by adding community health workers to IBH teams. Results from these initiatives indicate that pediatric IBH models are an effective and essential element of advanced primary care.

KEYWORDS: pediatric integrated behavioral health; pediatric learning collaborative; advanced pediatric primary care; team-based care

INTRODUCTION

Over the past decade, the Care Transformation Collaborative of Rhode Island (CTC-RI) and PCMH-Kids have implemented innovative team-based approaches to help pediatric medical homes manage youth mental health needs. Prevention and health promotion are core values of pediatrics, and behavior, development, and emotional health are integral components of routine pediatric care, including developmental surveillance and screening for anxiety, depression, and substance use. Integrating behavioral health clinicians into the care team is an essential component of an advanced pediatric medical home.

In 2021, the U.S. Surgeon General issued an advisory on youth mental health, stating that the challenges that youth are facing are unprecedented, hard to navigate, and significantly impacting their mental health.[1] Approximately 20% of youth had a diagnosable condition, but the majority did not receive care. Rates of youth sadness, hopelessness, suicidal ideation, and emergency department utilization were already rising prior to the pandemic.

More recent national data from the CDC[2] indicate that 40% of adolescents reported persistent feelings of sadness and hopelessness, and 20% seriously considered suicide during the past year. Eleven percent of younger children had a diagnosed anxiety disorder, 8% had a diagnosed behavior disorder, and 4% had depression. In Rhode Island in 2021, 51.7% of female and 25.1% of male high school students reported persistent sadness/hopelessness, and 24.1% (female) and 10.6% (male) considered suicide. Among middle school students, 31.2 % of females and 14.5% of males reported seriously thinking of suicide.

These trends underscore the need for scalable behavioral health models within pediatric primary care. Pediatricians and family medicine physicians have assumed a growing role in addressing behavioral health concerns despite limited training, resources and time. Even though most children with behavioral health needs do not receive care from a mental health provider, most see their pediatric provider at least once per year,[3] and parents will often turn to their child's pediatrician first when behavioral or emotional concerns arise. Pediatric providers serve as de facto first-line mental health providers for many of our children, even though pediatricians report insufficient training to manage these concerns.[4] Integrated behavioral health (IBH) models help bridge this gap by expanding behavioral health knowledge of practice teams overall, and by providing patients quick and direct access to a qualified behavioral health clinician.

CTC-RI AND PCMH-KIDS

CTC-RI's mission is to support the ongoing improvement and transformation of primary care in Rhode Island. Serving as a central hub, and working together with payers, providers, systems of care, government agencies, and community organizations, CTC-RI has supported practices in implementing innovative clinical models, successfully aligning payers and scaling integrated behavioral health across the State. PCMH-Kids, incorporated into CTC-RI in 2015, works with stakeholders to develop high quality primary care for children and has impacted nearly all pediatric practices in Rhode Island. Together, CTC-RI and PCMH-Kids have been instrumental in building IBH capacity in adult, family, and pediatric practices.

Establishing the Foundation for Pediatric IBH in Rhode Island

CTC-RI and PCMH-Kids have been working steadily to expand the capacity of pediatric practices to address mental and behavioral health needs. Early PCMH-Kids' efforts focused on supporting practices to become patient-centered medical homes (PCMH), creating more coordinated and comprehensive primary care by expanding care teams and improving access and communication. This included building partnerships with specialists and community resources and creating an engaged learning community of pediatric practices that highly values care coordination and team-based care.

After successfully transforming most Rhode Island pediatric practices into PCMHs, CTC-RI and PCMH-Kids shifted focus to integrating behavioral health clinicians into pediatric teams. In 2019, CTC-RI launched its first Pediatric IBH project with eight practices. Over the course of this project, the pandemic hit and led to a community-reported increase in behavioral health needs, and a decline in community behavioral health clinician availability. CTC-RI responded by focusing on further expansion of behavioral health capacity within pediatric teams.

This shift generated projects that expanded pediatric team behavioral health capacity in three ways: (1) pediatric skill-building on conditions such as sleep, restrictive eating, obesity, and anxiety; (2) adding community health workers (CHWs) to IBH teams; and (3) training pediatricians to conduct first-level autism assessments for children under age three.

Throughout these efforts, CTC-RI has implemented projects with varied structures to meet practice needs while consistently adopting a collaborative learning model. All projects include a trained practice facilitator who supports workflow redesign, quality improvement, and data collection, as well as opportunities for peer learning at designated project intervals.

CTC-RI became an ECHO® hub in 2022 to ensure quality delivery of virtual learning. This model, originally designed to connect specialists virtually to primary care, emphasizes community learning through an "all teach, all learn" approach. Typically, a didactic presentation from a content expert is followed by a participant case presentation and group discussion. This format has been well-suited for expanding knowledge in specific content areas such as restrictive eating disorders, sleep, obesity, LGBTQ+ youth, and anxiety, and is often paired with a quality improvement project.

HIGHLIGHTED PROJECTS

Since 2019, CTC-RI has implemented more than a dozen projects focusing on pediatric mental health, with evolving goals aligned to community needs. The array of projects is summarized in **Table 1**, and three are spotlighted below.

Project Spotlight 1: Foundational work to integrate BH clinicians into primary care teams

The first pediatric IBH project launched in 2019 with eight pediatric practices in 2 two-year cohorts, representing diverse practice types (hospital clinics, community health centers, and smaller practices). CTC-RI established goals and deliverables with national IBH models, including robust behavioral health screening protocol, an onsite behavioral health clinician receiving warm hand-off, brief assessment and short-term intervention services, and triage and referral pathways for higher-intensity treatment. Practices were expected to hire an IBH clinician and report screening rates quarterly, while CTC-RI supported implementation, workflows, documentation, and billing.

COVID-19 was disruptive, yet practices continued implementing the model with as much fidelity as possible. They successfully incorporated at least three screenings for children, adolescents, and/or postpartum mothers, and, despite the challenge of vastly diminished well-child visits during the pandemic, they maintained or improved their population screening rates [**Table 2**]. The most notable increase was adolescent anxiety screening, which rose from near zero to 75% among implementing practices.

Practices met quarterly for didactic and peer learning on topics such as anxiety, psychotropic medication, somatic complaints, sleep, obesity, virtual IBH, NCQA Behavioral

Table 1. CTC-RI pediatric BH projects since 2019

Pediatric IBH Program Launch Cohorts	Building IBH Infrastructure, Quality, and Virtual Care	Team Capacity Expansion and Specialty Skill Building
• Traditional Pediatric IBH implementation	• NCQA Behavioral Health Distinction • Telehealth learning collaborative • Integration of the DULCE model • Collaboration with Foundation of Integrated Care (FIC) to test innovative IBH model	• Expanding teams with CHWs • Pediatrician skill-building in Restrictive Eating Disorders, Obesity, Sleep, Anxiety, and LGBTQ+ Youth • Training pediatric providers in first level autism assessments

Table 2. Aggregated baseline and final screening rates

Screening Tool	PSC 35	PHQ-A	GAD-7	CRAFFT	EPDS
Target Population	School Age	Adolescents	Adolescents	Adolescents	Postpartum
Total # of Practices	2	8	3	6	5
Baseline Rate	45%	54%	7%	37%	80%
Final Screening Rate	81%	82%	75%	70%	83%
Total % Increase	36%	28%	68%	33%	3%

Table 3. Baseline and final screening rates by the end of year 2

	Target Population and Screening Tool	Practice 1	Practice 2	Practice 3	Practice 4	Practice 5
Baseline Rate	Infancy (SWYC or ASQ)	68%	58%	66%	92%	62%
Final Screening Rate		83%	91%	74%	91%	83%
Baseline Rate	School Age (PSC)	0%	0%	0%	0%	0%
Final Screening Rate		9%	28%	17%	46%	37%
Baseline Rate	Adolescent (PHQ-9)	97%	94%	97%	65%	87%
Final Screening Rate		97%	98%	88%	75%	86%

(Practice 6 data unavailable)

Health Distinction, PediPRN/MomsPRN, and restrictive eating disorders. The IBH clinicians met virtually to facilitate peer support, enhancing shared learning and model fidelity.

Despite staffing turnover during the pandemic, all practices wanted to continue IBH after the project ended. Practices reported that IBH clinicians were central to patient care, pediatric team education, and care coordination, and their departure significantly strained pediatric teams. IBH clinicians increased practice comfort with behavioral health screening, family communication, and treatment planning.

Project Spotlight 2: Supporting IBH workforce development

Despite clinical success, financial sustainability remained a barrier, particularly for smaller practices. In response, CTC-RI partnered with the Foundation for Integrated Care (FIC) to support IBH implementation while minimizing financial risk. FIC places early-career behavioral health clinicians into primary care practices and provides supervision and IBH-specific training. Under this model, an FIC clinician works part-time in the pediatric practice and part-time providing outpatient therapy. Patients requiring longer-term therapy can be referred to FIC's outpatient clinicians, allowing the IBH time to focus on brief interventions appropriate for primary care.

CTC-RI supported two cohorts of three practices each in one-year learning collaboratives. With monthly facilitation, practices established warm hand-off workflows, improved screening rates and cohort 2 added tracking of emergency room and hospital diversions. Cohort 1 generated 274 referrals to FIC clinicians during the project year, demonstrating rapid and successful adoption of the model.

Project Spotlight 3: Expanding the pediatric IBH team with CHWs

Pediatric IBH clinicians frequently manage high demand for behavioral health care coordination for children with complex needs. During and after the pandemic, the volume of clinical and care coordination highlighted the need to expand IBH teams even further. CTC-RI launched an IBH team expansion project to add and train community health workers (CHW) to support behavioral health care coordination, allowing BH clinicians to focus on direct care. CTC-RI collaborated with TEAM UP (Boston Medical Center) for CHW training, and with the Hassenfeld Child Health Innovation Institute at Brown University for evaluation support. The two-year learning collaborative launched in August 2023 and included six practices.

With financial support and facilitation, practices hired CHWs and implemented screening improvement initiatives across all developmental levels. By project end, practices showed improved screening rates; notably none screened children ages 5–11 for social emotional concerns at baseline, but all had protocols by project end [**Table 3**].

CHW activity tracking revealed that 58% of needs addressed were behavioral health-related, 32% were material needs, and 10% involved both. Adding CHWs shifted practices toward more robust team-based care, extending IBH clinician capacity and allowing more timely access for patients. CHW contributions demonstrated the value of expanded teams in meeting complex family needs. Providers reported improved ability to connect families to follow-up care, and practices expressed a desire to maintain CHWs after project completion.

SUCCESSES AND CHALLENGES

Successes

The pediatric IBH initiatives undertaken by CTC-RI and PCMH-Kids demonstrate that both pediatric teams and patients benefit from IBH models. Pediatric primary care providers and staff increased behavioral health knowledge and developed greater confidence and comfort in discussing difficult topics with families. Connecting community experts and pediatric teams improved referral pathways and increased awareness of community resources. Expanded IBH teams decreased staff burden, reduced burnout, and increased provider confidence and practice efficiency.

The benefits of behavioral health screening are well-documented[5] and the American Academy of Pediatrics recommends developmental surveillance and behavioral or social-emotional screening throughout childhood.[6] The learning collaboratives provided support for adopting BH screening protocols, and these tools are now embedded and considered standard care. As a result, providers can identify and address behavioral health or developmental concerns earlier and more effectively.

For patients, expanded IBH teams improved access to behavioral health services, and reduced stigma associated with care. Patient experience improved through the availability of multiple team members who could address and coordinate behavioral, developmental and social needs in the medical home.

Challenges

Despite these benefits, maintaining IBH teams in pediatric primary care remains challenging. Financial sustainability continues to be a primary concern for many practices, especially for smaller practices, as payments for behavioral health services often do not cover costs. CTC-RI and PCMH-Kids have advocated for alternative payment models that support advanced primary care models and allow IBH to be sustained regardless of practice size.

A second challenge is workforce capacity. The supply of behavioral health clinicians within primary care and at the community level does not meet demand. As a result, IBH clinicians must balance brief primary care-appropriate interventions with longer-term cases that cannot be transitioned to community providers, leading to reduced access and increased clinician burnout. Broader pediatric workforce constraints further complicate IBH implementation. A 2024 PCMH-Kids pediatric workforce survey showed substantial planned retirements and limited practice capacity for new patients, underscoring the importance of a stable primary care system for IBH success.

LOOKING AHEAD

CTC-RI and PCMH-Kids have been leaders in recognizing the value of pediatric IBH and creating innovative projects to meet the needs of diverse practices and patient populations. Sustainable pediatric IBH models require payment reforms that account for care coordination, screening, and short-term behavioral interventions that fall outside traditional fee-for-service payments. Although CTC-RI cannot directly support every practice in the State, it has demonstrated that advanced team-based care is essential to managing pediatric behavioral health needs statewide. Traditional models of IBH are not feasible for all practices given workforce shortages and financial constraints. However, CTC-RI and PCMH-Kids have shown that pediatric behavioral health care can be improved through innovative models that reduce financial risk, expand care teams, and provide specialty skill-building for pediatric providers.

These demonstration projects highlight that flexible, team-based models are critical for strengthening the pediatric medical home's capacity to address behavioral health needs. As Rhode Island continues to refine its primary care infrastructure, pediatric IBH represents a core component of advanced primary care and a scalable strategy for meeting the mental health needs of children and adolescents.

Looking forward, Rhode Island has an opportunity to build on these demonstrations by aligning statewide pediatric mental health strategies with value-based payment, integrated workforce development, and data infrastructure. Stronger linkage between schools, primary care, and community mental health systems could create a more seamless continuum for youth and families. Continued investment in primary care transformation, coupled with policies that recognize behavioral health as core pediatric care, will be critical to ensuring that these innovations are not add-ons, but become standard care within pediatrics. As Rhode Island continues to refine its primary care infrastructure, pediatric IBH represents a core component of advanced primary care and a scalable strategy for meeting the mental health needs of children and adolescents.

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Integrated Behavioral Health in Rhode Island: A Decade of Practice and Promise

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INTRODUCTION

Over the past decade in Rhode Island, Integrated Behavioral Health (IBH) has shifted from a proof of concept to an operational necessity as primary care faces rising behavioral health needs, workforce instability, and increasing clinical complexity. This commentary advances the premise that IBH is most effective and sustainable when embedded within stable, advanced primary care (APC) systems. Drawing on Rhode Island's experience as an early adopter of IBH through the Care Transformation Collaborative of Rhode Island (CTC-RI) and PCMH-Kids, there is a fundamental connection between IBH and primary care. As IBH strengthens primary care's capacity to manage complexity, so does primary care's stability provide the clinical, operational, and financial conditions required for IBH to flourish. Rhode Island's experience offers a practical perspective on both the promise of integration and the risks of scaling IBH without a strong primary care foundation.

IBH AS A FUNCTION OF ADVANCED PRIMARY CARE

The purpose of IBH is to integrate behavioral health clinicians into primary care teams to deliver brief, evidence-based interventions, support shared decision-making, and address psychosocial drivers of health at the point of care.[1] Evidence from IBH models documents improvements in care processes and clinical outcomes for adults receiving mental health services in primary care settings[2]; similar benefits have been demonstrated for pediatric populations through collaborative-care approaches that improve behavioral health symptoms and engagement.[3] Recent primary care research further indicates that practices with higher degrees of behavioral health integration report better patient outcomes, reinforcing the relationship between the level of integration and clinical quality across adult and family medicine settings.[4] However, these outcomes are contingent on primary care practices having the infrastructure to support team-based workflows, population management, and measurement-based care as a routine skill, rather than a reporting and funding requirement.[5]

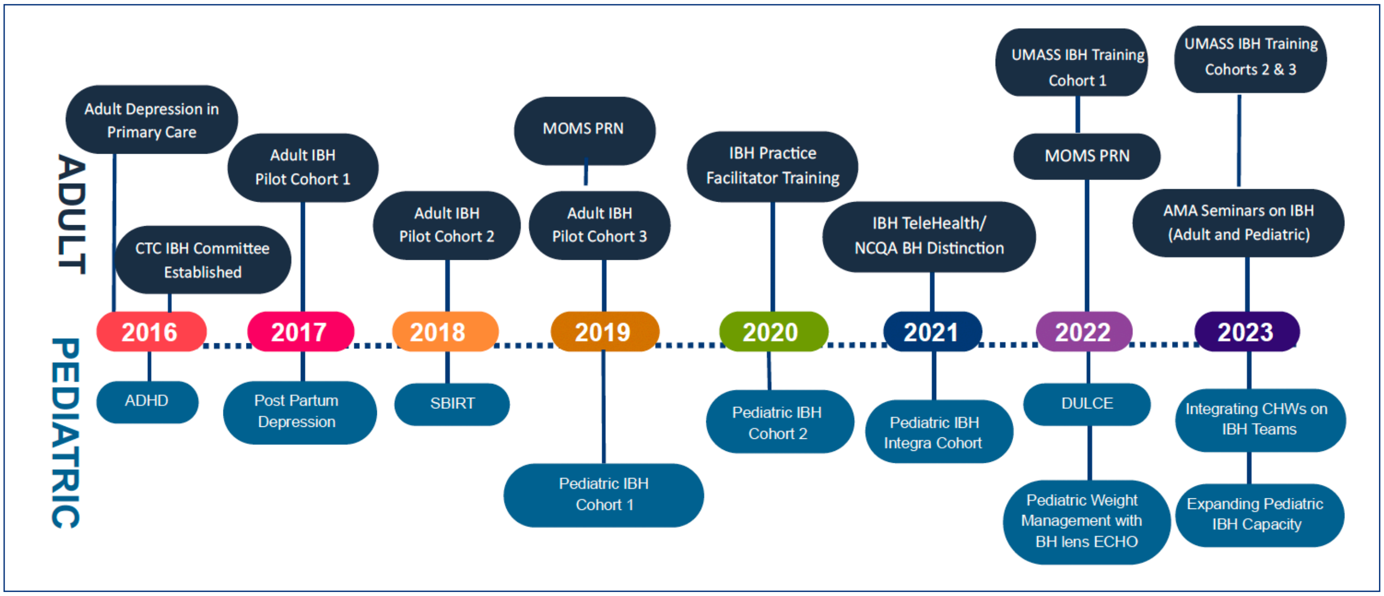
Recent evidence highlights that the most immediate and measurable effects of IBH occur at the level of care delivery. Practices receiving structured IBH support demonstrated significantly higher levels of integration compared with practices providing behavioral health services as usual,[6] which suggests that IBH functions as a catalyst for strengthening team-based care within primary care. Advanced primary care (APC) models, distinct from, but inclusive of the key features of patient-centered medical homes (PCMH), including a common contract with payers for supplemental payments to support care management/care coordination resources, quality reporting, and primary care transformation, represent a more mature stage of primary care transformation.[7,8] APC centers around team-based care that incorporates proactive, population health management; systematic care coordination across settings; routine use of data for measurement-based improvement; and payment models that support traditionally non-billable work, such as care navigation, consultation, and team collaboration. While PCMH recognition established important structural and process standards, APC reflects sustained operational and financial alignment required in managing complex, longitudinal patient needs. Furthermore, APC provides the operational backbone required for IBH to function as an integrated, team-based service, rather than as an ancillary program.[7,8] Rhode Island's experience underscores that integration is not an add-on service, but a core function of transformation in primary care.

CTC-RI AND THE EVOLUTION OF IBH IN RHODE ISLAND

Founded in 2008, the Care Transformation Collaborative of Rhode Island (CTC-RI) is a statewide, multi-payer, public–private partnership designed to advance comprehensive primary care transformation. The 2015 merger with PCMH-Kids established a unified infrastructure supporting pediatric and adult primary care, with an explicit emphasis on IBH across the lifespan.[7] Through aligned payment models, learning collaboratives and practice facilitation, IBH is positioned as a foundational component of advanced primary care [**Figure 1**].

A defining feature of CTC-RI's approach to IBH has been practice facilitators with subject-matter expertise focused on both clinical integration and operational redesign. Evaluation of IBH practice facilitation within Rhode Island medical homes demonstrated significant increases in levels of behavioral health integration over time, with practices

Figure 1. Timeline of CTC-RI Integrated Behavioral Health (IBH) Initiatives, 2016–2023, depicting evolution of IBH initiatives supported by CTC-RI and PCMH-Kids.



achieving practice-led integration goals rather than uniform benchmarks.[9]

To strengthen consistency and address training gaps, CTC-RI developed a structured, IBH practice facilitator training model, emphasizing shared competencies, role clarity, and supervision within primary care. These efforts addressed a well-documented gap in professional training, as both medical and behavioral health education programs often underprepare clinicians for generalist, team-based practice in integrated settings.[10]

CLINICAL, OPERATIONAL, WORKFORCE IBH LESSONS

Consistent with national patterns, Rhode Island's IBH initiatives expanded access to behavioral health support within primary care, and increased use of brief, targeted interventions, particularly in pediatric settings, where early identification can alter long-term trajectories.[3] These gains, however, are closely tied to primary care stability. Primary care in Rhode Island has experienced significant disruption related to provider shortages, comparatively low-payment rates relative to neighboring states, and rising cost pressures affecting practice sustainability and access.[11]

Evidence consistently shows that successful implementation of integrated mental health models depends on stable staffing, reliable workflows, training capacity, and functional health information system exchange within primary care.[2] When practices experience high turnover, productivity pressure, or unstable financing, IBH clinicians are less able to function effectively. In particular, Federally Qualified Health Centers (FQHCs) across Rhode Island served as IBH early adopters and, while initially setting the standard, struggled to sustain efforts in spite of loan repayment options, training within various IBH models, and peer support groups offered across the state through CTC-RI.

Workforce challenges further complicated scalability. Beyond discipline-specific skill gaps, research shows the importance of teamwork and collaboration between team members with different professional roles, and the importance of training to teach teamwork skills essential to integrated care delivery.[12] Rhode Island's experience suggests that investing in shared training across disciplines, supervision for those new to their roles, and facilitation from content experts and quality improvement leads is as critical as funding clinical positions, and not sufficient to ensure sustainability. Training specifically focused on interdisciplinary team-based care in a medical setting has been shown to have the most utility across CTC-RI initiatives, and is often the missing link between implementation and sustainability.

FINANCIAL AND POLICY IMPLICATIONS

Rhode Island's multi-payer environment, anchored by the Office of the Health Insurance Commission (OHIC) and Medicaid, positioned Rhode Island as an early national leader in primary care transformation. Affordability standards were created and aimed at requiring commercial health plans to participate in primary care innovation designed to improve healthcare affordability. These standards directed the adoption of the PCMH, advancing use of CurrentCare, (Rhode Island's health information exchange), and comprehensive payment reform across the delivery system. This alignment of policy and payer participation created the conditions for early experimentation with IBH through aligned incentives and shared pilot funding.[11] Recent outcome data indicates that practices achieving higher levels of behavioral health integration report better patient outcomes,[4] suggesting the role that financing may play to enable deeper integration and further enhance clinical quality. Yet long-term sustainability remains constrained by payment models that inadequately support team-based care. Both IBH and primary care rely on care coordination and population management, which are inadequately reimbursed under current fee-for-service payment structures.[8] Even within the health center model of stable, prospective payment system (PPS) rates, in which IBH services were included, costs related to the non-billable members of the team that are critical could not make up for the costs needed to continue providing high-functioning, team-based care services. If primary care provides the foundation for increased and predictable revenue streams sufficient to support team-based, non-visit-based care, IBH can be positioned to sustain.

CONCLUSION

Rhode Island's decade of experience demonstrates that IBH is most effective when treated as a core function of APC, rather than as an add-on. National trends increasingly frame integrated care as a response to rising clinical complexity, whole-person care expectations, and system strain, with emphasis on outcomes rather than on discipline-specific models of delivery.[1] Multiple behavioral health roles, including psychologists, social workers, psychiatrists and community health workers, represent one component of this transformation, contributing essential team-based care designed to address medical and behavioral needs together. The evidence from Rhode Island aligns with this national trajectory: IBH improves access, normalizes behavioral health within routine care, and enhances system efficiency, but only when primary care infrastructure is stable and adequately financed.[7]

Looking forward, the central question is not whether IBH should be pursued, but whether primary care systems are designed to enable it. Moving from pilot-driven experimentation to sustainable system design will require alignment in training pathways, outcome measurements, and payment reform that recognizes integrated care as foundational. Rhode Island's experience suggests that when primary care stability is prioritized, integrated behavioral health can move from promise to permanence. Absent renewed and increased investment in primary care infrastructure, Rhode Island risks losing the integration gains achieved over the past decade, and transforming IBH from a core function back into a series of fragile pilots.

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The author reports leadership involvement with the Care Transformation Collaborative of Rhode Island initiatives discussed in this commentary. The author is employed at Blackstone Valley Community Health Center, a Federally Qualified Health Center. Programs referenced in this commentary were supported through multi-payer and grant-funded initiatives. The author reports no personal financial conflicts of interest.

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Improving Access to Mental Health Care for Youth in Rhode Island: The Pediatric Psychiatry Resource Network

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ABSTRACT

Child Psychiatry Access Programs (CPAPs) were developed to address the increasing prevalence of pediatric mental and behavioral health issues and the growing workforce shortage of pediatric mental health specialists. This article will discuss the origin of CPAPs, data to support their importance and impact, and the development of Rhode Island's CPAP, The Pediatric Psychiatry Resource Network, or PediPRN. Data is collected for the purposes of evaluation and quality improvement. Seventy-four percent of the pediatric-serving primary care practices in Rhode Island have utilized PediPRN. PediPRN has provided 3,173 consultations to 465 professionals and has trained over 80 PPCPs with overall high satisfaction. Program sustainability and expansion are important future considerations.

KEYWORDS: mental health access; psychiatry; pediatric primary care; telephone consultation; peer consultation

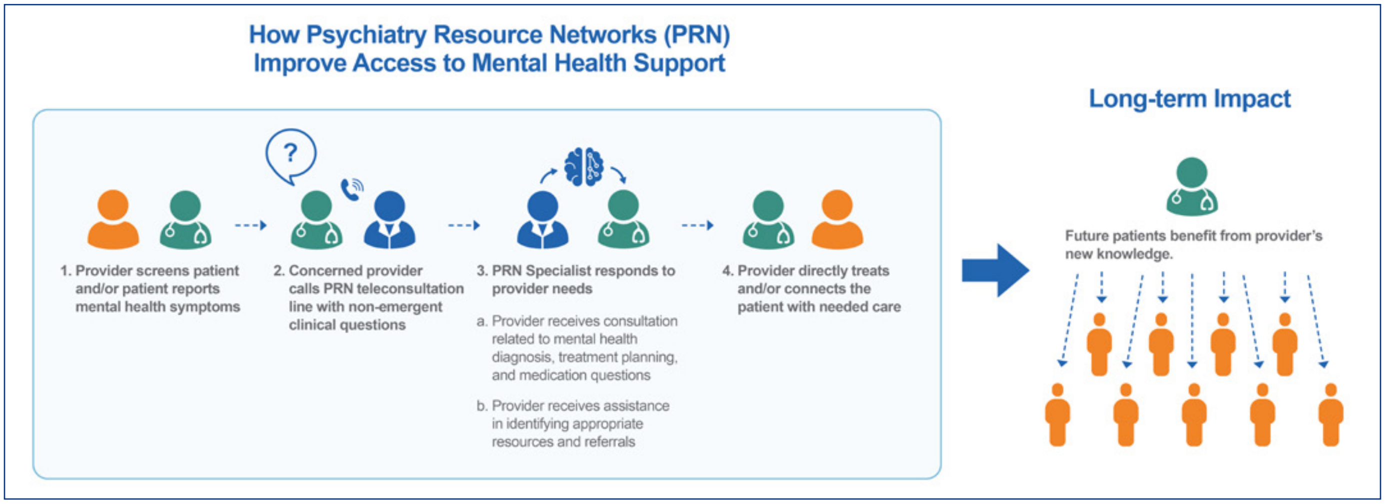
BACKGROUND

Child Psychiatry Access Programs, or CPAPs, are "programs with mental health specialists providing rapid remote mental health consultation services to pediatric primary care providers."[1] These programs are designed to support primary care providers in delivering mental health care in the context of persistent gaps in access to pediatric mental health services, and documented limitations in pediatric primary care providers' (PPCPs) knowledge and confidence in treating mental health conditions.[2] The first program was established in Massachusetts in 2004,[3] and similar programs now exist in nearly all 50 states (NNCPAP website), thanks to federal funding through the Health Resources and Services Administration grants since 2018.

CPAPs share several core components, including same-day telephone consultations, care coordination and referral support, and continuing education and training.[1,2] Consultations are typically delivered by child and adolescent psychiatrists and, in some programs, other licensed mental health professionals to PPCPs.[2] Consultation models allow for real-time response to these consultation requests either by phone or asynchronously.[2] Programs vary in service delivery, with many offering direct patient care such as one-time psychiatric evaluations, brief treatment, and/or second opinions.[1] Overall, CPAPs are well-received with high PPCP satisfaction.[1]

A growing body of evidence suggests that CPAPs increase PPCP confidence and comfort in assessing and managing mental health conditions in youth.[4] These programs support PPCPs in managing mild-to-moderate mental health conditions in primary care, which families prefer.[5] Consistent

Figure 1. Extending PPCPs' impact through PediPRN telephone consultation



with this, parents and caregivers report overall satisfaction with their primary care doctor's management of mental health conditions after a CPAP consultation.[6] At a population level, children living in states with a CPAP are more likely to have received mental health services.[7]

The effectiveness of CPAPs is rooted in a core educational principle: building capacity within primary care rather than relying solely on specialty referral, a concept often summarized by the proverb: "If you give a hungry man a fish, you feed him for a day, but if you teach him how to fish, you feed him for a lifetime." [**Figure 1.**] Each consultation serves as a "teachable moment" during which PPCPs can receive case-specific guidance, engage in clinical dialogue about complex presentations, and also obtain reassurance that their proposed management plan aligns with specialty-level recommendations. When combined with formal training opportunities, these consultations increase PPCP confidence and competence, enhance the capacity of PPCPs to address mild-to-moderate mental health conditions, and help reserve the limited child psychiatry workforce for the patients with the most complex needs.

Rhode Island's CPAP, The Pediatric Psychiatry Resource Network (PediPRN), was established in 2016, making RI the 32nd state to implement a CPAP. PediPRN was initially funded by a three-year grant through a private-public partnership. For the past eight years, PediPRN has been funded by a Health Resources Services Administration grant (awarded to the Rhode Island Department of Health) in combination with support from private partners.

PROGRAM OVERVIEW

PediPRN is a practice-based consultation program implemented by the Emma Pendleton Bradley Hospital in East Providence, RI. PediPRN is structured as a longitudinal, consultative model intended to be feasible within routine clinical workflows. The primary goal of the program is to enhance pediatric primary care providers' clinical confidence and capacity to address mild-to-moderate mental health concerns of their patients.

The core component of PediPRN is peer-to-peer consultation sessions facilitated by a board-certified child and adolescent psychiatrist (CAP). The program has 1.0 full-time equivalent (FTE) of child psychiatry time divided among five child psychiatrists. Consultations are available Monday through Friday during normal business hours. Consultations are scheduled at the request of the PPCP at the time most convenient for them. The consulting CAP provides diagnostic clarification, evidence-based treatment recommendations, guidance on psychopharmacologic considerations when appropriate, and suggestions for monitoring and referral. Emphasis is placed on strategies that could be implemented within the primary care setting, as well as on identifying thresholds for specialty referral. A full-time resource and referral coordinator triages consultation calls and provides tailored resources for patients. Referrals are matched based on insurance coverage, geographic location, and clinical need. The clinical director oversees the consulting CAPs and provides clinical leadership for the program.

PediPRN program utilizers include PPCPs (e.g., pediatricians, pediatric residents, nurse practitioners, and physician assistants) and any youth-serving professional licensed in Rhode Island. Eligibility criteria include Rhode Island licensed professionals agreeing to participate in consultations. Participation is voluntary, and no incentives are provided. No patients are directly enrolled in the program. Program utilization is tracked and monitored to assess engagement and feasibility.

Program coordination is managed by a core leadership team responsible for ensuring consistency and quality of psychiatric consultations. To promote consistency, CAPs meet monthly with program leadership to review and address any issues, and consultations follow a standardized protocol that includes case presentation, guided discussion, and summary recommendations.

Consultations are delivered in a telephone or videoconference format to maximize accessibility across clinical sites. In the case where the consult question cannot be answered over the phone due to the level of complexity, the PPCP is given the option to refer their patient for a one-time psychiatric evaluation with a PediPRN CAP.

Evaluation of consultations focuses on feasibility and perceived usefulness rather than patient-level clinical outcomes. Data sources include records of utilization and informal feedback from participating providers regarding satisfaction, perceived impact on clinical practice, and relevance to primary care mental health management. Formal outcome measures are not collected as part of this initial program description.

Pediatric mental health training opportunities are advertised via email blasts, local listservs, web-based marketing, and word of mouth. Topics are selected by PediPRN leadership and informed by recognized pediatric mental health competencies. Training enrollment is based on first-come, first-serve registration. Training sessions are conducted both in-person and via teleconference modalities. While there has been some variability in the modality, length, and topic areas of the training sessions, the majority of the cohorts have included at least 10 sessions covering different mental health topic areas. Each session is 1–1.5 hours long and includes didactics, case presentations, and interactive discussion. Presenters are identified as experts in the specific mental health area on which they present, and a moderator provides continuity across the sessions and facilitates discussions. Presentation materials and reference tools are also provided. In 2025, based on feedback from training participants regarding their training needs, PediPRN partnered with the Resource for Advancing Children's Health

(REACH) Institute to deliver their flagship training program: Patient Centered Mental Health in Primary Care course, a dynamic three-day, 16.5-hour interactive program, followed by eight biweekly, faculty-led case discussion sessions.

Evaluation of trainings focuses on program quality and satisfaction. Pre- and post- surveys are administered assessing knowledge and comfort with various aspects of mental health diagnosis and treatment, as well as satisfaction with components of education provided. Surveys do not include the collection of identifiable information and are voluntary.

RESULTS

From the program inception in 2016 through September 30, 2025, PediPRN has provided 3,173 consultations to 465 professionals. Compared to 2022, PediPRN utilization rates in 2025 have increased by 173%. Approximately 186 (74%) of the 253 identified pediatric practices in Rhode Island have utilized PediPRN services since the program's inception. The most common reasons for consultations in 2025 were mental health resources (58%), medication questions (42%), psychoeducation (27%), and treatment/level of care consultation (25%). In 2025 the most common diagnoses providers consulted PediPRN for were anxiety disorders (36%), ADHD (26%), depressive disorders (17%), behavior disorders (10%), and trauma/stress-related disorders (10%).

PediPRN has offered mental health training to local PPCPs since 2019. PediPRN has hosted five training cohorts and trained over 80 PPCPs. Overall satisfaction with the PediPRN training has been high. In the 2025 cohort, 100% of the participants rated the quality of the training as 5 out of 5. In the 2024 cohort, average session satisfaction was 9.4 out of 10 (ranging in from 7–10).

PPCPs have reported high satisfaction with the program. One participant stated, "PediPRN has been a great help to myself and my colleagues. I have used it to help with resources for patients, for facilitating care for patients...and for guidance regarding medication management."

Another participant reported, "PediPRN has been an invaluable resource to us providers at [my practice]. We have utilized both the monthly meetings and the individual consult calls extensively over the past year. As the mental health crisis of children and teens is increasingly falling on pediatricians, PediPRN is helping us provide high level care to this vulnerable population. It is with their support and guidance that we are able to rise to the mental health needs of our patients."

DISCUSSION

PediPRN has provided telephone consultation to youth-serving providers across the state since 2016, and has offered structured mental health training for pediatric primary care workforce development since 2019. Since inception, the program has reached almost three-quarters (74%) of pediatric serving primary care practices in Rhode Island, and has delivered over 3,000 consultations, demonstrating substantial penetration and sustained utilization across the healthcare system statewide. These findings suggest that a CPAP model can be successfully implemented and maintained in a geographically compact state while achieving broad engagement among community-based providers.

Consistent with national CPAP data, PediPRN functions largely as a capacity-building intervention. The volume of consultation and the breadth of practice participation suggest that pediatric primary care providers are using the program to support real-time clinical decision-making, particularly for the management of mild-to-moderate mental health conditions. This is aligned with the core tenets of the CPAP model, which seeks to extend the reach of a limited number of child and adolescent psychiatrists by equipping PPCPs with specialist support and education at the point of care.

PediPRN's impact has been evaluated in terms of provider experience and system-level support rather than patient-level clinical outcomes, similar to other CPAPs. While families ultimately benefit when mental health concerns are addressed in primary care, this program evaluation was not designed to measure symptom change or long-term clinical trajectories. Instead, the present findings support PediPRN's feasibility, acceptability, and sustained utilization—key prerequisites for any access model intended to operate at scale.

Several limitations warrant consideration. First, the evaluation relies largely on descriptive utilization data and provider-reported satisfaction and does not include objective measures of changes in prescribing patterns, referral behavior, or patient outcomes. Second, participation in both consultations and training was voluntary, introducing the possibility of selection bias toward more motivated or mental health–interested providers. Third, while reach across practices is high, the intensity and patterns of use likely vary substantially between sites and were not examined in this analysis.

Despite these limitations, this paper adds to the growing literature demonstrating that CPAPs can serve as a critical piece of pediatric mental health infrastructure. In a resource-constrained environment, models that emphasize consultation, education, and collaborative care offer a pragmatic and scalable strategy for extending specialty expertise into primary care settings.

As a grant-funded service, the long-term sustainability of this program is a critical priority. Other states' CPAPs have been successful with state appropriations, integrating into existing public mental health budgets, and collaboration with local universities. Continuing to evaluate cost-effectiveness and/or system-level value will be essential to supporting sustainability efforts.

Program expansion and scalability are another important future direction. PediPRN has gradually scaled programming over the years to continue to meet the diverse needs of pediatric professionals statewide, including improving service delivery by building and maintaining a robust database of all the licensed mental health providers serving youth in Rhode Island, and increasing service capacity to conduct limited direct care services and address the needs of specific professionals (in academic settings or addressing early childhood mental health concerns). While the program currently fills critical gaps in mental health access, future work will continue to examine opportunities to broaden reach and meet the progressing needs of the state's mental health care system. Future evaluation efforts should focus on identifying factors that support successful implementation of services as well as examining changes in clinical practice patterns, referral trajectories, and economic impacts. It will also be important to examine patient-level outcomes to better characterize the program's downstream effect and support the program's integration into the broader mental health care system in Rhode Island. By embedding the program into the state mental health infrastructure, this initiative has the potential to serve as a durable model for addressing persistent gaps in mental health services and improving patient outcomes.

In summary, PediPRN demonstrates that a statewide child psychiatry access program can achieve broad adoption, sustained use, and high provider satisfaction while supporting the pediatric primary care workforce in the management of common mental health conditions. As states continue to grapple with rising pediatric mental health needs and persistent specialty workforce shortages, programs such as PediPRN represent a feasible and system-level approach to strengthening the mental health care continuum for children and adolescents.

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Incorporating Family Members Into Treatment for Perinatal Psychiatric Disorders: A Pilot Program

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ABSTRACT

INTRODUCTION AND OBJECTIVE: Though perinatal psychiatric disorders affect the entire family, most perinatal mental health interventions only include mothers. Here, we detail the implementation of a single-session, virtual, family support group for partners and family members of mothers with perinatal psychiatric disorders.

METHODS: The family support group was created within a mother-baby partial hospital program for people experiencing perinatal psychiatric disorders. Patients in the program provided consent to contact their partner or family member. This person was offered participation in a complementary, one-hour virtual support group. Led by a clinical psychologist, the support group was designed to serve as a standalone psychoeducational intervention on perinatal mood disorders. Sessions were offered bi-weekly to facilitate access. Participants were asked to complete an anonymous survey soliciting mixed-method feedback about the group.

RESULTS: Of 105 people who consented to contacting their family members regarding the support group, 70 (65%) family members reported interest, and of these, 45 (64%) attended a support group session. Among the 13 participants who provided feedback (29%), there was a high level of satisfaction (Client Satisfaction Questionnaire-8 *M*=27.25; score >24=high satisfaction) and the perception that participation increased their knowledge of and empathy toward their family member's experiences. The most common feedback was a desire for more sessions.

CONCLUSIONS: In this pilot study, a virtual family support group was feasible and yielded high participant satisfaction. Future research should examine how this or other digital programs could make perinatal mental health care more accessible for partners and family members.

KEYWORDS: non-birthing partner; perinatal mental health; family-based care; virtual support groups; digital health

INTRODUCTION

Postpartum depression (PPD), the most common mental health concern during the perinatal period, affects up to 15% of mothers (who will be referred to interchangeably as birthing parents in this manuscript).[1] A history of depression is often identified as the most important risk factor for PPD.[2,3] However, inadequate and perceived lack of social support—especially family member support—is a major risk factor for PPD as well.[3-11] Unlike fixed risk factors, such as past psychiatric illness, family and partner support can feasibly change. High levels of marital satisfaction and perception of partner support can even serve as a protective factor for the development of antenatal anxiety and depression and later PPD.[12,13] Furthermore, in two parent households there is a clear, bidirectional relationship between parents' well-being, such that when one parent develops PPD, the other parent is at significantly increased risk of developing PPD themselves.[14-18] Despite the awareness of the interplay between PPD of both parents, recent meta-analyses have concluded that the vast majority of interventions that aim to prevent or treat maternal PPD focus exclusively on the patient, at the expense of the partner or other family members.[19,20] This exclusion has resulted in non-birthing partners or other family members feeling marginalized from treatment,[21-23] despite a desire to be included in their partner or family member's mental health care.[24]

Prior pilot studies have demonstrated that incorporating partners or other family members into interventions designed to prevent[25,26] or treat[27] maternal PPD is feasible and can improve PPD symptoms for both parents.[25-27] However, these studies describe interventions that require intensive, longitudinal partner engagement,[25-27] which may limit their feasibility outside the research setting. In addition, most interventions were limited to partners,[25,26] which downplays the role that non-partners may have in perinatal mental health outcomes. Thus, we created a single-session, virtual, psychoeducational support group for partners and family members of patients undergoing intensive therapy for perinatal psychiatric conditions at an established mother-baby partial hospital program. We then evaluated the feasibility and acceptability of the support group within a clinical treatment setting to gauge interest, follow-through, and participant reactions.

MATERIALS AND METHODS

This study includes partners and family members of birthing parents engaged in an established mother-baby partial hospital program for patients experiencing perinatal psychiatric disorders.[28-30] To be a patient in this partial hospital program, women must have moderate to severe symptoms of any psychiatric disorder while being concurrently pregnant or within 12 months of childbirth.

Patients in the partial hospital program were given information about the family support group at admission. Those who were interested in having a family member outreached provided family members' contact information to program staff. Family members were then contacted and given information on the group. If they elected to participate, they were provided with group information and a link to join virtually on their specified date. The hour-long group occurred bi-weekly and was only offered virtually. The support group was designed as a standalone session, but family members were offered to join multiple sessions, per their preference.

Although patients in the program were experiencing a range of psychiatric concerns, family support group programming primarily focused on perinatal depression, given that it was the most common presenting concern. Group content included psychoeducation on symptoms of perinatal depression and anxiety, an overview of partial hospital programming, specific strategies for supporting their loved ones' mental health treatment, and signs of postpartum depression in non-birthing parents. Each session was led by a clinical psychologist with expertise in perinatal mental health and family functioning. Sessions were designed to serve as a standalone psychoeducational intervention by providing an overview to the major topics identified above, with additional content and discussion based on participant interest.

To examine participant perspectives of the family support group, all participants were invited to complete an optional, anonymous survey via Research Electronic Data Capture (REDCap) within one week after attending the group. This survey solicited both open-ended and structured feedback regarding the family support group. The survey included the Client Satisfaction Questionnaire (CSQ), an 8-item measure assessing satisfaction on a 1–4 Likert scale, with higher indicating greater satisfaction.[31] The CSQ-8 is a validated tool widely used in health, mental health, and social services settings.[31] Demographic data were not collected on patient feedback surveys in order to protect the anonymity of respondents.

RESULTS

One hundred and five partial hospital patients consented for hospital staff to contact their family members to participate in the family support group and provided informed consent to contact. Of 105 family members who were contacted, 65% (n=70) reported interest in participating in the group. Among those with interest, 64% (n=45) of these individuals participated in the program.

Regarding acceptability, among respondents who completed the REDCap feedback survey (n=13), average scores on the CSQ-8 suggest a high level of satisfaction among family members (M=27.25; SD=3.4). Qualitative feedback was also positive, with common themes noting that participating in the virtual support group increased not only their understanding of perinatal mood disorders symptoms and treatment but their empathy for their loved one's mental health struggles [**Table 1**]. Participants also felt supported by the program, as it validated their caregiver fatigue and made space for peer support from others who also had loved ones undergoing psychiatric treatment. When asked about things to change about the group, over two-thirds indicated a desire for more frequent or longer group sessions.

Table 1. Qualitative feedback among participants in a virtual support group for family members of perinatal patients with moderate or severe psychiatric illness

Theme	Quote
Validation and support for family caregivers	*"It really spun my situation to a more positive place/feeling than I had prior to the session."* *"It provided basic tools and advice."*
Useful information re: perinatal mood disorders	*"I liked how personable the environment was and the valuable information that was provided."* *"It helped give me a better perspective [regarding] how to handle situations."*
Wish for longer/ more sessions	"Longer sessions, so people would have more time to share." "I would offer additional sessions."
Normalization and peer support	*"Loved hearing others' stories and knowing you're not alone in this."* *"It helped me to hear other people's experiences and to be able to receive valuable general suggestions or recommendations that could empower me to be a better supporter of my partner."*
Increased empathy towards family member	*"Helped me put everything into perspective and understand what my wife is going through."*

Note: No demographic information was captured among survey respondents.

DISCUSSION

In this preliminary study, a novel, virtual, 60-minute psychoeducational support group for family members of patients undergoing treatment for moderate to severe perinatal mood disorder symptoms was shown to be feasible. In addition, high levels of participant satisfaction with the program were noted. Qualitative data suggested the reasons for the favorable perception included not only peer support but psychoeducation from a trusted source, which allowed participants to increase their knowledge of perinatal mood disorder symptoms and treatment and empathy towards their loved one with the psychiatric illness. Findings from this pilot project support further research powered to detect whether the program improves mental health symptoms for the perinatal person or their family members.

These findings contribute to the growing body of literature describing the feasibility and acceptability of novel psychoeducational or psychotherapy-based programs designed for partners or family members of perinatal people to prevent or treat psychiatric conditions.[25-27] Similar to these prior studies,[25-27] partner or family-member engagement with our psychoeducational program was high. However, unlike the prior family-based interventions—which comprised anywhere from five[26] to 12 distinct sessions,[27] the majority of which were in-person[25-27]—our program provided comprehensive psychoeducation and peer support with one virtual session, though family members were allowed to attend group as many times as they desired. Thus, this work expands the potential of family-based, perinatal psychoeducational support by demonstrating that a single virtual session is not only feasible but viewed highly favorably by attendees.

This study also introduces important clinical and academic considerations in terms of programmatic sustainability. First, although this support group was designed as a standalone virtual session, participants could attend as many sessions as they desired. However, no participants engaged in the group more than once, despite some individuals providing feedback that they wished there were longer or more frequent sessions. Unfortunately, we do not have explicit feedback on why they did not attend multiple sessions. It is possible that participants believed a single session was sufficient to improve their understanding of what their affected partner or family member was experiencing, rendering additional attendance unnecessary. Alternatively, some family members may not have attended more than once given their awareness that similar content was covered in each session. It is also possible that partners and family members did not have the bandwidth to attend more than one session. Indeed participants often attended during a break from work or while caring for their baby, suggesting that they were juggling multiple demands.

Future programming could consider a hybrid model in which families are offered multiple drop-in sessions covering a range of topics (i.e., attend as often as desired). Second, this program was created and implemented by a trained clinician whose salary was not based on the number of hours she billed each week. This financial flexibility allowed her to provide the program free-of-charge to attendees as part of her clinical schedule. However, this also led to the program being paused when the clinician's work hours and responsibilities changed. Third, as our initial focus was on program feasibility and acceptability, we did not collect data on clinical outcomes of the patient or participating family member. Thus, the potential effect of this program on stress or perinatal mental health symptoms for both program participants and their family members is unknown. It would also be important to assess the extent to which participant knowledge of perinatal mental health symptoms and treatment changed from participating in this program, as increased knowledge may translate into improved support for the perinatal psychiatric patient, potentially reducing their mental health symptoms. We anticipate this study will serve as proof of concept to support a larger randomized trial powered to detect clinically meaningful outcomes.

This study has both strengths and limitations. Study strengths include the fact that this program was assessed via a mixed-methods approach, allowing for participants to provide feedback on the program via both validated quantitative surveys and qualitative research. In addition, the program was staffed by the same perinatal psychologist, ensuring the content provided was consistent and evidence-based. In terms of limitations, participant demographics were not assessed. While this decision was intentional to protect the anonymity of patients and their family members, it is therefore impossible to determine whether those who participated in the study were racially, ethnically, or sociodemographically diverse. In addition, less than one-third of participants in the program provided feedback regarding program satisfaction and acceptability, increasing the risk of selection bias. Lastly, we did not collect data on the number of patients with moderate or severe depression symptoms who were offered the program for their family members, though these data would have provided additional understanding of family members' interest in the program.

CONCLUSION

In conclusion, inadequate and perceived lack of social support from partners and family is a known risk factor for PPD.[3-11] It is possible that participating in support groups for family members of patients with moderate or severe perinatal psychiatric conditions may increase the support they provide to their loved one, thereby reducing their psychiatric symptoms and expediting treatment. In this study, we demonstrate the feasibility of a single-session, virtual, psychoeducational support group for family members of patients undergoing treatment for moderate or severe perinatal psychiatric symptoms. The value of the session was evidenced by patient uptake and the favorable evaluations of participants. We also identified challenges for future programming in terms of the need to financially support clinician effort. Thus, these results provide both a roadmap for other partial hospital programs seeking to include partners and family members in treatment, as well as an important foundation for future research exploring the clinical effect of virtual family support for patients experiencing perinatal psychiatric disorders.

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Moving Beyond Crisis Stabilization: Clinician Recommendations and Patient Perspectives for Improving Youth Psychiatric Hospitalization

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ABSTRACT

Inpatient psychiatric hospitalization is often considered the "default" solution for youth at risk for suicide, but these services have not been shaped by the voices of youth or families or by strong research support. To address these gaps, we sought to provide recommendations on improving care based on our clinical teams' diverse experiences working in inpatient settings in Rhode Island, enhanced by interviews with youth in psychiatric care and their caregivers about their experiences. We highlight the need for stronger family involvement, better transition planning, personalized safety strategies, and culturally responsive care. These improvements could reduce readmissions and support long-term recovery.

INTRODUCTION

Inpatient psychiatric hospitalization is often considered the "default" response for youth at risk for suicide.[1] Psychiatric hospitalization is intended to provide immediate safety and stabilization through individual, family, group, and milieu treatments.[2-4] Despite its widespread use, inpatient care for youth is not guided by an empirically informed or standardized model of care, and practices vary across units.[5] Furthermore, inpatient care has primarily been developed without input from critical parties, including the impacted youth and their families.[6,7] Consequently, there is a pressing need for an evidence-based care framework that integrates this input, to enhance treatment efficacy and promote long-term outcomes.

Drawing on our team's multidisciplinary expertise in pediatric inpatient settings, we sought to address this gap. To enrich our clinical insights, we invited youth (n=10; age range: 12–17, M=14.4) receiving psychiatric care at an adolescent inpatient unit in Rhode Island and their caregivers (n=17) to share reflections through open-ended conversations regarding their expectations about inpatient psychiatric hospitalization. These interviews were conducted with approval from our hospital's Institutional Review Board, with all participants providing informed consent and assent. Through this commentary, we seek to share key insights and recommendations based on our frontline professional experience and the lived experiences of these critical parties.

A NEED TO MOVE BEYOND CRISIS STABILIZATION

While psychiatric hospitalization is largely viewed as effective in providing immediate safety and stabilization, there is a need for enhanced transition planning, increased family involvement, and attention to cultural considerations to enhance overall treatment efficacy and promote more long-term safety for at-risk youth. To that end, the following recommendations are presented.

THOROUGH SCHOOL TRANSITION PLANNING

Returning to the home and school environment is often one of the most significant sources of stress following an inpatient hospitalization. In particular, youth-caregiver dyads frequently highlight an overall lack of coordination between the hospital and the school, impacting the development of a clear and supportive reintegration plan. Inpatient units may want to include designated social workers or other clinical team members who could serve as liaisons between the hospital, the school, and the family in the youth's treatment team. Specific tasks for these liaisons may include ensuring that there is signed consent for the clinical team to talk with the school, communicating diagnostic impressions and treatment courses throughout the hospitalization and beyond, organizing and facilitating plans to address missed assignments or other academic expectations, and providing robust recommendations to relevant parties (e.g., teachers, guidance counselors, school administration, support staff).

CAREGIVER SUPPORT AND GUIDANCE

While inpatient care is understandably centered on the hospitalized youth, the support offered to caregivers and broader systems often falls short of meeting their needs. Caregivers frequently report wanting greater inclusion and support throughout their youth's hospitalization. Caregivers note that they often feel unprepared and too overwhelmed to support their youth effectively during hospitalization and following discharge. Inpatient units should consider incorporating caregivers within the treatment plan from the start of hospitalization to address these concerns. This can be achieved via the development of formal caregiver training and educational sessions conducted throughout the hospitalization, either through single- or multi-family therapy sessions. These sessions should focus on providing psychoeducation regarding specific coping skills that the youth are learning and on disseminating practical tools (e.g., communication strategies, emotion regulation practices) that the caregivers can utilize to support their youth as they transition back home. Given the competing demands of many caregivers (e.g., caring for other children, balancing the demands of work, home, and the treatment of their hospitalized youth), making sessions available "on demand," such as through pre-recorded training videos, would alleviate some of the time burden not only for caregivers, but also clinical staff. Further, inpatient units should implement early and collaborative discharge planning with the family to provide caregivers with the support and confidence needed to manage their youth's transition home, and should include specifics on which providers will be involved in the youth's treatment team post-discharge, identifying potential barriers and collaborative problem-solving to attend appointments and sessions, and creating a visual schedule (when possible) so that expectations are clear for both the youth and the caregiver.

Finally, some caregivers describe the hospitalization as a temporary, but significant, relief from the emotional and logistical strain of caring for their child at home. Inpatient units may want to address and validate these feelings openly and perhaps even prescribe that caregivers utilize their youth's hospitalization to learn new supportive strategies and skills and engage in respite and self-care activities.

PERSONALIZATION OF SAFETY PLANS

Safety planning has become a standard component of inpatient hospitalization and is typically completed by the youth shortly prior to discharge. While many caregivers note that their youth had developed a safety plan before their hospital discharge, some caregivers may perceive these safety plans as hastily developed, with inadequate input from the family. As a result, youth and caregivers often feel that their safety plans are generic, impersonal, and difficult to implement within their home environments. Further, caregivers often express uncertainty in their specific role within their youth's safety plans. This is consistent with the literature that shows caregivers often do not know the details of their child's safety plan[8]; yet, when caregivers are involved in safety planning, the plans are deemed more effective.[9]

Inpatient units should focus on training and role-playing safety planning with staff to enhance personalization of the plans. This should be in tandem with implementing early and collaborative safety planning discussions with youth and their caregivers. These plans should be tailored to fit the family's unique environments. Further, inpatient units may consider expanding safety planning to include direct, clear instructions for caregivers on responding to challenging moments or supporting their youth during a crisis. Providing opportunities for caregivers to practice these responses while their child remains hospitalized could enhance their confidence and preparedness to respond following discharge. Brief, post-discharge check-ins with families could further support effective implementation.

INTEGRATION OF CULTURAL FACTORS

Currently, there are no cultural guidelines specific to inpatient care, potentially leaving important aspects of culture overlooked and inadequately addressed. Youth and their caregivers often endorse wanting a greater emphasis on cultural considerations within treatment plans during hospitalization. For example, religious or familial beliefs around suicide may need to be more thoroughly assessed. To address these concerns, inpatient psychiatric units should provide ongoing, consistent cultural competency training for clinical team members and unit staff. This training should focus on understanding the diverse backgrounds, strengths, and challenges of the youth in their care and integrating these considerations into treatment.

Further, on a practical note, inpatient psychiatric units may want to develop processes that ensure access to critical materials (e.g., safety plans, psychoeducation documents) in the family's preferred language, and ensure access to culturally informed personal hygiene products.

CONCLUSION

While psychiatric hospitalization remains a critical component of intervention for high-risk youth, it is essential that care evolves to reflect the needs and voices of the families it serves. By integrating our clinical expertise with direct feedback from youth and their caregivers, we offer a set of recommendations to guide improvements in inpatient care beyond short-term crisis stabilization toward a more family-centered and culturally responsive approach. Inpatient units may wish to address these areas of improvement via the recommendations provided or through their own efforts to understand their communities, ensuring hospitalization effectively meets the immediate and long-term needs of the families served.

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Social Needs Analysis in a Transcranial Magnetic Stimulation Patient Cohort with Major Depressive Disorder

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ABSTRACT

BACKGROUND: Social determinants of health play a critical role in mental health outcomes, yet their influence on access to and response to transcranial magnetic stimulation (TMS) for major depressive disorder (MDD) remains poorly understood. As TMS is an effective intervention for treatment-resistant depression and may serve a clinically vulnerable population, characterizing the social context of patients receiving TMS is essential. We examined social needs and assets in a TMS-treated cohort and evaluated their relationship to treatment response, hypothesizing greater social need burden among non-responders.

METHODS: We conducted a retrospective analysis of adults who received an acute course of TMS for MDD at Butler Hospital between 2019 and 2021. Depressive symptom severity, response, and remission were assessed using the Inventory of Depressive Symptomatology–Self Report (IDS-SR). Social needs and assets were measured using a modified Accountable Health Communities Health-Related Social Needs (AHC-HRSN) Screening Tool, including items assessing community engagement.

RESULTS: Seventy-four patients were included in the analysis. Baseline social needs were not significantly associated with TMS response or remission. Patients accessing TMS generally demonstrated high levels of social assets and minimal deficits in basic needs and substance use; however, most reported social isolation and substantial functional impairment. Several domains of self-reported social needs improved following TMS treatment, independent of clinical response.

CONCLUSIONS: Patients receiving TMS exhibited relatively high social assets despite pronounced psychosocial burden associated with depression. Several self-reported psychosocial domains improved following treatment, including isolation/loneliness, difficulty with concentration, and ability to complete errands independently. These findings suggest that TMS may coincide with functional improvements beyond depressive symptom reduction and highlights opportunities to integrate supportive psychosocial services alongside treatment that may further optimize clinical outcomes and reduce social unmet needs. Further investigation is needed to understand how social context influences access to and outcomes of TMS care.

KEYWORDS: Major Depressive Disorder; Social Determinants of Health; Transcranial Magnetic Stimulation

INTRODUCTION

As of 2020, more than 1 in 5 adults in the United States experienced mental illness. Major depressive disorder (MDD) is among the most common psychiatric disorders, and its prevalence continues to rise. In 2017, an estimated 17.3 million U.S. adults (~7% of the adult population) experienced at least one major depressive episode; by 2020, this increased to approximately 21.0 million adults (8.4%).[1,2] Consistent with these trends, data from the National Center for Health Statistics indicate that the proportion of adults receiving mental health treatment within a one-year period increased from 19.2% in 2019 to 21.6% in 2021.[3] Globally, the Global Burden of Disease Study 2019 reaffirmed that mental disorders remain a leading driver of disability; depressive disorders ranked 13th for disability-adjusted life years and were the second leading cause of years lived with disability.[4]

In parallel, clinicians and health systems increasingly recognize that social determinants of health substantially influence both risk for mental illness and downstream outcomes. Social determinants of health refer to the conditions in which people are born, grow, live, work, and age that shape health risks and access to care. Within this framework, "social needs" represent individual-level representations of these broader determinants (e.g., housing instability, food insecurity, transportation barriers, and social isolation), whereas "social assets" refer to supportive resources such as stable housing, reliable transportation, and strong social networks and supports that may help facilitate engagement in care. Higher levels of unmet social needs are associated with an increased likelihood of developing mental illness,[5] and smaller social networks and reduced social support are linked to greater depressive symptom burden.[6] Individuals experiencing more unmet social needs face a higher risk of adverse health outcomes and are less likely to engage in care at the same rates as patients with stronger social supports and assets. Evidence also supports a reciprocal relationship: mental illness can undermine social functioning and economic stability, with cumulative effects over the life course.[7] Numerous studies have demonstrated associations between mental health and educational attainment, relationship stability, criminal justice involvement, workforce participation, economic status, and housing stability.[8-13] Patients with MDD are more likely to report negative social interactions and diminished social belonging, often worsening as symptom severity increases.[14] This is particularly concerning given longstanding evidence that social support can mitigate depressive symptoms, while a lack of support may contribute to the development of MDD.[15]

Despite available interventions, consistently effective treatment for MDD is not assured. In the STAR*D trial, remission after an initial antidepressant medication trial was estimated to be approximately one-third.[16] In the setting of frequent treatment resistance, transcranial magnetic stimulation (TMS) emerged as an additional treatment modality for MDD.[17] TMS is a neuromodulation procedure that uses magnetic fields to non-invasively stimulate regions in the brain. It is approved for difficult to treat depression among patients who have not benefited from one or more medication trials; clinically, many patients treated with TMS present with long-standing, recurrent, or chronic depressive illness.

To date, little research has examined how social needs and social assets influence access to, adherence to, and benefit from TMS. Given the effectiveness of TMS for a subset of patients with MDD and the potential vulnerability of individuals who pursue this specialized treatment, it is important to better understand the social context surrounding TMS care. Characterizing social needs and assets in this cohort may inform holistic psychiatric care, aid in the identification of barriers to TMS access, and clarify the relationship between health-related social needs and treatment response. Such findings may also help identify opportunities for integrated supportive interventions and inform policies that promote more equitable access to effective treatment.

Accordingly, this study aimed to characterize social determinants in a TMS-treated patient population and to evaluate changes in these determinants following TMS treatment. A secondary aim was to test whether baseline social needs were associated with clinical outcomes following a standard course of TMS therapy.

METHODS

Study Design and Population

We performed a retrospective analysis of data obtained from patients who underwent an acute series of TMS therapy for MDD at the Butler Hospital TMS Clinic between 2019 and 2021. The Butler Hospital Institutional Review Board (IRB) approved the use of clinical data for this purpose. Data were collected at the beginning of the TMS course and again after the final treatment session as part of routine clinical care. Treatment was naturalistic and delivered according to standard-of-care TMS clinical practice.

Sample Characteristics

We included all consecutively admitted adult patients (≥18 years) who received an acute series of TMS at the Butler Hospital TMS Clinic and completed the modified Social Determinants of Health questionnaire. Patients were either self-referred or referred by community providers. All patients were required to meet insurance (Medicaid, Medicare, and commercial plans) coverage for criteria for TMS, which included a primary diagnosis of MDD (single or recurrent episode, without psychotic features, consistent with DSM-V criteria), and documentation of inadequate response or intolerance to >2 antidepressant medical trials. Patients were excluded if they had medical (e.g., seizure disorder) or other (e.g., intracranial metal) conditions that would preclude safe administration of TMS. Patients were required to have MDD symptoms at a moderate or severe level after consultation with a TMS psychiatrist based on clinical assessment and measured by standardized self-report depression measures. Patients must also be sufficiently stable to engage in outpatient care.

TMS Device and Treatment Protocol

Data were collected as part of routine screening and ongoing clinical care. Butler Hospital is a private, non-profit psychiatric and substance use hospital that also serves as a teaching and research facility for Rhode Island and Southeastern Massachusetts.

TMS sessions were delivered once daily as an adjunct to ongoing psychiatric medications. Patients typically received five treatment sessions per week for a total of 30 sessions over six weeks, followed by a taper phase comprising six additional sessions over three weeks. In cases where patients improved but had not achieved remission, the course could be extended by an additional 10 sessions; notably, this course extension was not available to patients with Medicare or Medicaid. Given the retrospective and naturalistic design, patients continued other aspects of mental health care, including pharmacotherapy and psychotherapy.

All treatments were delivered using the NeuroStar TMS Therapy system (Neuronetics, Inc., Malvern, PA). Motor threshold (MT) was determined over the left primary motor cortex during the initial session and used to set stimulation intensity. The system incorporates an iterative, automatic software-based algorithm (MT Assist, Neuronetics) to support MT determination. Head measurements were used to identify a scalp location corresponding to the left dorsolateral prefrontal cortex (DLPFC), over which the coil was positioned for treatment sessions. The standard protocol specifies stimulation at 120% of MT. The on-label stimulation parameters consisted of 10 pulses per second with a cycle of 4 seconds on and up to 26 seconds off, totaling 3000 pulses per session. Although all patients initiated treatment with left-sided 10 Hz stimulation, protocol modifications were made as clinically indicated to manage side effects or optimize outcomes.

Data

Depressive symptom severity and treatment outcomes were assessed using the Inventory of Depressive Symptomatology-Self Report (IDS-SR) and the Patient Health Questionnaire-9 (PHQ-9).[18,19] Consistent with definitions used in large clinical trials of TMS, IDS-SR response was defined as a ≥50% reduction from baseline to endpoint, and remission was defined as an endpoint IDS-SR score ≤14. Percent change was calculated as ((baseline – endpoint)/(baseline) × 100%). PHQ-9 response was defined as a ≥50% reduction from baseline, and remission as an endpoint score ≤4. Patients were grouped for analyses based on whether they met response or remission criteria at the end of treatment.

Chart abstraction included age, gender, race, primary language, ethnicity, educational attainment, employment status, marital status, insurance type, comorbid psychiatric conditions, antidepressant use, and home address. Home addresses were mapped using ArcGIS (Esri, Redlands, CA) to identify U.S. Census block group (BG).

To assess social needs and assets, we used a modified version of the Accountable Health Communities Health-Related Social Needs (AHC-HRSN) Screening Tool as a self-report measure, adding items to assess community engagement to measure social needs burden.[18] Social-need variables were created from questionnaire items and coded for hypothesis testing [**Figure 1**].

Figure 1. Modified Accountable Health Communities Health-Relates Social Needs Screening Tool (AHC-HRSN)

Questions on TMS Patient Social Determinants of Health Survey	Subcategory
What is your living situation today?	Basic Needs
Think about the place you live. Do you have problems with any of the following: 1) Pests such as bugs, ants, mice 2) mold 3) lead paint 4) lack of heat 5) oven or stove not working 6) smoke detectors missing or not working 7) water leaks 8) none of the above	Basic Needs
Within the past 12 months, you worried that your food would run out before you got money to buy more:	Basic Needs
Within the past 12 months, the food you bought just didn't last and you didn't have money to get more:	Basic Needs
In the past 12 months, has lack of reliable transportation kept you from medical appointments, meetings, work or from getting things needed for daily living?	Basic Needs
In the past 12 months has the electric, gas, oil, or water company threatened to shut off services in your home?	Basic Needs
How hard is it for you to pay for the very basics like food, housing, medical care, and heating?	Basic Needs
Do you want help finding or keeping work or a job?	Basic Needs
If for any reason you need help with day-to-day activities such as bathing, preparing meals, shopping, managing finances, etc., do you get the help you need?	Basic Needs
Do you want help with school or training? For example, starting or completing job training or getting a high school diploma, GED or equivalent.	Basic Needs
How often does anyone, including family and friends, physically hurt you?	IPV
How often does anyone, including family and friends, insult or talk down to you?	IPV
How often does anyone, including family and friends, threaten you with harm?	IPV
How often does anyone, including family and friends, scream or curse at you?	IPV
How often do you feel lonely or isolated from those around you?	Isolation and Stress
Stress means a situation in which a person feels tense, restless, nervous, or anxious, or is unable to sleep at night because his or her mind is troubled all the time. Do you feel this kind of stress these days?	Isolation and Stress
In the last 30 days, other than the activities you did for work, how many days during the week on average did you engage in moderate exercise (like walking fast, running, jogging, dancing, swimming, biking, or other similar activities)? On average, how many minutes did you usually spend exercising at this level on one of those days?	Behavior
In the past 3 months, have you engaged in any volunteering?	Behavior
How likely are you to vote in the upcoming election?	Behavior
How connected do you feel to your community?	Behavior
Because of a physical, mental, or emotional condition, do you have serious difficulty concentrating, remembering, or making decisions	Disability
Because of a physical, mental, or emotional condition, do you have difficulty doing errands alone such as visiting a doctor's office or shopping?	Disability
How many times in the past 12 months have you had 5 or more drinks in a day (males) or 4 or more drinks in a day (females)? One drink is 12 ounces of beer, 5 ounces of wine, or 1.5 ounces of 80-proof spirits.	Substance Use
How many times in the past 12 months have you used tobacco products (like cigarettes, cigars, snuff, chew, electronic cigarettes, vaping)?	Substance Use
How many times in the past year have you used prescription drugs for non-medical reasons?	Substance Use
How many times in the past year have you used illegal drugs (e.g., ecstacy, heroin, cocaine, LSD)?	Substance Use
Over the past 12 months, how many times have you been admitted to a hospital for inpatient psychiatric care?	Psych History
Over the past 12 months, have you been treated in a psychiatric day hospital or intensive outpatient program?	Psych History
Over the past 12 months, have you made a suicide attempt or suicide gesture?	Psych History

Questions were compiled into 7 subcategories: Basic Needs, Interpersonal Violence (IPV), Exposure, Isolation and Stress, Health-Related Behaviors, Psychiatric History, Substance Use, and Other

Statistical Analysis

Descriptive statistics characterized the sample at baseline. Continuous parametric variables are reported as mean (SD), continuous non-parametric variables as median (IQR), and categorical variables as proportions.

To compare remitters versus non-remitters, chi-square tests were used for categorical variables. Bonferroni correction was applied to reduce type I error from multiple comparisons. Paired t-tests examined within-subject changes over time (pre- versus post-treatment) in each social-need domain; a second Bonferroni correction was applied to these comparisons. Independent-sample t-tests compared mean AHC-HRSN total scores between outcome groups (responders vs non-responders and remitters vs non-remitters).

Regression models were used to identify predictors of treatment outcomes. Linear regression with backward elimination evaluated predictors of percent change in IDS-SR and PHQ-9. Stepwise forward binomial logistic regression evaluated predictors of IDS-SR and PHQ-9 response and remission status. Covariates included: age, gender (Male=0, Female=1); race (unavailable/other=0, White=1, Black=2); ethnicity (Not Hispanic/Spanish/Latino=0, Hispanic/Spanish/Latino=1); state of residence (Rhode Island=0, Massachusetts=1); total number of treatments, severe history of depression defined by previous psychiatric hospitalization or ECT (yes/no); insurance type (Private=1, Medicare=2, Medicaid=3, Dual Eligible=4); education level (High School=0, Some college=1, Technical college/Associate Degree=2, Bachelor's Degree=3, Graduate school=4), and SSDI enrollment (yes/no).

Domain scores were defined as follows: Housing Insecurity (Item 1; range 0–2); Unsafe Housing (Item 10 endorsements; range 0–7); Food Insecurity (Item 3; range 0–2); Financial Strain due to Cost of Living (Item 5; range 0–2); Assistance with ADLs (Item 8; range 0–3); Interpersonal Violence Exposure (sum of Items 11–14; range 0–16)[20,21]; Isolation (Item 15; range 0–4); Stress (Item 16; range 0–4); Lack of Community Connection (Item 17; range 0–2); Lack of Community Engagement (Item 21; range 0–1); Lack of Political Engagement (Item 22; range 0–3); Days without Moderate Exercise per week (Item 20; range 0–7); and Substance Use (sum of Items 23–26; range 0–16). A total basic-needs score ("AHC-HRSN Screening Tool Total Score") was calculated as the sum of Items 1–26 (range 0–79). While the aggregate score provides a pragmatic summary measure of social needs burden, the items capture multiple distinct domains, including poverty-related material needs (Items 1–10), interpersonal and internal dynamics and community engagement (Items 11–22), and substance use behaviors (Items 23–26). See **Figure 1** for item descriptions.

For backward elimination, all variables were entered initially; at each step, the least significant variable (highest p-value) was removed, using p>0.10 as the criterion for exclusion. For forward stepwise logistic regression, variables entered the model at p<.05. Correlation coefficients were interpreted using standard criteria: r<0.3 (weak), 0.3–0.7 (moderate), >0.7 (strong). All p-values were two-sided, with statistical significance defined as p<.05. Analyses were performed in SPSS version 24 (IBM Inc.).

RESULTS

Patient Sample

From September 2019 to August 2021, 82 patients initiated a course of TMS. Of these, 81 completed baseline social needs screening, 74 had clinical outcome data (IDS-SR, PHQ-9) available for analysis, and 40 completed endpoint social needs screening.

The mean age was 42.82 (15.71) years. The sample was 67.6% female; 1.4% identified as Black and 4.1% as Hispanic. Sixty-nine (93.2%) were adults aged 18–65 years, and five (6.8%) were older adults (>65 years). Demographic and clinical characteristics are summarized in **Table 1**.

TMS Treatment Outcomes

Mean (SD) percent change in IDS-SR from baseline to endpoint was 53.1% (31.3%). Mean percent change in PHQ-9 was 59.6% (36.1%). Forty-one (55.4%) met IDS-SR response criteria and 50 (67.6%) met PHQ-9 response criteria. Thirty-two (43.2%) met IDS-SR remission criteria and 33 (44.6%) met PHQ-9 remission criteria. Treatment outcomes are summarized in **Table 2**.

Reported Social Needs at Baseline

Fewer than one-quarter endorsed housing insecurity concerns, with only one patient endorsing active housing instability. Fewer than one-quarter endorsed food insecurity. Only one patient lacked reliable transportation, and only one endorsed difficulty affording utilities. However, just over one-third reported some difficulty paying for basic needs (e.g., medical, food, housing, heating). The most endorsed domains were isolation/loneliness and stress, each reported by 94.6% of the sample. Similarly, 90.8% reported low or no community connection and 86.2% reported no volunteer activity in the prior three months. Baseline responses to the modified AHC-HRSN tool are summarized in **Figure 2**.

Changes in Social Needs Following TMS Treatment

Paired t-test results assessing change in social needs from pre- to post-treatment are summarized in **Table 3**, after Bonferroni correction, adjusted α=0.003. Exposure to physical violence did not change significantly (0.05±0.32 vs 0.00±0.00; t(39)=1.00, p=0.32), though it was endorsed by only two patients at baseline and none at endpoint. No significant changes were observed for threats of physical harm (0.05±0.22 vs 0.05±0.22; t(39)=0.00, p=1.00) or verbal abuse (0.43±0.75 vs 0.40±0.71; t(39)=0.37, p=0.74).

Difficulty paying for basic needs decreased (0.63±0.77 vs 0.43±0.59; t(39)=2.24, p=0.031), though not at the corrected

Table 1. Demographics and Clinical Characteristics of Study Population (n=74)

Characteristic	**n (%) or mean ± SD**
Age, years	42.82 ± 15.71
Gender	
Female	50 (67.6%)
Male	24 (32.4%)
Race	
White	69 (93.2%)
Black	1 (1.4%)
Other/Unavailable	4 (5.4%)
Ethnicity	
Hispanic, Latino, or Spanish	3 (4.1%)
All Other	71 (95.9%)
Primary language	
English	72 (97.3%)
French	1 (1.4%)
Other	1 (1.4%)
English not spoken at home	7 (9.5%)
Marital status	
Married	31 (41.9%)
Single	35 (47.3%)
Divorced	8 (10.8%)
Insurance	
Private Insurance	35 (47.3%)
Medicare only	17 (23.0%)
Medicaid only	16 (21.6%)
Dual Eligible	6 (8.1%)
Education	
High School	9 (12.2%)
Some College	16 (21.6%)
Technical College/Associates	4 (5.4%)
Bachelor's	30 (40.5%)
Graduate School	15 (20.3%)
Geography	
Living in RI	64 (86.5%)
Living in MA	10 (13.5%)
Treatment history	
Prior Psychiatric Hospitalization	46 (62.2%)
Prior Electroconvulsive Therapy	18 (24.3%)
Baseline IDS-SR score	45.81 ± 9.38
Baseline PHQ-9 score	18.91 ± 4.75
Concurrent Use of Antidepressant Medications*	64 (86.5%)
Any Comorbid Psychiatric Diagnosis	32 (43.2%)
Number of Treatments	35.20 ± 7.63
Employment status	
Employed	26 (35.1%)
Unemployed	15 (20.3%)
Disabled (no SSDI)	1 (1.4%)
SSDI recipient	20 (27%)
Student	2 (2.7%)
Retired	4 (5.4%)
Leave of Absence	6 (8.1%)

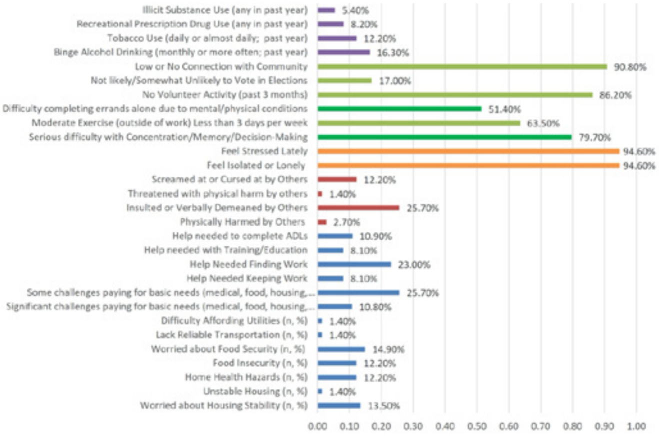
* Defined as prescription use at any dose of any antidepressant medication in one of the following classes: Selective serotonin reuptake inhibitors, Serotonin and norepinephrine reuptake inhibitors, Norepinephrine-dopamine reuptake inhibitors, Tricyclic Antidepressants, Noradrenergic and specific serotonergic antidepressants, Serotonin Antagonist and Reuptake Inhibitor, Monoamine oxidase inhibitors.

Table 2. TMS Treatment Outcomes (n=74)

IDS-SR Responder (n, %)	41 (55.4%)
PHQ-9 Responder (n, %)	50 (67.6%)
IDS-SR Remitter (n, %)	32 (43.2%)
PHQ-9 Remitter (n, %)	33 (44.6%)
%Change IDS-SR (mean ± SD)	53.1 ± 31.3
%Change PHQ-9 (mean ± SD)	59.6 ± 36.07

IDS-SR = Inventory of Depressive Symptomatology–Self-Report; remission=<14
PHQ-9 = Patient Health Questionnaire–9; remission=<4
Response defined as a ≥50% reduction from baseline score on the respective clinical rating scale.

Figure 2. Baseline Prevalence of Social Needs in the Cohort (n=74) by Modified AHC-HRSN Questionnaire



ADLs = Activities of Daily Living, defined as bathing, preparing meals, managing finances, shopping

threshold. Similar decreases were observed in needing help finding/keeping employment (0.63±0.90 vs 0.28±0.68; t(39)=3.01, p=0.005) and need for assistance with ADLs (0.62±0.85; t(38)=2.77, p=0.009).

There was a significant reduction in isolation/loneliness (2.90±0.73 vs 1.73±1.10; t(39)=7.86, p<0.001) and stress (3.23± 0.81 vs 1.54±1.06; t(38)=8.25, p<0.001). Community connection did not change significantly (1.25±0.62 vs 1.09±0.70; t(31)=1.54, p=0.134).

There was also a significant decrease in difficulties with concentration/memory/decision-making (0.79±0.41 vs 047± 0.51; t(37)=3.39, p=0.002) and in inability to complete errands alone (0.56±0.50 vs 0.18±0.39; t(38)=4.42, p<0.001).

Volunteer activity did not change (0.31±0.90 vs 0.34±0.87; t(31)=–2.73, p=0.79), and political engagement did not change (0.88±0.34 vs 0.84±0.37; t(31)=0.571, p=0.572).

Comparison of Response Groups

Independent-samples t-tests comparing responders versus non-responders found no significant baseline differences in AHC-HRSN total score using either definition of response:

Table 3. Changes in Subscale and Selected Item Scores From Baseline to Post-Treatment Following TMS Therapy (n = 40; adjusted α = 0.003)

Subscale Items	Mean	Std. Deviation	T	Df	Sig
Housing Insecurity	0.2	0.464	1.955	39	0.058
	0.075	0.267			
Exposure To Physical Violence	0.05	0.316	1	39	0.323
	0	0.000			
Insults and Verbal Demeaning	0.9744	1.013	2.817	38	0.008
	0.5641	0.852			
Threats of Harm	0.05	0.221	0	39	1
	0.05	0.221			
Verbal Abuse	0.425	0.747	0.374	39	0.711
	0.4	0.709			
Financial Strain Due to Cost of Living	0.625	0.774	2.243	39	0.031
	0.425	0.594			
Needs Employment Help	0.625	0.897	3.009	39	0.005
	0.275	0.679			
Needing Assistance with ADLs	0.6154	0.847	2.768	38	0.009
	0.3077	0.614			
Isolation	2.925	0.730	7.856	39	<0.001*
	1.725	1.062			
Stress	3.2308	0.810	8.253	38	<0.001*
	1.5385	1.253			
Community Connection	1.25	0.622	1.539	31	0.134
	1.0938	0.689			
Difficulty Concentrating, Remembering, or Making Decisions (n=38)	0.7895	0.413	3.389	37	0.002
	0.4737	0.506			
Difficulty Doing Errands (n=39)	0.5641	0.502	4.418	38	<0.001*
	0.1795	0.389			
Days without Moderate Exercise Per Week (n=38)	4.9474	2.105	2.479	37	0.018
	3.9737	2.137			
Minutes of exercise (n=39)	1.8718	0.951	2.061	38	0.046
	1.5128	0.790			
Community Engagement (n=32)	0.3125	0.896	-0.273	31	0.786
	0.3438	0.865			
Political Engagement (n=32)	0.875	0.336	0.571	31	0.572
	0.8438	0.369			

IDS-SR responders 16.21±5.72 vs non-responders 15.14±7.55; t(59)=–6.29, p=0.532. PHQ-9 responders 15.88±5.69 vs non-responders 15.43±8.17; t(59)=–2.50, p=0.804.

Similarly, remitters and non-remitters did not differ at baseline: IDS-SR remission groups 15.46±5.49 vs 15.91±7.37; t(59)=0.264, p=0.793. PHQ-9 remission groups 15.44±7.18 vs 15.92±5.75; t(59)=0.276, p=0.784. Chi-square analyses comparing domain-level endorsements between IDS-SR remitters and non-remitters showed no significant differences [**Table 4**].

Table 4. Association Between Social Needs and IDS-SR Remission Status: Chi-Square Analyses (adjusted α = 0.002)

Social Need Domain	Remitters, n (%) (n=32)	Non-Remitters, n (%) (n=42)	p-value
Housing Insecurity			0.156
Worried about Housing	2 (6)	8 (19)	
Unstable Housing	1 (3)	0 (0)	
Unsafe Housing	3 (9)	6 (14)	0.724
Food Insecurity			0.174
Sometimes True	2 (6)	7 (17)	
Food Security Worry			0.291
Sometimes True	4 (13)	4 (10)	
Often True	0 (0)	3 (7)	
Unreliable Transportation	0 (0)	1 (2)	1.000
Difficulty Affording Utilities	1 (3)	0 (0)	0.432
Financial Strain due to Cost of Living			0.716
Somewhat Hard	7 (22)	12 (29)	
Very Hard	3 (9)	5 (12)	
Need Help Finding Work	10 (31)	7 (17)	0.281
School Help Needed	2 (6)	4 (10)	0.693
Needing Assistance with ADLs			0.503
Little more help needed	3 (9)	2 (5)	
A lot more help needed	1 (3)	2 (5)	
Physically Harmed [a]	0 (0)	2 (5)	0.502
Insulted or Verbally Demeaned [a]	17 (53)	20 (48)	0.578
Threats of Harm [a]	0 (0)	4 (10)	0.200
Verbally Abused [a]	7 (22)	12 (29)	0.543
Isolated or Lonely			0.535
Rarely	1 (3)	1 (2)	
Sometimes	10 (31)	12 (29)	
Often	12 (38)	20 (48)	
Always	7 (22)	9 (21)	
Stress			0.637
A little bit	1 (3)	3 (7)	
Somewhat	3 (9)	5 (12)	
Quite a bit	15 (47)	14 (33)	
Very much	13 (41)	20 (48)	
Difficulty Concentrating, Remembering, or Making Decisions	26 (81)	33 (79)	1.000
Days without Moderate Exercise			0.525
Two or less	8 (25)	10 (24)	
Seven	13 (41)	11 (26)	
Difficulty Doing Errands	18 (56)	20 (48)	0.491
Binge Alcohol Drinking	10 (31)	16 (38)	0.901
Tobacco Use (daily)	3 (9)	6 (14)	0.260
Recreational Prescription Drug Use	2 (6)	5 (12)	0.075
Illicit Substance Use	2 (6)	2 (5)	1.000

ADLs = Activities of Daily Living: defined as bathing, preparing meals, managing finances, shopping

[a] counted as present if endorsed as happening "sometimes," "fairly often" or "frequently"

Social Determinants as Predictors of TMS Outcomes

A significant linear regression model predicting percent change in IDS-SR (Adjusted R^2=0.382, F(9,51)=5.12, p<0.001) retained eight variables. Age-predicted percent change (β=0.66, p=0.004), lack of community connection (β=–17.10, p=0.004), housing insecurity (β=–24.30, p=0.042), and food insecurity (β=–29.06, p=0.029) were negative predictors.

A significant linear regression model predicting percent change in PHQ-9 (Adjusted R^2=0.391, F(7,53)=6.51, p<0.001) retained seven variables. Age-predicted percent change (β=0.52, p=0.044), insurance type (β=12.81, p=0.002), and days without moderate exercise (β=6.67, p=0.001) were positive predictors. Severe history of depression (i.e., past ECT or inpatient psychiatric hospitalization) (β=–22.97, p=0.009), housing insecurity (β=–24.299, p=0.042), lack of community connection (β=–2.681, p=0.097), and food insecurity (β=–15.03, p=0.026) were negative predictors.

A significant forward stepwise logistic regression predicting IDS-SR responder status (Cox & Snell R^2=0.280, Nagelkerke R^2=0.374, overall correct=74.2%, p<0.001) retained four variables. Total treatments (B=0.12, χ^2(1)=5.35, p=0.021) and days without moderate exercise (B=0.474, χ^2(1)=7.068, p=0.008) were positive predictors. Lack of community connection (B=–1.36, χ^2(1)=4.97, p=0.056) was a negative predictor.

A significant forward stepwise logistic regression predicting PHQ-9 responder status (Cox & Snell R^2=0.338, Nagelkerke R^2=0.464, overall correct=74.2%, p<0.001) included four variables: total treatments (B=0.16, χ^2(1)=7.87, p=0.005), state of residence (B=3.97, χ^2(1)=4.92, p=0.027), and insurance type (B=1.35, χ^2(1)=6.76, p=0.009) were positive predictors; housing insecurity (B=–2.64, χ^2(1)=5.20, p=0.023) was a negative predictor.

A significant logistic regression predicting IDS-SR remission status (Cox & Snell R^2=0.315, Nagelkerke R^2=0.424, overall correct=75.8%, p<0.001) included five variables. Housing insecurity (B=–2.39, χ^2(1)=5.12, p=0.024), lack of community engagement (B=–2.68, χ^2(1)=5.61, p=0.018), food insecurity (B=–3.09, χ^2(1)=4.59, p=0.032), and past psychiatric hospitalization or ECT (B=–2.51, χ^2(1)=9.39, p=0.002) were negative predictors. A significant logistic regression predicting PHQ-9 remission status (Cox & Snell R^2=0.117, Nagelkerke R^2=0.158, overall correct=69.4%, p<0.006) retained one predictor: age (B=0.05, χ^2(1)=6.758, p=0.009).

DISCUSSION

This study aimed to characterize social needs in a TMS-treated cohort, evaluate the relationship between a patient's social needs and social assets to clinical treatment outcomes, and examine changes in self-reported social determinants before and after a course of TMS for MDD. We anticipated that this cohort would include patients with relatively higher social assets, given their ability to access a specialty clinic and engage in a treatment requiring weekday attendance during standard business hours for at least six consecutive weeks. We further hypothesized that higher baseline social assets would be associated with greater response and remission.

Consistent with published naturalistic response rates of approximately 45–60%, our cohort demonstrated response rates of 55.4% (IDS-SR) and 67.6% (PHQ-9). Remission rates were 43.2% (IDS-SR) and 44.6% (PHQ-9), within or slightly above typically reported remission ranges of 30–40% in clinical practice.[22,23]

Notably, the cohort was disproportionately White (93.2%). In 2019, when recruitment began, the proportion of individuals self-identifying as solely White was 78.5% in Massachusetts and 80.9% in Rhode Island. Similarly, only 4% of the cohort identified as Latino/Hispanic/Spanish, substantially lower than the 11.6% and 15% in Massachusetts and Rhode Island, respectively. English was the only language spoken at home for 90.5% of patients, compared with 76.4% in Massachusetts and 77.9% in Rhode Island.[32] These disparities suggest structural barriers to access for TMS treatment and are consistent with broader inequities in mental health care. Individuals from racial and ethnic minority groups have lower access to care, experience lower quality treatment, and have higher rates of discontinuation and lower satisfaction.[24-29] These findings reinforce the need for outreach and strategies to improve equitable access to specialty neuromodulation services.

Across many examined determinants, patients reported generally high social assets with relatively low prevalence of basic-need insecurities. Only one patient endorsed active housing instability, lack of reliable transportation, or difficulty affording utilities, and fewer than one-quarter endorsed housing or food insecurity. However, several domains reflected high psychosocial burden: isolation/loneliness, stress, reduced community connection, lack of volunteer activity, and functional impairments. These patterns may reflect common depressive features (e.g., cognitive symptoms, psychomotor retardation) and disability-associated withdrawal from social and community engagement.[10]

Contrary to our hypothesis, baseline social needs did not differ significantly between responders and non-responders or between remitters and non-remitters. This may reflect selection bias related to treatment access, limited variability in social needs within this cohort, or insufficient power (type II error).

Interestingly, several self-reported domains improved following TMS treatment, including isolation, stress, cognition-related difficulty, and functional limitations, and some nonsignificant trends suggested improvement in additional domains. These changes occurred independent of clinical response classification, raising questions about whether extended engagement with clinical staff, structured daily routines, or shifts in perceived social circumstances contribute to improvement beyond symptom change alone. Further work is needed to clarify mechanisms and reproducibility.

Regression models identified multiple predictors of outcomes. Some predictors (e.g., total treatments, insurance type, state of residence) may reflect access, adherence, and structural determinants of care. Patients with Medicaid or dual eligibility (i.e., individuals who qualify for both Medicare and Medicaid coverage, typically reflecting low income and higher medical or disability-related needs) have documented disparities in mental health care compared to privately insured individuals, including differences in access to services and treatment outcomes that are often associated with broader socioeconomic disadvantage rather than the insurance status itself, and our findings may reflect similar effects.[30] Access to TMS can vary across insurers due to timeline differences in prior authorization approval, which may create structural barriers to timely treatment. Additionally, some insurance companies, with the exception of Medicaid and Medicare, may approve extensions of up to 10 additional treatments if clinically indicated, which may allow some patients to achieve greater clinical improvement and could contribute to disparities in full access to care. The finding that out-of-state residence predicted better response in one model may indicate that patients able to travel across state lines for daily treatment have greater resources or support.

Other predictors—housing insecurity, food insecurity, interpersonal violence, lack of community connection, and psychiatric hospitalization/ECT history—were anticipated negative predictors, as these factors represent established social and clinical stressors associated with greater depressive symptom burden, reduced social support, or trauma exposure, which have been linked to poorer mental health outcomes and barriers to treatment engagement.[5,6,32] Importantly, these findings should not be interpreted as justification for restricting access to TMS among individuals experiencing greater social unmet needs. Rather, they highlight the opportunity to integrate psychosocial supports and addressing social needs alongside TMS Therapy that may help optimize clinical outcomes and reduce disparities in access to care.

Conversely, some variables representing a higher-need burden (e.g., financial strain, lack of political engagement, needing help with ADLs) emerged as positive predictors in certain models, which is counter to our hypothesis and may reflect complex confounding, measurement overlap with depressive symptom domains, or cohort-specific effects. From a clinical perspective in neuromodulation populations, some of these variables may also partially overlap with depressive symptom domains themselves (e.g., reduced activity levels or civic engagement), functioning as proxies for baseline illness severity rather than independent causal predictors. Age also emerged as a positive predictor, despite prior work suggesting limited association with TMS outcomes.[31]

Strengths include a longitudinal design capturing change over time—an important limitation in much research on social determinants.[21] Evaluating social determinants pre- and post-treatment allowed identification of statistically significant improvements in several domains. Additionally, allowing concurrent pharmacotherapy and psychotherapy improves generalizability to real-world clinical care.

Limitations include single-site design, which may reduce external validity. Endpoint survey completion was limited for a subset of the cohort, potentially introducing attrition bias. Additionally, the sample was relatively homogenous with respect to racial, ethnic, and socioeconomic characteristics, and given the generally high social assets of this sample, restricted range may have reduced the ability to detect effects. Finally, while the AHC-HRSN provides a pragmatic framework for measurement of social determinants, refinements to timeframes and scaling may improve clarity and usability for future work.

Future research should further characterize this cohort, including granular socioeconomic indicators (e.g., household income, housing value, homeownership, neighborhood safety/walkability, debt burden). Qualitative approaches may clarify barriers to TMS access and illuminate how social assets are mobilized to engage in treatment. Structured interviews with patients and referring providers may be particularly valuable to understand referral pathways, access inequities, and opportunities to improve equitable linkage to TMS services.

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Integrated Behavioral Health in Family Medicine Supports Resident Learning by Working to Achieve the Quintuple Aim

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ABSTRACT

Integrated behavioral health (IBH) in primary care settings has been touted as improving access to behavioral health services. In this case report, we describe a representative IBH team nested in a family medicine residency clinic, led by a behavioral health faculty clinician. Using this patient as an example, we identify ways in which the team was able to achieve elements of the quintuple aim (population health, enhanced patient experience, cost reduction, health equity, and provider well-being). We additionally utilize this case report to provide examples of learning opportunities for medical residents.

KEYWORDS: Integrated behavioral health; family medicine behavioral health education; primary care; quintuple aim

INTRODUCTION

Patients navigating the United States (U.S.) healthcare system in pursuit of behavioral health services face significant challenges.[1] Increased medical complexity, psychiatric co-morbidity, acuity, and unmet social and financial needs (i.e., social determinants of health (SDoH)) further impede efforts to engage in necessary care.[2] Patients unable to access specialty mental health care often rely on primary care settings, overwhelming already overburdened providers seeking to manage their multiple conditions.[3] This dynamic exacerbates occupational stress and burnout[4] among medical residents balancing competing patient care and professional development priorities.[5] Integrated Behavioral Health (IBH) teams with behavioral health faculty embedded within medical residency training clinics teach residents aspects of behavioral health collaboration and coordination, brief assessment and treatment, and communication skills which they can take forward into their primary care practices when they graduate. In this way, IBH teams provide a pathway by which to enhance care for patients coping with multiple medical and behavioral health issues and SDoH needs, maximize learning and support for medical residents,[6] and advance primary care clinics towards meeting the quintuple aim[7]: improved population health, patient experience, healthcare provider well-being, health equity, and reduced per capita cost.

The Family Care Center (FCC) is a resident-led primary care clinic and patient-centered medical home for the Brown Family Medicine Residency of the Warren Alpert Medical School of Brown University. It is a safety net clinic characterized by a high proportion of patients utilizing public insurance and high rates of co-morbidity, psychiatric complexity, and challenges related to SDoH. Patient care is predominantly delivered by residents and advanced medical students overseen by faculty preceptors. In addition, the FCC is staffed by an IBH team offering embedded services comprised of multiple IBH clinicians (i.e., clinical psychologists and a licensed social worker), two bachelor's-level IBH community health workers (CHWs), psychology doctoral students, and a double-boarded family medicine/psychiatry physician who consults three half-days per month.

Some IBH team members, including the double-boarded family medicine/psychiatry physician, additionally serve as behavioral health faculty members, and the IBH team leader serves as the Director of Behavioral Health for the residency program. IBH team members are available for warm handoffs from resident primary care physicians (PCPs) during routine primary care visits. In this way, the IBH team provides an interprofessional behavioral health integration learning experience for residents in team-based care. Additional resident learning experiences with the IBH team include observations and co-therapy within the behavioral health faculty members' scheduled clinics, and via co-therapy and/or leading care of patients who present in the weekly walk-in behavioral health open access clinic. The behavioral health open access clinic is an interdisciplinary training clinic comprised of medical residents, medical students, and psychology students, and is supervised by two behavioral health faculty members. The chronic pain group medical visit at the FCC provides another avenue for interdisciplinary collaboration and behavioral health clinical teaching. This monthly medical group visit is led by three medical residents under the supervision of a physician faculty preceptor, and includes the presentation of topics related to coping with chronic pain. Monthly groups typically include resident co-presentations on a behavioral health topic, with a behavioral health faculty member coaching.

CASE REPORT

A 62-year-old male patient dually eligible for Medicaid and Medicare, has been followed for >10 years at the FCC. He has multiple chronic, poorly controlled medical conditions, active behavioral health issues, and SDoH needs impacting his overall well-being and adherence to medical care [**Figure 1**]. His visits have the potential to be overwhelming and unproductive for any primary care provider, but especially a trainee learning how to set agendas and manage several problems simultaneously. The patient was initially referred to an IBH clinician by his resident PCP in 2018 for chronic depression. Initial IBH assessment also identified the patient to be coping with inordinate family-related stress, PTSD, chronic pain and other complex medical conditions, and self-reporting a history of substance use disorder. Given the acuity and expanded understanding of the patient's mental health conditions, the IBH clinician initially recommended that the IBH team assist in guiding the patient to a specialty mental health referral at a community mental health center where he could receive more frequent, sustained therapeutic support. The patient declined outside referral due to his mistrust of new providers; however, he agreed to initiate care at the primary care site, crediting trust established with his primary care team at the FCC, and rapport established with his IBH clinician.

Figure 2 summarizes elements of collaboration between the IBH team and the resident PCP, aligned with quintuple aims and lessons learned. Challenges encountered by the patient included difficulty adhering to recommendations for management of diabetes and sleep apnea, distress due to a difficult interaction with a specialty provider, and escalation of chronic pain symptoms in the context of chronic suicidal ideation. The IBH clinician was able to address those issues in therapy sessions provided within the patient's primary care setting. When SDoH needs presented as a barrier to equitable care, then leading to feelings of hopelessness and immobilization, the IBH team was able to partner with CHWs to facilitate appropriate referrals for community SDoH support, while the IBH clinicians continued to address the psychological impact in their visits. The patient's ongoing engagement with the IBH clinician and the FCC IBH team has provided a pathway to foster trust in the broader healthcare system. Despite the patient's initial decision to decline referral for specialty mental health care, he ultimately requested a referral to a behavioral health clinician with expertise in supporting not only the aforementioned issues, but also LGBTQ-related concerns, a need uncovered via his IBH therapy sessions.

Figure 1. Summary of the patient's medical and mental health issues

Medical diagnoses	Behavioral health issues	Issues related to SDOH
• Chronic pain • Type 2 DM (poorly controlled) • COPD • OSA (poor adherence to CPAP) • Hypertension • Atrial fibrillation • Pancreatitis • Stage 3 Chronic Renal-Insufficiency • Diabetic foot ulcer	• MDD moderate, recurrent -PTSD • Chronic suicidal ideation • Coping with Chronic medical conditions including chronic pain • Distress related to sexual identity exploration • Psychosocial Stressors: family-related, financial, health	• Unable to work (receiving SSDI) • Barriers to healthcare access due to insurance • Limited finances • Housing instability
Involvement of IBH team allowed for better coordination with PCP to optimize treatment for Depression and PTSD, with chronic suicidal ideation; and also improved adherence to treatment for medical conditions, and access to community referral resources for both behavioral health and SDoH needs.		

Figure 2. Impact of IBH in primary care on elements of the Quintuple Aim – examples

Aim	Case Report Example	Learning Points
Population health	Poorly controlled diabetes and sleep apnea due to depression impacting adherence to treatment; IBH team helped patient with adherence	Unmet behavioral health needs can result in poor medical outcomes; Population health is better served when these needs are met
Enhanced patient experience	Patient distress and frustration about mental health referrals resulted in distrust in the system, unwillingness to accept new referrals	IBH clinician is ideal person to address this via support and appropriate referral
Cost reduction	Significant potential cost of missed appointments if pt's mistrust prevented him from going to scheduled referrals	IBH availability can reduce missed appointments due to inappropriate referrals, and can also address issues rapidly in primary care, resulting in fewer ED visits
Health equity	Patient had multiple SDoH barriers to care (losing insurance, financial and transportation barriers) that were able to be comprehensively addressed within primary care	Health equity is achieved when there are fewer barriers to medical care. IBH in primary care can solve these barriers more easily
Provider well-being	Taking care of the patient could have been overwhelming for any provider, especially a medical resident trainee; having the support of the IBH clinician allowed AP (co-author) to focus visits toward pressing medical issues.	IBH can unload the PCP visit by addressing BH concerns separately; supporting providers with complex, challenging patients is important in their wellness

DISCUSSION

Value of IBH in primary care

The case illustrates the challenges faced by primary care teams seeking to support patients with significant behavioral health needs, who may decline specialty mental health services.[8] This case demonstrates a dynamic often seen in primary care, wherein the unique combination of patients' behavioral health diagnoses, psychosocial stressors, and unmet SDoH needs have driven patient experiences of discrimination and suboptimal care in behavioral health clinical settings.[9-11] This in turn results in generalized distrust of systems of behavioral health care. Fortunately, this patient's trust in his primary care clinic and provider provided an avenue to connect with an IBH team, resulting in a sustained trajectory of care through which his PCP and IBH clinician could establish rapport, rebuild trust, and ultimately guide the patient towards specialty care specific to his needs.

Impact of IBH beyond the clinic

The IBH team supports health equity and cost reduction simultaneously by lowering barriers to medical care and preventing inappropriate referrals and emergency department visits. The availability of IBH within the primary care team allows patients to receive behavioral health care more efficiently, at the time of reported need during their PCP visit. Furthermore, timely behavioral health assessment through an IBH clinician supports creating an optimal behavioral health treatment plan and, if necessary, the most fitting referral resources. A positive patient experience with a timely and effective IBH intervention increases the chance that the patient will attend subsequent behavioral health appointments, preventing costly and unnecessary visits to the emergency department.

IBH in learner-focused primary care clinics

Collaboration between this patient's resident-level PCP and IBH clinician highlights pathways by which the IBH team in primary care residency settings brings considerable value to training.

While behavioral health providers can teach residents valuable skills through didactic lecture and workshop experiences, the presence of IBH in the primary care clinic supports robust and comprehensive learning in the context of direct clinical care. Care coordination between PCPs and IBH supports multiple elements of the quintuple aim,[13] and this case provided *in vivo* opportunities for the PCP to observe how IBH team coaching and advocacy smoothed challenges faced by both patient and provider in accessing care. When the patient experienced escalating emotional distress following interactions with medical providers and staff members, the IBH clinician has a unique skill set to counsel patients in these circumstances and assist in providing solutions and strategies.

The Accreditation Council of Graduate Medical Education's (ACGME) program requirements for Family Medicine specify: "there must be faculty members dedicated to the interprofessional integration of behavioral health" into the educational program, and "the curriculum must incorporate behavioral health into all aspects of patient care, including experience in integrated interprofessional behavioral health care in the [primary care practice]".[12] Notably, a qualitative study of FM residency practices found delivery and training experiences in IBH varied widely, despite recognition of the value and benefits to patients and care delivery processes.[13] A survey of FM program directors found only 44% reported fully integrated behavioral health care in their clinics.[14]

Impact of IBH on resident wellness

The presence of behavioral health faculty and the IBH team support resident PCP well-being. In **Figure 2** we highlight that coordination between the IBH clinician and resident PCP helped ensure ample monitoring of behavioral health risks, allowing the PCP to address other complex health conditions. When IBH professionals provide risk assessment, treatment, and safety planning, residents are allowed to focus on patients' complex medical issues, prioritize quality care in the visit, and actively set an agenda. The IBH team also provides additional professional support through facilitating opportunities for residents to reflect on all aspects of the challenging, and ultimately rewarding, journey of caring for patients with complex needs.

Challenges

IBH adoption and sustainment demands significant resources, and faces barriers such as workforce shortages, high rates of occupational burnout, and competing demands on limited resources. IBH faces competition for physical space within primary care clinics, and the ongoing need to demonstrate financial viability via direct reimbursement for behavioral health services. A study comparing residency and non-residency family medicine practices found similar uptake of IBH and similar requirements for interventions and resources to help them overcome challenges associated with dissemination of high levels of BH integration.[15] Despite evidence underscoring the value of IBH, efforts to maintain a robust integration of behavioral health and primary care workflows often include navigating similar roadblocks.[16] Nonetheless, the shifting landscape of healthcare provision and training may yield significant opportunities to advance integration of behavioral health in practice, to the benefit of population health and healthcare spending goals nationwide.[17]

In summary, this case demonstrates key ways in which IBH and resident PCP collaboration advance health services towards the quintuple aims of healthcare improvement, and provides unique and valuable training experiences for our future primary care workforce. ACGME accreditation requires robust behavioral health training opportunities. This case report illustrates the enhanced value of achieving those requirements via an IBH program.

Challenges include competition for physical space within primary care clinics, and the ongoing need to demonstrate financial viability via direct reimbursement for behavioral health services. Despite evidence underscoring the value of IBH, efforts to maintain a robust integration of behavioral health and primary care workflows often include navigating similar roadblocks.[15] Nonetheless, the shifting landscape of healthcare provision and training may yield significant opportunities to advance integration of behavioral health in practice, to the benefit of populations.

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The Pediatric Resident Mental Health Rotation: Implementing the ACGME Requirement

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ABSTRACT

The need for improved mental and behavioral health training for pediatric residents has been recognized for over 40 years. During this time, the prevalence of child behavioral health issues has steadily increased, culminating in the American Academy of Pediatrics, the American Academy of Child and Adolescent Psychiatry, and the Children's Hospital Association declaring a national emergency in children's mental health in 2021. In response, the Accreditation Council for Graduate Medical Education (ACGME) implemented new mental health training requirements for pediatric residents beginning in July 2025. A core group of Brown University Health faculty designed and launched a structured rotation with milestone-informed goals and objectives, clinical experiences, and didactic components. These efforts align with Brown's longstanding commitment to address child and family mental health within a pediatric context. Pre- and post-surveys, qualitative data, and participant feedback were collected. Over 40 residents have participated in the rotation, appreciating the opportunity to tailor experiences to their individualized learning goals. A survey evaluating knowledge and comfort in assessing, diagnosing and treating common mental health conditions was administered before and after the didactic curriculum. Paired t-tests were conducted to evaluate changes in self-efficacy before and after the curriculum. Residents across all years of training reported improved knowledge and comfort in assessing, diagnosing and treating depression, suicide, and attention-deficit/hyperactivity disorder (ADHD) after delivery of the didactic mental health curriculum (all $p \leq 0.05$, $n = 15$), and many of these improvements were sustained at six months. Areas for improvement include increasing first-year exposure to mental health training, creating longitudinal experiences, including direct clinical involvement within the Med-Psych service line, and expanding supported faculty time and resources for development.

KEYWORDS: pediatrics; resident; mental health; education

INTRODUCTION

Mental and behavioral health (MBH) disorders have now surpassed physical illness as the leading cause of childhood disability.[1] Despite an estimated 20% of children experiencing an MBH disorder, the majority do not access appropriate support services, largely due to a significant shortage of mental health providers, particularly child and adolescent psychiatrists.[2,3] More than half of pediatric primary care visits involve an MBH concern, underscoring the growing demand for competent behavioral health care within pediatrics.[4]

In 2009, the American Academy of Pediatrics (AAP) issued a policy statement which was updated in 2019, outlining core mental health competencies for pediatric primary care providers, yet training programs have not kept pace with these expectations.[5] In a national survey of pediatric trainees applying for initial board certification in general pediatrics, only one-third reported high competence in MBH assessment skills, and only 20% felt highly competent in MBH treatment skills, even though there was a strong consensus that pediatricians should be proficient in managing these conditions.[6] Over the past several decades, both the American Academy of Child and Adolescent Psychiatry (AACAP) and the AAP have developed several toolkits, instructional videos, podcasts, curricula and trainings aimed at strengthening pediatricians' skills in addressing mental health and behavioral concerns. These diverse initiatives have led to only modest gains in pediatricians' comfort and confidence in managing patients with MBH presentations. In an effort to more effectively address this gap, the Accreditation Council for Graduate Medical Education (ACGME) mandated that all pediatric residency programs include a formal, structured four-week rotation in mental and behavioral health starting in July 2025 to better prepare pediatricians to practice effectively in the current landscape of child and adolescent health.

Hasbro Children's, the pediatric division of Rhode Island Hospital and the Alpert Medical School of Brown University, have a longstanding history of addressing child and family mental health within a pediatric context. The institutional partnership with Bradley Hospital, the nation's first psychiatric hospital exclusively for children, further strengthens this tradition of integrated care. Another cornerstone is the Brown Triple Board program, a combined residency in Pediatrics, General Psychiatry, and Child and Adolescent

Psychiatry established in 1986 as one of six national pilot programs intended to bridge the gap between pediatrics and child psychiatry, optimizing the health and well-being of children and families. Today, the Brown Triple Board Program is integral to Hasbro Children's identity, shaping the culture of care throughout the children's hospital and positively impacting trainees, faculty, and affiliated programs.

Despite these resources, significant gaps remain in our ability to deliver comprehensive care to children with mental health needs and their families. Without exception, every provider in the hospital system routinely encounters these presentations, yet many continue to feel uncomfortable and underprepared in providing psychiatric care. The demand for mental health services far exceeds the capacity of available specialists, making it imperative that pediatric providers become better equipped to manage common behavioral and mental health concerns across all levels of care. As pediatricians responsible for the full spectrum of child health and wellness, including mental and behavioral health, we have an obligation to ensure that training cultivates competence, confidence, and clinical readiness required to meet these demands.

Prior to the ACGME Mental Health Rotation mandate, the Brown Department of Pediatrics launched the Meeting the Moment for Pediatric Health Care initiative to empower pediatric providers to deliver expert, inclusive, and comprehensive care to children, young adults, and families facing mental health challenges. This department-wide effort incorporated a range of educational strategies, including a yearly lecture series sponsored by Pediatric Grand Rounds, safety care training, and quarterly Med/Psych case conferences. These efforts collectively established the groundwork for developing a formal, structured mental health rotation aligned with the new ACGME requirement.

A four-week mental health rotation was developed and offered to Brown Pediatric residents in academic year 2024–2025, one year prior to the ACGME deadline. The rotation emphasizes direct clinical exposure to common mental health conditions such as anxiety, depression, and attention-deficit/hyperactivity disorder (ADHD), interprofessional collaboration, and a didactic curriculum covering assessment, management, and pathways for specialty referral. This experience is designed to integrate developmental and family context, cultural humility, equity considerations, and longitudinal integration across residency. By graduation, pediatric residents are expected to competently identify, manage, co-manage, and refer children and adolescents with behavioral and mental health concerns across diverse clinical settings.

Hasbro Children's and the Brown Pediatric Residency Program are uniquely positioned to serve as national leaders in this work, given the longstanding history of integrating pediatrics and child psychiatry. The establishment of the division of Pediatric Medicine and Psychiatry in 2021 as the only division of its kind nationally underscores the institution's commitment to interdisciplinary pediatric mental and behavioral health. In addition, Brown's Triple Board program, the oldest combined Pediatric, Psychiatry and Child Psychiatry residency in the country, continues to play a vital role in resident education with Triple Board fellows making valuable contributions to the development and delivery of the mental health curriculum.

METHODS

Key faculty from the Departments of Pediatrics and Child Psychiatry met regularly in the months leading up to July 2024 to plan the logistics of implementing the new mental health rotation. During this period, goals and objectives were established, teaching faculty were recruited, learning experiences were designed, and didactic topics were selected. Goals, objectives, and educational topics were informed by the pediatric mental health competencies[6] and common factors' skills.[7]

Goals and objectives

Based on ACGME requirements and the resources available within the Brown University Health organization, the faculty committee developed a comprehensive set of goals and objectives to guide the structure of the new rotation. These goals and objectives span the domains of knowledge, professionalism, practice-based learning and improvement, and patient care and communication skills. Together, they informed the design of the curriculum and highlighted specific needs for aligned didactic sessions [**Table 1**].

Supplemental funding from an ACGME grant on addressing physician burnout supported the development of the didactic curriculum, which included five hours of instruction occurring over two academic half days with residents across all years of training, and a one-hour process group with interns during their advocacy rotation. This portion of the curriculum was approved by the Brown University Health Institutional Review Board. The didactic curriculum occurred asynchronously with the two-week blocks of the mental health rotation [**Table 2**].

Rotation components

Rotation components [**Table 2**] were chosen to blend different mental health experiences within two-week blocks in both the PGY-2 and PGY-3 training years. Didactic components were integrated throughout the pediatric academic half-day curriculum, the advocacy rotation and curriculum (PGY-1 year), and didactic sessions throughout the structured clinical rotation.

The two-week block during PGY-2 year is focused on integrated hospital settings, such as the Hasbro Partial Hospital Program and the Selya 6 integrated medicine-psychiatry inpatient unit. During these experiences, residents observe

Table 1. Goals and Objectives of Brown Mental Health Rotation

Knowledge
Gain exposure to and improve understanding of mental health care across all clinical settings that is sensitive to the developmental stage of the patient and the cultural context of the patient and family Develop a basic understanding of assessment and management of common mental health presentations in children and adolescents, including Med/Psych conditions, while gaining a greater understanding of how to manage, co-manage, and appropriately refer patients to special resources when indicated Highlight important psychological considerations in patients with medical conditions Gain exposure to the successful negotiation of difficult conversations
Professionalism
Demonstrate an understanding of the importance of: • Ensuring continuity of care with planful care transitions and handoffs • Responding to communications from patients, families, and collateral providers promptly and respectfully • Communicating clearly and comprehensively with collateral providers Demonstrate respectful and ethical behavior towards patients, families, and colleagues regardless of age, culture, abilities, ethnicity, gender, and sexual orientation
Practice-Based Learning and Improvement/Systems-Based Practice
Articulate the basic concepts of family-based, integrated treatment, and their application in various settings Demonstrate an understanding of the range of systems touching patients with psych and med/psych conditions Demonstrate an understanding of how to access systems to create a comprehensive care plan Understand the value of collaboration with MDT teams across disciplines and settings
Patient Care/Interpersonal and Communication Skills
Effectively partner with patients and families, fostering therapeutic alliances considering family beliefs, narratives and relationships and their impact on the presentation's development, function, and targets of treatment Collaborate effectively with the interdisciplinary team, including providers from all levels of care Gain exposure to diagnostic decision making and maintain awareness of potential cognitive bias Consider the range of potential treatment components including psychotherapies, medical management, medication options, and other therapeutic modalities

Table 2. Rotation Components

Clinical Components
2 weeks in PGY-2 Year in The Hasbro Partial Hospital Program: • Observation and participation in individual, group and family therapy sessions • Collaboration with rehabilitation services and other ancillary therapy providers such as art or music therapy **2 weeks in PGY-3 Year in Integrated, Outpatient, and Community Settings:** • Ambulatory settings: integrated psychiatry within the resident primary care clinic, outpatient psychiatry clinics • Interaction and collaboration with other disciplines, including psychology and social work in integrated care settings
Didactic Components
Pediatric Academic Half-Day components: • 3 hours of Behavioral Health in Pediatric Residency Training (Be ExPeRT) Curriculum[8] • 2 hours of Brief Psychotherapy Interventions in Primary Care **Advocacy rotation with PGY-1 residents:** • 1-hour introduction to levels of care and community resources in RI • 1-hour process group on doing mental health work Mental Health case discussion sessions integrated into primary care curriculum Additional short didactic sessions with faculty during structured clinical rotation

and participate in individual, group, and family therapy sessions while working alongside pediatricians, psychiatric/psychology providers, rehabilitation providers, and other professionals through a wide range of experiences, including art and music therapies. The two weeks during PGY-3 year focus on integrated ambulatory and community settings. Ambulatory experiences include integrated psychiatry within the resident primary care clinic and outpatient psychiatry clinics at Hasbro and Bradley. Residents also collaborate with psychology and social work in integrated care settings.

To evaluate the didactic curriculum's impact, pre- and post-surveys were administered to assess perceived knowledge about and comfort with assessment, diagnosis and treatment of common mental health conditions, including ADHD, anxiety, depression, and suicidality, using Likert scales (each domain rated from 1–41 = not at all [knowledgeable/comfortable], 4 = a great deal [knowledgeable, comfortable]). Surveys were completed before and after the didactic curriculum and again at six months post-completion. The survey instrument was modified from a previously published, but not validated, version originally developed by the Resource for Advancing Children's Health (REACH) and amended with permission for use only with residents.[8] Paired t-tests were conducted to evaluate changes in knowledge and comfort scores after the three-hour mental health curriculum and six months following completion of all didactic training sessions, with some participants having experienced a two-week mental health rotation block during that time. Triple Board fellows implemented the curriculum under the supervision of a Triple-Boarded attending psychiatrist. Senior Triple Board fellows additionally designed and facilitated the psychotherapy skills training and process groups. Written self-reflections collected during these process groups were analyzed using an inductive thematic approach. Two reviewers independently coded responses, reconciled differences, and iteratively grouped codes into broader themes through constant comparison. Residents also developed individualized learning goals at the start of the rotation, and feedback was gathered through the pediatric residency evaluation process and end-of-rotation meetings with the rotation director.

RESULTS

A total of 40 residents completed the rotation, with approximately one-quarter submitting rotation feedback. Residents consistently described the experience as broadly valuable. Key quotes included, "I think this rotation is helpful no matter what specialty you enter." They also noted increased confidence with challenging clinical environments feeling "much more comfortable going to [the inpatient psych unit] when called overnight now having rotated there." Many residents also submitted individualized learning goals (37 residents out of 40), most commonly seeking to: 1) strengthen their understanding of referral resources, 2) improve comfort with navigating difficult and sensitive conversations, and 3) gain more experience screening and interviewing youth presenting with mental health concerns.

Qualitative data

Nineteen residents provided written self-reflections during scheduled process groups. The most prominent themes reflected early feelings of uncertainty, overwhelm, and inadequacy when caring for children with behavioral health needs, especially in ambulatory settings. Residents identified several key challenges contributing to this discomfort, including: 1) Family or caregiver stigma surrounding mental health, which complicated engagement and treatment planning, 2) Limited time during clinical encounters to adequately address behavioral health needs, and 3) Gaps in knowledge, particularly around diagnostic decision-making and management. Collectively, these reflections underscore the need for ongoing longitudinal training, more structured exposure across care settings, and protected time for residents to build confidence in assessing and managing pediatric mental and behavioral health concerns.

Quantitative data

Fifteen residents completed both the pre- and post-curriculum surveys following the three-hour mental health curriculum, and 10 of those residents completed surveys again at six months. Immediately after the curriculum, residents demonstrated significant improvements in knowledge and comfort related to assessing and diagnosing depression, suicide, anxiety, and ADHD, as well as treating depression, suicide, and ADHD ($p \leq 0.05$, $n = 15$). Comfort in treating anxiety also improved significantly ($p \leq 0.05$), although the corresponding increase in knowledge did not reach statistical significance ($p = 0.11$). At six months, residents continued to show sustained improvement in knowledge related to assessing and diagnosing ADHD, and in comfort related to assessing and diagnosing suicide, as well as in both knowledge and comfort in treating depression, suicide, and ADHD (all $p \leq 0.05$, $n = 10$). Improvements in knowledge related to assessing and diagnosing depression, suicide, and anxiety; comfort in assessing and diagnosing depression, anxiety, and ADHD, and knowledge in treating anxiety were not statistically significant at six-month follow-up.

DISCUSSION

MBH conditions in youth have continued to rise, yet pediatric residents across the country remain insufficiently prepared to address these concerns in clinical practice. The new ACGME requirement for a structured mental health rotation for pediatric residents represents a long-awaited and necessary step towards equipping pediatricians with the skills and confidence to assess and manage the most common issues encountered in primary care and specialty practice.

Hasbro Children's and the Brown Pediatric Residency Program are uniquely positioned to develop a model clinical rotation due to the institution's longstanding history of integrated medicine-psychiatry training and patient care, including the Triple Board training program and the Division of Pediatric Med-Psych. Engaging faculty and trainees who are accustomed to navigating both medical and psychiatric frameworks supported the design of a curriculum that is realistic, feasible, and aligned with the day-to-day clinical responsibilities of pediatricians. This collaboration also helped to ensure that didactic materials addressed when pediatric management is appropriate, and when additional resources or specialized care are warranted. Additionally, developing the curriculum with a blend of interdisciplinary faculty members and Triple Board residents supported the creation of educational materials tailored to skills that are both practical and lasting across inpatient and ambulatory settings. Residents highlighted increased comfort with routine expectations, such as inpatient night coverage, and valued opportunities to practice navigating difficult conversations with patients and families.

Data from the first year of implementation suggests that the required rotation was well received. Residents who completed evaluations found the experiences meaningful and applicable to their practice. Pre- and post-curriculum surveys indicated notable improvements in knowledge and comfort related to assessing, diagnosing and treating common mental health conditions, including anxiety, depression, suicide, and ADHD. Importantly, many of these gains persisted at six months, though interpretation is limited by the small response sample.

Limitations and future directions

Implementing the rotation presented several logistical challenges. Clinical learning environments frequently host multiple trainees from a range of disciplines, including psychology, child and adult psychiatry, and medical students, making placement difficult at times. Securing sufficient pediatric psychiatry faculty preceptors was also challenging, and prior work suggests that pediatric trainees prefer to learn from their own pediatric supervisors.[9] As resident exposure to mental health content continues to expand, parallel investment in faculty development will be critical to ensure that continuity clinic preceptors feel confident and comfortable when supervising MBH care. An additional limitation to this study is the small sample size which limits generalizability of the data. Future directions include enhancing training in mental health competencies, strengthening resident evaluation and feedback processes, including survey responses, as well as increasing opportunities for direct patient care across settings.

While our results indicated improved self-efficacy in mental health competencies in a small sample of residents, this does not necessarily translate to improved patient outcomes. Future research should examine patient level outcomes such as improved mental health screening scale scores over time, or qualitative data related to patient and family perception of mental health care delivery in the resident primary care clinic.

CONCLUSION

In summary, building on a longstanding tradition of integrated med-psych training and patient care, Brown University Health and Hasbro Children's successfully implemented the new required mental health rotation for pediatric trainees starting in July 2024. The rotation was well-received by trainees and led to modest improvements in residents' mental and behavioral health skills across common pediatric conditions. Looking ahead, key areas for growth include expanding opportunities for direct patient care throughout training, strengthening faculty development, and establishing standard evaluation processes to more effectively assess competency progression.

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'Guy Stuff': Male Adolescents and Their Physicians Gather Around the Dinner Table

LYNAE CONYERS, MD

I had committed to saying "no" more often—no to more projects, meetings and demands on my time. I was well into my second year of residency but, despite having survived internship year, the promised relief was not yet manifest. I was deeply tired and fighting to keep hold of the sense of purpose that had once felt so certain in medicine. "Find joy in the journey" is one of my life mantras. Yet, to be perfectly honest, at that point I was gritting my teeth and (barely) surviving. So when one of my preceptors asked if I wanted to be involved in meeting weekly with a group of young men from our clinic to explore and consider how best to address their psychosocial concerns with a focus on mentoring, I took a deep breath and…agreed. What can I say? Old habits die hard.

We began an eight-week series of meetings with a group of young urban men under the generous support of the Arnold P. Gold Foundation. The project, which we fondly named "Guy Stuff," brought together trainees and a group of male at-risk teens and young adults from our Medicine-Pediatrics ("Med-Peds") residency clinic, with the goals of improving understanding of the complex psychosocial needs of this population, and exploring a variety of mentoring models with them, including group and peer mentoring. As the faculty leader who conceived of the project tells the story, the idea was born out of a patient visit with a teenage boy she had taken care of since birth. He walked in, gave her a big hug, and then proceeded to tell her about his recent activities which, if discovered, could have landed him in jail. This got her thinking about ways to build on the trusting relationship many of these young men had with their physicians in order to help them navigate common adolescent hurdles in ways that are not possible during typical well-adolescent visits.

The group consisted of five trainees (three Med-Peds residents, one Pediatrics resident and one Child Psychiatry fellow); two faculty leaders (a primary care Med-Peds physician and a child and adult psychologist); and 10 male clinic patients ranging in age from 14–22 years. We met together for eight consecutive weeks, with each session lasting just over three hours. The first two hours involved the whole group, and the final hour consisted of trainees and faculty to debrief and plan. We began each session by eating a homemade dinner together. As the weeks passed, we were delighted to observe some youths arriving early, so they could help prepare the meal. Each gathering was devoted to a different topic, and after dinner we began group discussions and activities. Topics included peer pressure, emotions, relationships, gender, sexuality and contraception, substance use, and non-violence and conflict resolution. During the relationship session, an improvisation actor helped us explore verbal and non-verbal communication. A physician with extensive experience caring for LGBTQ+ youth and adults led small group discussions during the gender and sexuality night. For the session on non-violence, a local community leader from the Institute for the Practice and Study of Nonviolence, who had been incarcerated for gun violence, taught conflict-resolution techniques, and cautioned against the lure of gangs. For the evening on substances, we "flipped" the classroom, and trainees asked the young men about the presence, use, and role of marijuana in their communities and schools; this model aimed to demonstrate that youths can mentor people older than themselves. Activities included painting self-portraits on tiles at the first and final meeting, as part of a mural project in our clinic, and baking apple calzones and cranberry bread. We dedicated our final session, just before Thanksgiving, to debriefing the group's experience and eating Thanksgiving dinner together, complete with turkey, mashed potatoes, and gravy.

I initially joined the group because of an interest in exploring ways primary care practitioners can engage patients outside of standard office visits. I also thought it would be valuable to learn something more about a population I find to be a somewhat enigmatic, namely teenage boys. I wasn't sure what to expect. Would the guys show up? Would they participate? However, the Guy Stuff group far exceeded my expectations. Remarkably, all 10 young men completed the group, with a 95% show rate. Attendance for trainees was challenging, given competing work responsibilities, including duty hours and scheduled vacations. I participated in seven of the eight meetings, and overall, the trainees had a 72.5% attendance rate. During our time together, there was a unique and valuable exchange of information. We taught the guys about topics we believed were pertinent to their health and wellbeing, and they taught us how to be better doctors for them by offering a window into their lives, and showing us that patients can mentor their physicians. They opened up about their challenges, fears, hopes, and the people and issues important to them. I especially relished talking with the guys around the dinner table, outside of the structured programming. Several of them expressed that they usually ate alone or had *never* had "family dinner." I believe it sent a powerful message to them that their doctors cared enough about them to spend time with them in the evening, eating, talking, and exploring difficult topics. As we debriefed at the end, the guys stated that the group had helped them imagine a wider range of potential mentors, including their own doctors. Other comments included, "I feel like I gained more confidence to voice my opinion," and, "[It is easier] to talk to others about my life and see things from a different point of view." Other young men stated they had learned about "patience," "life-learning skills," and "to control my anger." One youth stated, "This has been one of the best experiences of my life."

I came away from the group more empathic and better equipped to care for this population. Not only that, I can also say with certainty that this endeavor reminded me of the power of primary care, of establishing long-lasting, trusting relationships, and of being concerned with the entirety of a patient's life. There is no question that the work is complex and the challenges many. But I am grateful for the mentor who invited me along on this project, and opened my eyes to the value and enjoyment of seeking creative ways for physicians to engage and connect with our patients. Perhaps the antidote to burnout in primary care isn't learning to say "no" more often, but rather learning to lean in, create new models and systems where the old ones are lacking, and perhaps even occasionally trade in our checklists and computer screens for a paintbrush or a home-cooked meal shared with patients around a dinner table.

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Alpha-gal Syndrome Surveillance in Rhode Island

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KEYWORDS: Rhode Island; Alpha-gal syndrome; tick; human illness surveillance; tick-associated condition

BACKGROUND

Alpha-gal syndrome (AGS) is an emerging tick-associated condition causing an allergic reaction to galactose-alpha-1, 3-galactose, a carbohydrate found in mammalian meat and mammalian products such as milk, dairy, and pharmaceuticals containing mammalian products.[1] AGS is primarily caused by the bite of the lone star tick (*Amblyomma americanum*), a tick known to be prevalent in the southeastern United States, but now increasingly identified in Rhode Island as its geographic range expands northward.[2,3] AGS allergic reactions can be severe and possibly life threatening. Mild symptoms include hives, itching, abdominal pain, nausea, vomiting, and diarrhea; with more severe reactions including acute hypotension, swelling of facial structures, shortness of breath, and anaphylaxis.[4]

AGS is not a nationally notifiable condition to the Centers for Disease Control and Prevention (CDC) and is not legally required to be reported under Rhode Island's Reporting and Testing of Infectious, Environmental, and Occupational Diseases (216-RICR-30-50-1) regulations; therefore, its incidence in Rhode Island was unknown prior to this investigation. The Rhode Island Department of Health's (RIDOH) Center for Acute Infectious Disease Epidemiology (CAIDE) sought to determine the presence of AGS in the Rhode Island population. CAIDE obtained hospital emergency room and inpatient data for calendar years 2022 and 2023, and selected records that included the ICD-10 code Z91.014, allergy to mammalian meats. Analysis of the hospital records identified 43 individuals who met the inclusion criteria, providing evidence of human illness potentially consistent with AGS in Rhode Island. This finding supported the likelihood that AGS was present in the state and warranted further investigation, leading to the development of a voluntary AGS surveillance system.

METHOD

In January 2024, RIDOH issued a Healthcare Professional Advisory to licensed allergy and asthma specialists within the state of Rhode Island requesting voluntary reporting of AGS. In addition to the advisory, targeted outreach was conducted in February 2024 to laboratories known to perform serologic testing for alpha-gal-specific immunoglobulin-E (IgE). Electronic communication provided the laboratories with the background and justification for the development of CAIDE's AGS voluntary surveillance system for human illness. CAIDE requested that laboratories voluntarily report positive alpha-gal IgE results retrospective to January 1, 2022, and continue to report these results prospectively. All agreed to participate and submitted positive laboratory reports.

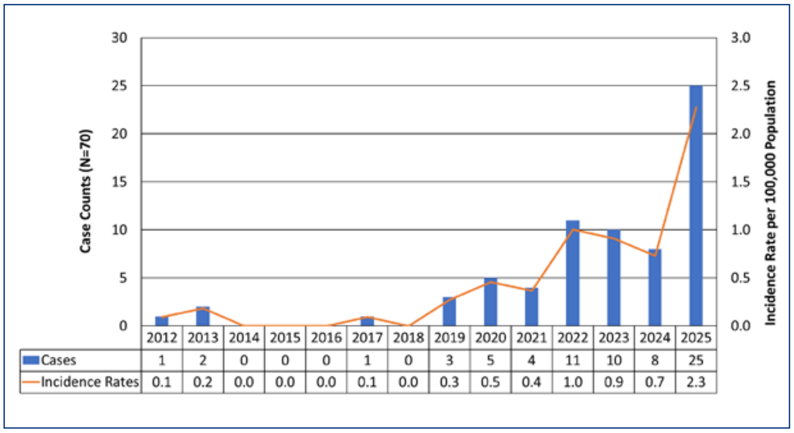
The CDC case definition for AGS was utilized to determine case status.[5] Individuals with an allergy skin test consistent with an alpha-gal allergy based on sensitivity to one or more mammalian meats or a serum or plasma IgE laboratory test specific to alpha-gal ≥0.1 IU/mL or ≥0.1kU/L were considered suspect cases. CAIDE investigators used an adapted CDC AGS case report form to interview individuals and collect a history of symptoms experienced following consumption of mammalian foods or administration of mammalian-derived products or medications. The interview results were reviewed to assess whether each individual experienced a clinically compatible illness and met criteria for classification as a probable or confirmed case.

An investigation module, adapted from the CDC AGS case report form, was incorporated into the Rhode Island National Electronic Disease Surveillance System (RINEDSS) and used for the entry and storage of laboratory and investigation data. RINEDSS is the Rhode Island instance of the CDC-developed National Electronic Disease Surveillance System (NEDSS), an integrated surveillance system used to manage and exchange public health data.[6] Data was extracted from RINEDSS and analyzed using Microsoft Excel 365.

RESULTS

CAIDE received 121 alpha-gal serology laboratory results with specimen collection dates ranging from January 1, 2022, to December 31, 2025. No reports of individuals with a positive allergy skin test consistent with AGS were received. All serology laboratory reports met the suspect case definition and were assigned for interview. Of the 121 suspect cases, 70 (57.9%) had a clinically compatible illness and were

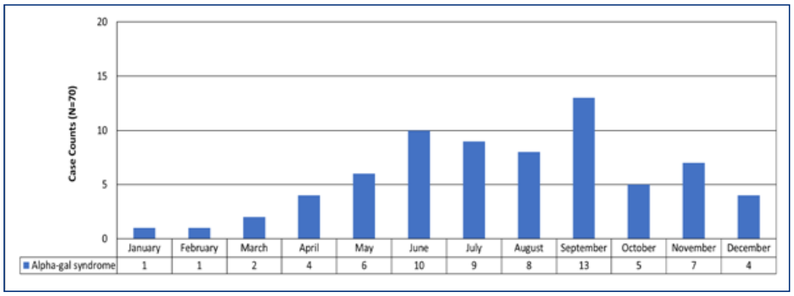
Figure 1. Case counts and incidence rates of Alpha-gal syndrome, Rhode Island, 2012–2025*



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Cases	1	2	0	0	0	1	0	3	5	4	11	10	8	25
Incidence Rates	0.1	0.2	0.0	0.0	0.0	0.1	0.0	0.3	0.5	0.4	1.0	0.9	0.7	2.3

*Rates were calculated using the 2020 Rhode Island population as reported by the U.S. Census.

Figure 2. Aggregate cases of Alpha-gal syndrome by month, Rhode Island, 2012–2025



	January	February	March	April	May	June	July	August	September	October	November	December
Alpha-gal syndrome	1	1	2	4	6	10	9	8	13	5	7	4

classified as confirmed cases. Of the 51 cases that were not confirmed, 33 (27.3%) remained classified as suspect cases. Twenty-three (19.0%) of the 33 suspect cases refused interview or were unable to be contacted, and 10 (8.3%) had a clinically compatible illness, but no reaction after exposure to a mammalian-derived product. Sixteen (13.2%) suspect cases were reclassified as not a case because they did not have symptoms consistent with AGS, and 2 (1.7%) were not included in this analysis because they were out-of-state residents.

To assess the annual and monthly occurrence of AGS in Rhode Island, the initial illness onset date, specimen collection date, and provider diagnosis date of the 70 confirmed cases were reviewed. The earliest of these three dates for each case was used to create a graph illustrating the annual occurrence of AGS in Rhode Island [**Figure 1**]. The earliest cases identified in Rhode Island occurred in 2012 and 2013, with consistent annual reporting from 2019 through 2025, peaking at 25 cases. Similar to other tickborne infections, an increase in case counts was observed during the summer months. However, this seasonal pattern was modest and may reflect the small number of cases available for analysis, as well as the potential delay between tick exposure and reported illness onset [**Figure 2**].

Due to small numbers, confirmed cases were analyzed in aggregate to summarize demographics, symptoms experienced, and products consumed within 2 to 10 hours prior to symptom onset [**Table 1**]. Males (52.9%) were found to make up a slightly higher percentage of cases compared to females (47.1%). The highest percentage of cases occurred in those 60–69 years of age (27.1%), followed by 40–49 years of age (21.4%), and then by both 50–59 years of age and 70 years of age or older (17.1% each). AGS was less common in the younger age groups. Geographically, the highest percentage of cases were in Washington County residents (41.4%) followed by Providence County residents (30.0%).

Eight cases (11.4%) reported either being bitten by a lone star tick or found one on their body before symptom onset. Overall, 48 cases (68.6%) reported experiencing a tick bite of any species at any time prior to developing symptoms consistent with AGS. Of those cases, 31 cases (64.6%) recalled being bitten by a tick within Rhode Island, 12 cases (25.0%) recalled being bitten while out of state or traveling, and 5 cases (10.4%) did not recall the geographic location of the tick bite.

Cases were questioned about their ingestion of mammalian foods as well as the consumption and administration of mammalian-derived products or medications within 2–10 hours prior to symptom onset. Overall, more than one-third of cases (68.6%) reported AGS-related reactions after the consumption of products from multiple product categories, while the remaining cases (31.4%) reported an allergic reaction to a single product category. Beef was the most commonly reported product consumed by cases (81.4%), followed by pork (48.6%), and milk or milk products, including cheese, yogurt, butter, and ice cream (40.0%). The remaining categories, including gel-cap medication and glycerin-containing foods, were reported by 10 or fewer cases.

The AGS case report form included a standardized question assessing each case's experience with 12 symptoms commonly associated with AGS. **Table 1** provides a summary of the symptoms experienced by AGS cases. The number of symptoms experienced in the past by a case ranged from 1 to 12, with each case experiencing an average of 4.2 symptoms. The most reported symptom was itching (71.4%), followed by hives (67.1%). Forty-five cases (64.3%) experienced at least one gastrointestinal symptom (diarrhea, vomiting, nausea or abdominal pain). Each case was provided with the definition of anaphylaxis and then asked to self-report whether they experienced anaphylaxis. Fifteen cases (21.4%) self-reported experiencing anaphylaxis, six of whom were hospitalized. In contrast, of the 55 cases who

Table 1: Characteristics of Alpha-gal syndrome cases, Rhode Island, 2012–2025

Characteristic	Number of Cases (N=70)	Percent of Cases
Sex		
Male	37	52.9
Female	33	47.1
Age Range (Years)		
0–19	5	7.1
20–39	7	10.0
40–49	15	21.4
50–59	12	17.1
60–69	19	27.1
≥70	12	17.1
Patient County		
Bristol County	<5	†
Kent County	<5	†
Newport County	12	17.1
Providence County	21	30.0
Washington County	29	41.4
Signs or Symptoms Reported by Cases During Interview		
Itching	50	71.4
Hives	47	67.1
Abdominal pain	31	44.3
Nausea	31	44.3
Diarrhea	26	37.1
Swelling of lips, tongue, throat, face, eyelids, or other associated structures	26	37.1
Acute episode of hypotension	19	27.1
Vomiting	16	22.9
Heartburn/Indigestion	16	22.9
Shortness of breath	14	20.0
Wheezing	9	12.9
Cough	7	10.0
Product Categories Consumed within 2–10 Hours of Symptom Onset		
Beef	57	81.4
Pork	34	48.6
Milk or milk products (cheese, yogurt, butter, ice cream)	28	40.0
"Red meat", not specified	10	14.3
Lamb/mutton	9	12.9
Gel-cap medications	6	8.6
Gelatin/glycerin-containing food products (such as gelatin dessert, pudding, gummy candy, marshmallows)	5	7.1
Game meat (venison, boar, bison, elk, rabbit)	4	5.7
Goat	2	2.9

† Suppressed due to small numbers.

did not report ever experiencing anaphylaxis (78.6%), only one case reported being hospitalized in the past for an AGS-related allergic reaction. For five of the seven cases with available data, the average length of hospital admission was 2.8 days.

DISCUSSION

The spread and establishment of a self-sustaining lone star tick population in Rhode Island, together with case interview data, provides evidence that Rhode Island residents are at risk of developing Alpha-gal syndrome following a tick bite. Continued voluntary reporting by laboratories of individuals with reactivity to galactose-alpha-1,3-galactose will facilitate identification of additional cases in the future. Given the marked increase in cases observed in 2025, enhancing AGS surveillance in Rhode Island is essential to fully assess its impact. To support this, CAIDE proposes that AGS be added to Rhode Island's Reporting and Testing of Infectious, Environmental, and Occupational Diseases (216-RICR-30-50-1) regulations during the next revision. Inclusion of AGS to the testing and reporting regulations would require clinical laboratories and healthcare professionals to report individuals with positive laboratory or skin tests, as well as those that are suspected of having AGS.

The number of confirmed cases reported here likely underestimates the true burden. Laboratories were requested to voluntarily submit positive AGS laboratory tests since January 1, 2022, yet one of the cases reported an onset of AGS in 2012. This suggests that expanding laboratory reporting to earlier dates could have identified additional earlier cases. Additionally, CAIDE did not receive any reports from healthcare professionals of positive skin tests; however, interviews revealed that nine (12.9%) cases reported they had undergone skin testing, seven (10.0%) of whom reported positive results. Although self-reported and therefore subject to recall bias or misunderstanding, these findings indicate that skin testing occurs, but the overall volume of testing is unknown. Had positive skin tests been systematically reported, these individuals could have been investigated and counted as probable cases if they experienced symptoms consistent with AGS.

CAIDE's investigation into AGS in Rhode Island has established the foundation for an ongoing surveillance system. Although AGS is not yet officially reportable in Rhode Island, commercial laboratories continue to submit positive laboratory reports and suspect cases are actively investigated. Case interview data indicate that individuals with positive skin test results, but no serology testing, are currently not being captured. Transitioning from voluntary to required reporting by including AGS in Rhode Island's Reporting and Testing of Infectious, Environmental, and Occupational Diseases (216-RICR-30-05-1) regulations will help improve case identification. Strengthening AGS reporting and surveillance will provide a more accurate estimate of disease burden and guide the development of targeted public and healthcare professional education, as well as funding to inform resource allocation for monitoring this.

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VITAL STATISTICS
JEROME M. LARKIN, MD
DIRECTOR, RHODE ISLAND DEPARTMENT OF HEALTH
COMPILED BY ZUHEIL AMORESE, DEPUTY STATE REGISTRAR

Rhode Island Monthly Vital Statistics Report Provisional Occurrence Data from the Division of Vital Records

	REPORTING PERIOD		
VITAL EVENTS	**SEPTEMBER 2025**	**12 MONTHS ENDING WITH SEPTEMBER 2025**	
	Number	**Number**	**Rates**
Live Births	934	10,935	10.3*
Deaths	798	10,601	10.0*
Infant Deaths	3	50	4.6#
Neonatal Deaths	3	34	3.1#
Marriages	867	6,907	6.5*
Divorces	256	2,558	2.4*

* Rates per 1,000 estimated population
# Rates per 1,000 live births

	REPORTING PERIOD			
Underlying Cause of Death Category	**MARCH 2025**	**12 MONTHS ENDING WITH MARCH 2025**		
	Number (a)	**Number (a)**	**Rates (b)**	**YPLL (c)**
Diseases of the Heart	226	2,388	217.6	2,945.0
Malignant Neoplasms	176	2,184	199.0	4,005.0
Cerebrovascular Disease	54	477	43.5	490.0
Injuries (Accident/Suicide/Homicide)	129	871	79.4	9,672.0
COPD	53	488	44.5	504.5

(a) Cause of death statistics were derived from the underlying cause of death reported by physicians on death certificates.
(b) Rates per 100,000 estimated population of 1,097,379 for 2020 (www.census.gov)
(c) Years of Potential Life Lost (YPLL).

NOTE: Totals represent vital events, which occurred in Rhode Island for the reporting periods listed above.
Monthly provisional totals should be analyzed with caution because the numbers may be small and subject to seasonal variation.

Why join RIMS?

The Rhode Island Medical Society is your voice at the State House and in the community. In 2025, we secured wins on prior authorization, clinician wellness, and primary care funding—but this work depends on physician support. Without membership, RIMS cannot continue to advocate, educate, and protect the profession. Join or renew today—and consider getting involved in one of our committees. Together, we are stronger. The Rhode Island Medical Society is the only organization dedicated solely to advocating for physicians and their patients in our state.

In 2025, RIMS members helped

- Eliminate prior auth for PCP-ordered services (3-year Medicaid pilot)
- Secure fair Medicaid rates—up to 100% of Medicare starting Oct. 2025
- Protect physician wellness with the Clinician Wellness & Support Act

We're not stopping here

RIMS is fighting for the future of telemedicine, tackling workforce shortages, and reducing administrative burdens.

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https://rhodeislandmedicalsociety.wildapricot.org/Join-us/

Wins for providers

RIMS worked to secure and support key budget investments.

Medicaid primary care rate increase

Up to 100% of medicare rates
Starting October 2025

Medicaid prior authorization pilot

Eliminates prior authorization for Medicaid for three years
Starting October 2025

Physician loan repayment funding

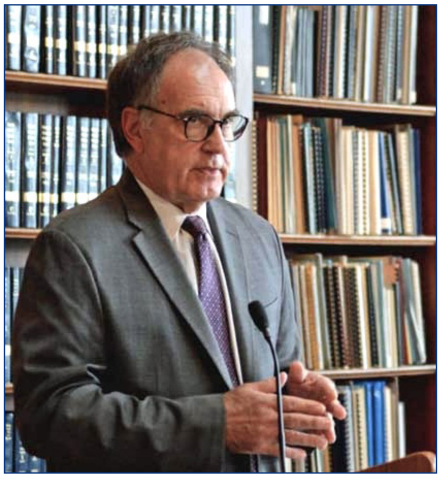
Includes $200,000 in funding to recruit and retain clinicians

Health center funding

Sustained investments in FQHCs and community health

Health services funding assessment

$30Mannually for primary care and other critical programs



Our priorities

RIMS focused on strengthening Rhode Island's healthcare system, protecting physicians' well-being, reducing administrative burdens, and improving access to care. Together with members, specialty societies, and partner organizations, we made significant progress on our top priorities.

The Rhode Island Prior Authorization Reform Act (SB 168/HB 5120)

Eliminates prior authorization for admissions, services, and procedures ordered by in-network primary care physicians in a three-year pilot.
Effective: October 1, 2025.
Status: Passed and signed
Sponsored by: Rep. Brandon Potter; Sen. Melissa Murray

The Rhode Island Clinician Wellness and Support Act (SB 695/HB 6036)

Recognizes RIMS' Physician Health Program in statute, strengthens confidentiality protections, and updates licensing language to encourage clinicians to seek care without fear.
Status: Passed and signed
Sponsored by: Rep. John "Jay" Edwards; Sen. Bridget Valverde

"I'm Sorry" Bill (H6210/S66)

Although not yet enacted, RIMS made significant progress this session on legislation to allow physicians to express sympathy or apologize after an adverse outcome without it being used as evidence of liability. We met twice with the Rhode Island Association for Justice (trial lawyers) and reviewed their suggested language—which we ultimately could not support—laying important groundwork for next session.
Sponsored by: Rep. Teresa Tanzi; Sen. Pamela Lauria

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Epistemic Trust and Combating Misinformation

PAUL J. BAKER, MD

In the March edition of the *Rhode Island Medical Journal*, William Binder, MD, writes persuasively about the importance of trust in the treatment relationship, and the erosion of authority as a source of trust in the current social and political environment.[1] The question of how we as physicians establish trust with patients in this climate is an important one. Psychoanalytic theory offers some suggestions. An important concept in contemporary psychoanalytic psychotherapy is *epistemic trust*, defined as "trust in the authenticity and personal relevance of interpersonally transmitted knowledge."[2] Put simply, epistemic trust is a willingness to take in and consider information which may be new or different from our pre-existing beliefs. Epistemic trust can be generated by authority, and historically physicians have made use of authoritative symbols—white coats, stethoscopes, walls of diplomas—to induce epistemic trust in the treatment relationship. This strategy may be losing its effectiveness today.[3] But psychotherapists have long known that many patients are mistrustful of authority, and so other means of creating epistemic trust must be employed if treatment is to be successful.

There is increasing evidence that feeling understood by another person is a potent generator of epistemic trust. When the patient's subjective experience has been understood by the physician, who communicates this understanding in a way that resonates with the patient, an evolutionary learning channel is unlocked that allows for the consideration of novel or discrepant ideas.[4] As the psychoanalyst Peter Fonagy writes, "the experience of being thought about in therapy makes us feel safe enough to think about ourselves in relation to our world and learn something new about that world and how we operate in it."[2] A patient seeking ivermectin treatment for COVID-19 may be unpersuaded by our authoritative evidence recommending against its use. But if the same patient is certain that the physician understands the depth of her fear of disability from long COVID, the strength of her determination to do anything to avoid transmitting COVID-19 to an ill loved one, or her history of negative healthcare experiences that have shown her she must advocate for herself unrelentingly in order not to be ignored, she is more likely to consider our perspective and recommendation, even if they differ from what she has previously heard or thought.

The problem, of course, is that this kind of relational practice takes time. It is thus more important than ever that we defend the value of the physician's clinical time against encroachment from administrative, regulatory, and productivity burdens. We must continue to insist that physicians be trained as healers who treat patients, not algorithmic providers of protocol-driven interventions. Without the time and skill to demonstrate to patients that we have understood them, we are at the mercy of misinformation, propaganda, and social media. The future practice of medicine is likely to rely less on authority and even more on the relationship of mutual understanding between doctor and patient. Through this process, we may rediscover a trust that nowadays so often seems lost. ❖

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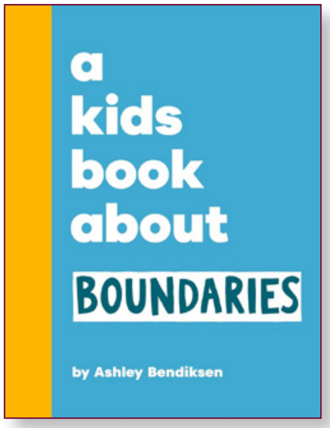
RI advocate authors children's book on creating safe boundaries

NEWPORT — Rhode Island resident and nationally recognized advocate **ASHLEY BENDIKSEN** has released a children's book designed to help families talk about boundaries, safety, and self-advocacy.



A Kids Book About Boundaries, published in April by DK Books/ Penguin Random House, is a 64-page book geared to children 5–9 years old, grades K–4. [IMAGES COURTESY OF ASHLEY BENDIKSEN]

A Kids Book About Boundaries, published in April by DK Books/ Penguin Random House, helps children understand how to identify unsafe situations, communicate their needs, and respect the boundaries of others. Age Range: 5–9 years

"Boundaries are about more than just physical safety," Bendiksen says. "They're about emotional well-being, respect, and helping children understand that their voice matters. It's the kind of book I wish I had growing up, which makes sharing it especially meaningful."

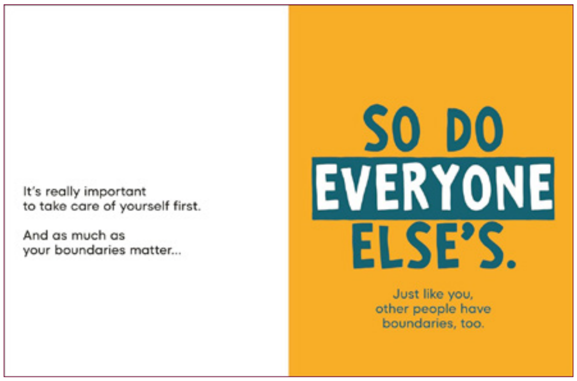
Bendiksen graduated as valedictorian from Salve Regina University in 2013 and has held nonprofit leadership roles across Aquidneck Island. Professionally, she is a nationally renowned expert speaker who works with students, educators, and youth-serving organizations across the country on topics of healthy relationships, abuse prevention, and trauma resilience. A teen trauma survivor herself, she combines her lived experience with professional expertise to help other young people avoid harm, while equipping adults to better support struggling youth.

Ashley Bendiksen

Her book, designed to be read together between a parent or caregiver and child, offers a practical way for families to begin important conversations about personal safety and healthy relationships. Through relatable examples and kid-friendly language, the book introduces children to different types of boundaries—physical, emotional, and social—and provides simple phrases and scenarios that help them practice speaking up and advocating for themselves.

The book is part of the bestselling *A Kids Book About* series and is designed for school-aged children and their families.

For more information about the book and the author, visit www.ashleybendiksen.com. ❖



Clifford Whittingham Beers: From Patient to Pioneer in the Mental Health Movement

MARY KORR
RIMJ MANAGING EDITOR

CLIFFORD WHITTINGHAM BEERS (1876–1943), a pioneer in mental health reform, admitted himself to Butler Hospital in 1939. Burdened by his own recurring mental health issues, he was uplifted in the company of **ARTHUR RUGGLES, MD**, the hospital's long-time superintendent. The two had first collaborated in 1919, forming the U.S. International Committee for Mental Hygiene.

In 1944, a year after Beers' death, Dr. Ruggles paid homage to his colleague and friend in an article in the *American Journal of Psychiatry*.[1] "For thirty-five years of his lifetime his work profoundly affected American psychiatry. His plea for the better care of the mentally ill and his founding of the National Committee for Mental Hygiene had the definitive effect of rallying physicians and layman toward the better understanding and care of mental disease and defect," he wrote. "Over the past twenty-five years it was my privilege to work closely with Clifford Beers and to know his innermost hopes and desires."

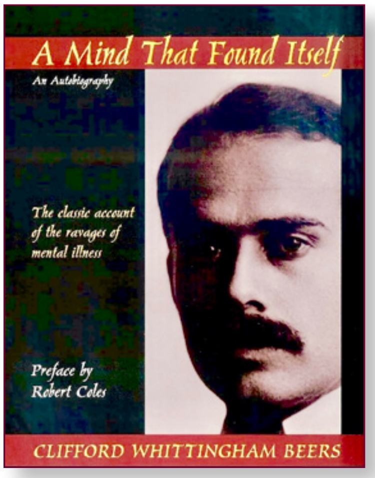

Clifford Whittingham Beers, Yale College, 1897 [YALE UNIVERSITY LIBRARY]


Butler Hospital in 1907 [Providence Library digital collections]


Arthur Ruggles, MD, Superintendent of Butler Hospital [AMERICAN PSYCHIATRIC ASSOCIATION FOUNDATION ARCHIVES]

Autobiography

Beers' personal battles with depression, delusions, and mania first came to the world's attention with the publication of his autobiography, *A Mind That Found Itself*, in 1908, which is still in print and digital formats. In it, he recounts his struggles with what was then termed



Cover of autobiography reprinted in 1981, with a preface by Robert Coles [UNIV. OF PITTSBURGH PRESS, AMAZON]

The Mental Health 'Bell of Hope'

ALEXANDRIA, VA — The following information on the Mental Health "Bell of Hope" is from the Mental Health America website (mhanational.org).

May in designated as national Mental Health Awareness Month. During the early days of mental health treatment, asylums often restrained people who had mental illnesses with iron chains and shackles around their ankles and wrists. With better understanding and treatments, this cruel practice eventually stopped.

In the early 1950s, Mental Health America issued a call to asylums across the country for their discarded chains and shackles. On April 13, 1953, at the McShane Bell Foundry in Baltimore, MD, Mental Health America melted down these inhumane bindings and recast them into a sign of hope: the Mental Health Bell, the "Bell of Hope."

Now the symbol of Mental Health America, the 300-pound Bell serves as a powerful reminder that the invisible chains of misunderstanding and discrimination continue to bind people with mental illnesses. Today, the Bell of Hope rings out hope for improving mental health and achieving victory over mental illnesses. Over the years, national mental health leaders and other prominent individuals have rung the Bell to mark the continued progress in the fight for victory over mental illnesses. ❖


Maryland Gov. Theodore McKeldin and Mrs. A. Felix DuPont in 1953 pour the metal made from melted chains used to restrain people with mental illnesses to create the Mental Health Bell. [HTTPS://MHANATIONAL.ORG/THE-MENTAL-HEALTH-BELL]

manic depression, now bipolar disorder. His initial bouts were sparked by an older brother's "epileptic" seizures over a six-year course, and subsequent death in 1900 (ultimately determined to be caused by a brain tumor). Beers worried the same thing would happen to him.

He and his four siblings grew up in New Haven, Connecticut. In 1897, he graduated from the Sheffield Scientific School at Yale College, and went on to work in accounting, insurance and finance firms—successful, yet haunted by his brother's seizures, as he described in his book. "For five years I had my ups and downs. I finally decided to take a respite from work. I said to friends I would rather die than live life as an epileptic. My persistent dread became a false belief. My disordered brain was busy with schemes for death."

Suicide attempt

On a June day in 1900, in the throes of despair, Beers climbed out of his fourth-story bedroom window, hung on to the sill, and then dropped down, hurtling past the dining room window. His family, seated at a table eating, were startled. Incredibly, he landed on his feet, but incurring severe ankle, foot and leg injuries. His younger brothers ran out and carried him inside. "'I thought I had epilepsy', was my first remark. 'I wish it was over!'" he recounted in his autobiography.

Institutionalized

After a hospital stay of several weeks, he returned home, but continued to suffer from acute depression and delusions. The latter led him to believe his family members were imposters, and that the police were after him for attempting suicide. He was admitted to a private sanatorium, followed by two other mental health institutions in Connecticut, from 1900 to 1903.

THE

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[HATHI DIGITAL TRUST]

Confined to the "violent" ward in one institution, he turned to art and literature. Reading *Les Misérables* was a pivotal point for him. "Hugo's plea for suffering Humanity—for the world's miserable—struck a responsive chord within me. Not only did it revive my latent desire to help the afflicted; it did more. It aroused a consuming desire to emulate Hugo himself, by writing a book which should arouse sympathy for and interest in that class of unfortunates in whose behalf I felt it my peculiar right and duty to speak."

In 1904, "after becoming a free man," Beers resumed his business activities, and began work on *A Mind That Found Itself*. His accounts of staying silent for two years, and placed at times in solitary confinement and straightjackets, are both chilling and compelling to read. In Chapter 1 of his book, he described the demons that afflicted him.

"It is an autobiography, and more: in part it is a biography; for, in telling the story of my life, I must relate the history of another self—a self which was dominant from my twenty-fourth to my twenty-sixth year. During that period I was unlike what I had been, or what I have been since. The biographical part of my autobiography might be called the history of a mental civil war, which I fought single-handed on a battlefield that lay within the compass of my skull. An Army of unreason, composed of the cunning and treacherous thoughts of an unknown foe, attacked my bewildered consciousness with cruel persistency, and would have destroyed me had not a triumphant Reason finally interposed a superior strategy that saved me from my unnatural self.

"For what purpose was my life spared? That question I have asked myself, and this book is, in part, an answer. That the very delusion which drove me to a death-loving desperation should so suddenly vanish would seem to indicate that many a suicide might be averted if the person contemplating it could find the proper assistance when such a crisis impends."

Book Review: An "Alienist's" Analysis

A book review appeared in 1908 in *The American Journal of Insanity,*[2] later renamed the *American Journal of Psychiatry,* written by **CLARENCE B. FARRAR, MD**, an associate professor of psychiatry at the Johns Hopkins Medical School, who worked at a psychiatric hospital and asylum in Maryland.

He wrote: "It is, or should be, the object of every alienist to study his cases first and foremost from their individual subjective point of view." He criticized the "habit of passing through a mental ward and forming opinions of patients from brief and routine interviews; setting down extraordinary ideas as delusions, without more ado…and meting out at once summary and violent treatment to meet violent emergencies, without deliberate consideration of the pathogenesis of the emergency. One of the richest and most valuable sources of information at the alienist's disposal is the "confession" of the convalescent or recovered patient."

Society/Committees for Mental Hygiene

In 1908, Beers founded the Connecticut Society for Mental Hygiene, which would expand a year later to form the National Committee for Mental Hygiene, the predecessor to the National Mental Health Association, and the current Mental Health America.

Beers and New Haven native Clara Louise Jepson, also a Yale graduate, married in 1912, but the couple decided against having children, worried about possible hereditary links to his mental health issues. She traveled widely with her husband, engaged in the formation of national and international foundations for mental health.

In a 1933 *New York Times* article on Beers' accomplishments,[3] L.H. Robbins wrote: "Institutions once known as "insane asylums" are now "hospitals." Harsh practices within them, under which the ill suffered needlessly, have been largely done away with. Violent wards have almost disappeared. Intelligent after-care is provided in most communities. Best of all, the notion is dying out that "to be once insane is to be always insane." Mental illness is coming to be as rationally looked upon as physical illness, and thus a long injustice will some day be ended.

"And all because one man had the courage, at any cost to himself, to tell what he had learned in three bitter years, and the determination to follow up his message with a quarter century of tireless effort. True, it might have come about in some other way. But it did not. It waited for Clifford Beers to be the pioneer."

As a young man, Beers aspired to be a Wall Street financier and build wealth, in part because his family was of limited means. But his mental health battles led him elsewhere. Robert Frost, a contemporary poet who lived in New England at the time, perhaps illustrates Beers' winding path to reform in the final verse of *The Road Not Taken*, published in 1916.

I shall be telling this with a sigh
Somewhere ages and ages hence:
Two roads diverged in a wood, and I—
I took the one less traveled by,
And that has made all the difference.

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ANCHORED IN SUPPORT
STRONGER TOGETHER
MAY IS MENTAL HEALTH MONTH

May is Mental Health Awareness Month

Mental Health Association of RI to recognize state legislators

PROVIDENCE — The Mental Health Association of Rhode Island (MHARI), an affiliate of Mental Health America, is holding a celebratory and recognition event of Mental Health Awareness Month on Tuesday, May 26th, from 2:30 pm to 3:30 pm in the second floor State Room at the Rhode Island State House.

Legislator of the Year Awards will be presented to the Speaker of the House of Representatives **K. Joseph Shekarchi** and Senator **Linda Ujifusa**. A special recognition will also be presented to former Director of Communications & Community Partnerships at Horizon Healthcare Partners **Karen Jeffreys**.

History

The movement began with Clifford Beers, whose experience in early 20th-century asylums helped spark a national reform effort demanding dignity, accountability, and humane care. That legacy is symbolized by the Mental Health Bell of Hope, forged from the iron shackles once used to restrain patients—a reminder of how far we have come, and how much work remains.

MHARI carries the 110-year legacy of the national organization forward by elevating lived experience, advancing policies that expand access and rights, and advocating for a stronger behavioral healthcare system for all Rhode Islanders.

For more information, visit: https://mhari.org, an affiliate of Mental Health America https://mhanational.org ❖

Brown Health researchers identify key molecule behind 'exceptional responders' with glioblastoma

PROVIDENCE — A team of researchers from Brown University Health and Brown University has uncovered an important clue in the fight against glioblastoma, the most common and aggressive form of brain cancer in adults.

The team studied a rare group of patients known as 'exceptional responders', whose tumors are exquisitely sensitive to therapy, allowing these patients to live well beyond expectation. Through this study, Brown University Health researchers identified a powerful molecule that may pave the way for a new class of highly effective therapies.

The findings, published in the March issue of *iScience*, center on a molecule called miR-181d. Researchers found that tumors in these 'exceptional responders' contain higher levels of miR-181d, which appear to play two very important roles: weakening the tumor while also helping the body's immune system fight back.

Typically, treatments like radiation and chemotherapy work by damaging a tumor's DNA. But many glioblastoma cells can repair that damage, allowing the cancer to regrow. The researchers discovered that miR-181d blocks a key protein, called RAD51, that cancer cells rely on for this repair process. Without it, the tumor becomes more vulnerable to treatment.

"By studying hundreds of patient tumor samples, we found that people whose tumors have lower RAD51 levels live longer. What makes this discovery so powerful is that miR-181d naturally lowers RAD51 levels," said **JAY HOU, PhD**, assistant professor of neurosurgery at Brown University Health and a key collaborator on the study. "So, miR181d could help make glioblastoma tumors more sensitive to treatment."

miR181d provides a second important benefit to glioblastoma patients. The research also showed that miR-181d may help "switch on" the immune system against the tumor. In preclinical models, adding miR-181d back into tumors before radiation not only helped shrink them but also appeared to train the immune system to recognize and attack glioblastoma cells in the future.

This kind of response, in which the immune system continues to attack cancer long after treatment ends, is rare, but researchers say miR181d may increase the likelihood. Because longterm survival in cancer often depends on how powerfully the immune system can stay engaged, this effect is crucial.

"We've been studying exceptional responders and miR-181d for more than a decade. We understand now that miR-181d sits at the very center of how glio-blastomas respond to therapy and the body's ability to mount an effective immune response against glioblastoma," said senior author **CLARK CHEN, MD, PhD**, professor and director of the Brain Tumor Program at Brown University Health. "Our findings suggest that treating glioblastoma with miR181d could improve the chances that all patients live longer, much like the 'exceptional responders' who far outlive what this disease typically allows."

Researchers are now working toward a clinical trial in which miR181d would be delivered directly into tumors during surgery to help the body mount a stronger, longerlasting defense against glioblastoma.

The study was a collaborative effort involving scientists from Brown University Health, Brown University, the University of Minnesota, the International Institute of Information Technology, and Johns Hopkins University.

The study can be found at: miR-181d coordinates homologous recombination and anti-tumor immune responses in glioblastoma: *iScience*. ❖

University Gastroenterology (UGI) launches clinical trials studying use of GLP-1 medications for complex digestive diseases

PROVIDENCE — University Gastroenterology (UGI) has launched a series of clinical trials studying the use of GLP-1 medications for patients with fatty liver disease (MASH), inflammatory bowel disease (IBD), and irritable bowel syndrome (IBS).

These studies offer eligible participants access to therapies at no cost, with many participants also receiving compensation for their time. Some of these therapies are FDA-approved, while others are investigational, allowing researchers to evaluate emerging treatment options. GLP-1 medications have gained national attention for their use in metabolic conditions, and researchers are now exploring their potential role in treating complex gastrointestinal diseases that affect millions of Americans.

By participating in these studies, patients may gain access to new approaches that are not yet widely available. Qualified participants may receive:

- Study-related medications at no cost
- Access to specialized care and monitoring
- Compensation for time and participation

For more information, visit: https://www.universitygi.com/ongoing-trials or call 401-227-8393. ❖

Reed, Whitehouse, Magaziner, Amo announce $18M for RI medical research

WASHINGTON, DC — In an effort to boost public health and further medical research, U.S. Senators **JACK REED** and **SHELDON WHITEHOUSE** and Congressmen **SETH MAGAZINER** and **GABE AMO** announced $18,078,715 from the U.S. Department of Health and Human Services (HHS) to help Rhode Island-based researchers, including Brown University; the University of Rhode Island (URI); the Rhode Island Department of Health (RIDOH); and other Ocean State institutions to advance science, medicine, and health care.

A large portion of the federal funding will be used by universities and hospitals, as well as RIDOH, to support medical advancement in various fields, ranging from biomedical research to diabetes and lung diseases to research related to aging, childhood development, mental health care, substance use, addiction, neurological disorders, and more.

The fiscal year 2026 appropriations law included $116.6 billion in funding for the U.S. Department of Health and Human Services and targeted investments to propel life-saving and life-changing cures and treatments, including: $5.5 billion for mental health research; $3.9 billion for Alzheimer's disease research; $7.4 billion for cancer research, including $30 million for Senator Reed's Childhood Cancer STAR Act; $1.6 billion or opioid research; and $2.3 billion for diabetes research

Recipients of HHS grants related to medical research include:

Brown University
$1,873,288 for Aging Research
$1,348,042 for Drug Abuse and Addiction Research Programs
$1,283,789 for Alcohol Research Programs
$1,237,515 for Pharmacology Physiology and Biological Chemistry Research
$1,042,549 to study Mental Health
$791,611 to study Allergy and Infectious Diseases
$672,899 for Lung Diseases Research
$478,722 for Clinical Research related to Neurological Disorders
$50,114 for Biological Research Related to Deafness and Communicative Disorders
$385,598 for Mothers and Children Research

University of Rhode Island
$567,224 for Aging Research

Women & Infants Hospital
$385,000 for Child Health and Human Development Extramural Research
$195,480 for Diabetes Endocrinology and Metabolic Research

Miriam Hospital
$376,322 for Diabetes Endocrinology and Metabolic Research
$1,230,244 for Drug Abuse and Addiction Research Programs

Bradley Hospital
$183,914 to study Mental Health
$169,696 for Mothers and Children Research
$118,482 for Children's Graduate Medical Education Program

Butler Hospital
$165,987 for Mental Health Research

Rhode Island Hospital
$734,814 for Drug Abuse and Addiction Research Programs
$80,224 for Allergy Immunology and Transplantation Research

Thundermist Health Center
$55,882 National Training and Technical Assistance

Rhode Island Department of Health
$164,888 for State Primary Care Offices
$136,502 for Maternal and Child Health Services
$77,537 for Universal Newborn Hearing Screening and Intervention
$68,511 for Emergency Medical Services for Children (EMSC) Partnership
$66,580 for Maternal and Child Health Bureau (MCHB) State Systems Development Initiative
$467,030 for Agency for Toxic Substances and Disease Registry (ATSDR) Partnership to Promote Local Efforts to Reduce Environmental Exposure
$1,083,848 for Family Planning Services

Rhode Island Executive Office of Health & Human Services
$1,168,613 for National Training and Technical Assistance
$371,284 for Aids Drug Assistance Program (ADAP) Relief

Tri-County Community Action Agency
$1,046,526 for Health Center Program

Kent Hospital transformative $97M re-construction project begins

WARWICK — Care New England recently announced the details of a transformative construction project at Kent Hospital, to begin this spring, designed to modernize the campus, expand clinical capacity, and bring enhanced services to the community.

It includes the creation of a new ambulatory services building, expansion of the Cardiac Catheterization Suite, expansion and modernization of the Kent Hospital Emergency Department, and creation of a new main entrance space.

The $97 million project is financed through the US Department of Housing and Urban Development (HUD) FHA Section 242 Loan Program, which is designed to provide federal mortgage insurance to facilitate construction and refinancing for healthcare facilities.

"This investment reflects our deep commitment to the health and well-being of our community," said **CAROLYN JACKSON**, president and COO, Kent Hospital. "As demand for care continues to grow, this project ensures we are prepared to meet that need not just for today, but for generations to come."

The new 90,000 sq. ft. Ambulatory Services Building will encompass three floors, including a new entrance and lobby space for Kent's main entrance. This expansion will allow Kent Hospital to enhance its services on the Warwick campus. That includes:

- Creating a new OB/GYN practice by combining existing offices
- Expanding the Cardiovascular practice
- Integrating Pulmonary and Thoracic Surgery practices
- Implementing a Multidisciplinary Medical Specialties practice, including Dermatology, Neurology, and Endocrinology

By relocating these services, space will be freed up in the existing ambulatory building to accommodate a new primary care practice on the Kent campus. In total, 18 new clinicians will be recruited to meet patient demand and facilitate this critical growth.

The project will also expand the Cardiac Catheterization Suite, adding a third cath lab and creating a larger patient recovery area. The Kent Hospital Emergency Department will also be renovated to enlarge and enhance the Triage, Express Care, and behavioral health areas, upgrade and relocate a Computerized Tomography (CT) Suite, and upgrade the Magnetic Resonance Imaging (MRI) Suite.

The Kent Hospital renovation includes a new main entrance and lobby space.
[RENDERINGS COURTESY OF CARE NEW ENGLAND]

During construction, Kent will remain fully operational, with careful planning in place to minimize disruption to patients and visitors. The project is anticipated to be completed in March 2028. ❖

CNE introduces Butler Behavioral Health to reflect scope of care

PROVIDENCE — Care New England has introduced a new name for care at Butler Hospital that reflects a broader, more inclusive approach to behavioral health, extending well beyond traditional inpatient mental health services: Butler Behavioral Health (BBH). BBH reflects the full range of behavioral and cognitive health services available at Butler Hospital: innovative and compassionate care for individuals and families, with a focus on treating the whole person, as well as a wide range of programs designed to support mental wellness, memory care, and advanced therapeutic options.

"This new name, Butler Behavioral Health, communicates the comprehensive services that Butler has always provided," said **MARY MARRAN**, President and COO, Butler Hospital, Chief Administrative Officer, Care New England. "This change helps clarify our mission and ensures patients and families understand the full spectrum of care available to them, both inpatient and outpatient."

Key benefits of Butler Behavioral Health include improved access, standardized delivery across programs, more effective use of acute and higher levels of care, a seamless patient experience, and an enhanced ability to meet evolving consumer needs and expectations.

Butler Hospital remains the cornerstone of this expanded model. Butler is the only private, nonprofit psychiatric and substance abuse hospital serving adults, seniors, and adolescents in Rhode Island and Southeastern Massachusetts. ❖

Butler receives $1M donation to support BRaIN Program

PROVIDENCE — Butler Hospital recently announced an anonymous $1 million gift from a grateful patient to support its Brain Research and Interventional Neurotherapeutics (BRaIN) Program. This generous investment will help advance the hospital's ability to develop and deliver innovative treatments for individuals living with treatment-resistant psychiatric illness.

The BRaIN Program focuses on pioneering interventional neurotherapeutics, including advanced neuromodulation techniques such as transcranial magnetic stimulation, intranasal esketamine therapy, PRISM neurofeedback, and other emerging brain-stimulation therapies designed to treat patients facing some of the most difficult and often debilitating mental health disorders. This transformational investment is expected to accelerate cutting-edge research, strengthen clinical care, and support the development of innovative treatments for individuals who have not responded to traditional therapies like medication and psychotherapy.

"This level of philanthropic investment gives us the flexibility to innovate and the momentum to move promising therapies forward more quickly," said Chief of the Mood Disorders Program and Medical Director of the BRaIN Program **LINDA CARPENTER, MD**. "This gift empowers our team to explore bold ideas, expand access to advanced interventions, and improve outcomes for patients who often have very few remaining treatment options."

Butler Hospital President and COO **MARY MARRAN, MS OT, MBA**, said the gift reflects the growing recognition of the importance of advancing brain health through innovation.

"We are incredibly grateful for this generous support of the BRaIN Program," Marran said. "Breakthroughs in psychiatric care often begin with bold ideas and the resources to explore them. This gift will help our clinicians and researchers continue developing the next generation of treatments for patients in need of advanced mental health care."

"Philanthropy from grateful patients is one of the most powerful reflections of the care our team provides every day," said Senior Vice President and Chief Philanthropy Officer **JEFFREY CABRAL**, at Care New England. "We are deeply grateful for this extraordinary commitment to Butler Hospital and its BRaIN Program. This gift, the second seven-figure contribution Butler Hospital has received this year from a grateful patient, will help our clinicians and researchers to pursue promising ideas and bring new hope to patients and families facing difficult-to-treat psychiatric illness." ❖

Newport Hospital's Noreen Stonor Drexel Birthing Center to remain open, but requires $4.9M in annual state, philanthropic investment

NEWPORT — Newport Hospital recently announced that the Noreen Stonor Drexel Birthing Center will remain open following a thorough review, completion of an independent assessment and strong community involvement. Supporting this service into the future will require an additional $4.9M in sustained and new annual revenues that would need to come from increased state funding and philanthropic support. The hospital identified the resources needed to sustain a quality birthing center and will immediately launch an aggressive effort to secure additional funding.

"Throughout this process, we have remained committed to transparency and to listening closely to our community," said **TENNY THOMAS, MD**, president of Newport Hospital. "To ensure we received broad input, we convened a Community Advisory Panel (CAP), and I am deeply grateful to its members for their time, guidance, advocacy, and partnership. I am pleased that the Newport Hospital CAP members apprised of this news are supportive of remaining open while Brown University Health seeks additional state and philanthropic funding."

Newport Hospital engaged consultants Kaufman Hall to conduct a comprehensive review, evaluating perinatal quality and safety against national Level I standards, as well as the program's long-term sustainability.

The review found that the Birthing Center delivers safe, quality care supported by strong clinical commitment and 24/7 obstetric, pediatric, and anesthesia coverage. It also identified areas requiring focused attention and investment, including workforce sustainability, readiness for high-acuity, low-frequency events, and ongoing operational reliability in a low-volume setting. Based on these findings, hospital leadership has established a clear path forward to strengthen and sustain the program.

"The independent review affirmed the quality and safety of care delivered by our clinical teams and outlined the additional investments needed to ensure the program remains strong and financially sustainable," said Dr. Thomas. "State and philanthropic investments are essential to improving care across Rhode Island and maintaining quality local services, such as the birthing center. The call to action is that we need the support and advocacy of our community and policymakers to secure these resources so we can continue providing essential care close to home. This is about protecting access to care for families across our region. With continued partnership and support, we are confident in our ability to sustain this vital service for years to come." ❖

AMA: Physician burnout rates are falling, specialty gaps remain

New report shows uneven progress across medical specialties, highlighting need for targeted solutions

CHICAGO — New data from the American Medical Association (AMA) show physician burnout continuing to decline nationwide, but significant differences across medical specialties underscore the need for more targeted solutions within health systems.

In 2025, 41.9% of physicians reported experiencing at least one symptom of burnout—down from 43.2% in 2024 and 48.2% in 2023—reflecting steady progress in physician well-being also found in peer-reviewed research. However, AMA-exclusive data reveal that the burden of burnout is not shared equally by physicians across medicine.

"2025 marked another year of progress in reducing overall physician burnout levels," said AMA President **BOBBY MUKKAMALA, MD**. "This reflects broad gains in engagement, well-being, and perceived support across organizations. However, burnout varies widely by medical specialty, driven by differences in workload, administrative burden, clinical environment, staffing support, and the day-to-day realities of practice. Building effective, lasting solutions requires better understanding where physicians are struggling and why."

According to AMA data, the highest burnout rates were reported in emergency medicine (49.8%), urological surgery (49.5%), hematology/oncology (49.3%), obstetrics and gynecology (45.7%), radiology (45.2%), family medicine (45%), general surgery (43.8%), cardiology (43.5%) and gastroenterology (43.5%). In contrast, infectious diseases (23.3%), nephrology (29.3%), dermatology (31.5%), psychiatry (31.6%), and anesthesiology (39.2%) reported the lowest levels.

The findings are based on nearly 19,000 physician responses across 38 states and 106 health systems participating in the AMA Organizational Biopsy® and reported in the 2025 edition of the AMA national physician comparison report. The aggregated data available in the report provides a national snapshot of physician well-being by benchmarking five key indicators: burnout, job stress, job satisfaction, intent to leave an organization, and feeling valued by an organization.

While four of the five indicators improved significantly from 2024 to 2025, variation by specialty remains pronounced. Hospital-based specialties, including emergency medicine, radiology and anesthesiology, performed worse than the overall benchmark on three of five measures, suggesting persistent operational and workflow challenges.

Physicians reported feeling valued by their organization (great or moderate extent) at 56.2% representing an increase of 1.7% from 2024. There continues to be variation on physician feeling valued by gender (female respondents at 53.3% and male respondents at 59.6%), by years in practice (physicians 1–5 years in practice reporting at 57.9% and physicians post 20 years at 59.4%) and by specialty.

Overall job satisfaction was stable across specialty groupings with the highest satisfaction reported by psychiatry (83%) and obstetrics and gynecology (81.2%), while hospital-based specialties reported the lowest satisfaction (74.8%).

"These data make clear that improving physician well-being isn't one-size-fits-all; it requires targeted, specialty-specific strategies," said Dr. Mukkamala. "By reducing administrative burden and advancing evidence-based solutions, we can help physicians rediscover the joy in medicine while building more sustainable practice environments. The AMA urges health system leaders to use these insights to benchmark performance and accelerate efforts to address the unique drivers of burnout across specialties."

The AMA can help health systems tailor solutions to the unique drivers of burnout across specialties and maximize support for care teams with cutting-edge tools, information and resources. Through its Well-being Toolkit, health systems can learn how organizations are partnering with the AMA, explore proven strategies to reduce burnout and enhance physician well-being, and calculate the cost of physician burnout to their organization. ❖

AMA research details toll of broken medical liability system

CHICAGO — New research studies from the American Medical Association (AMA) reveal that many physicians face a significant risk of being sued during their careers. The ever-present risk of lawsuits—even when no error occurred—and high medical liability insurance premiums have contributed to a prolonged period of heavy financial burden on doctors, fueling escalating expenses throughout the health care system.

Physicians know the practice of medicine carries risk, and even highly skilled doctors face lawsuits," said AMA President **BOBBY MUKKAMALA, MD**. "But a claim does not mean a mistake was made. Most cases never find fault with the physician, and the majority are dropped or dismissed before trial. Doctors continue to take on complex, high-risk care because patients depend on it. However, the ongoing liability risk not only challenges physicians but it increases practice expenses, reinforces defensive medical practices, and drives up health care costs for patients and families."

In the first of two research reports, the AMA studied medical liability claim frequency among patient care physicians in the U.S. between 2016 and 2024. The findings show the risk of being sued increases with years in practice, and medical specialty and gender are also prominent factors. Key findings from the research include:

- Physicians with more years of practice have more exposure to risk. Nearly half (45.2 percent) of physicians aged 55 and over had been sued, compared to 11 percent of physicians under the age of 45.

- Surgical specialties carry the highest risk. Nearly three in five (59.6 percent) obstetricians & gynecologists and about half (53.1 percent) of general surgeons have been sued at least once in their career.
- Among obstetricians & gynecologists and general surgeons aged 55 and over, nearly three out of four have been sued at least once in their careers.
- Claim frequency against physicians has fallen over time. Less than a third of physicians (28.7 percent) had been sued during their careers in 2024, down from a share of 34 percent in 2016.

Given the high costs and strain caused by a highly litigious climate and the drag it places on the nation's health care system, the AMA continues to work with state and specialty medical societies and other stakeholders to advance medical liability reforms. These efforts aim to fix the costly problems in the medical liability system while ensuring that injured patients are fairly compensated. The AMA wants reforms to rein in the broken medical liability system, reduce the growth of health care costs, and preserve patients' access to high-quality care. For information on AMA solutions to reshape the current medical liability system to better serve both patients and physicians, please read Medical Liability Reform – Now!

The new reports are the latest additions to the AMA's Policy Research Perspective series that support AMA federal, state and private sector advocacy agendas. For additional information from the new reports, go to the AMA website.

Note: The AMA will host a webinar on May 20 examining current legislative trends, research and advocacy efforts centered on medical liability reform. For details including registration information, please visit the AMA website.

AMA urges Congress to strengthen safeguards for AI chatbots

WASHINGTON, DC — The American Medical Association (AMA) urged federal lawmakers to put stronger safeguards in place as the use of augmented intelligence (AI) chatbots in mental health care continues to grow. The AMA emphasized both the promise and risks of these rapidly expanding technologies.

In letters to the co-chairs of the Congressional Artificial Intelligence Caucus, the Congressional Digital Health Caucus, and the Senate Artificial Intelligence Caucus, the AMA recognized Congress for advancing conversations about AI's role in society and mental health. At the same time, the AMA warned that the rapid rise of mental health chatbots—along with reports of risks such as encouraging self-harm and privacy breaches—highlights the urgent need for clear guardrails to protect patients and maintain public trust.

"AI-enabled tools may help expand access to mental health resources and support innovation in health care delivery, but they lack consistent safeguards against serious risks, including emotional dependency, misinformation, and inadequate crisis response," according to AMA CEO **JOHN WHYTE, MD, MPH**. "With thoughtful oversight and accountability, policymakers can support innovation and ensure technologies prioritize patient safety, strengthen public trust, and responsibly complement—not replace—clinical care."

While AI technologies present meaningful opportunities to improve access to care and support innovation in health care delivery, recent congressional hearings made clear that immediate attention is required to ensure these tools do not inadvertently harm individuals seeking mental health support.

To address these concerns, the AMA urged Congress to require stronger safeguards—recognizing they are a starting point, not a limit, and that modernized protections may be needed as these tools evolve. The safeguards outlined in the AMA letter include:

Enhance Transparency: Require chatbots to clearly and meaningfully disclose that users are interacting with AI, not a human being, and prohibit systems from presenting themselves as licensed clinicians. Congress should also empower federal regulators to enforce transparency standards and penalize deceptive practices.

Establish Clear Regulatory Boundaries: Prohibit chatbots from diagnosing or treating mental health conditions without appropriate regulatory review. Congress should direct agencies to create a modern, risk-based oversight framework and clarify when AI tools qualify as medical devices. Developers should also be required to implement crisis-detection systems that identify self-harm risk and provide immediate referrals to appropriate resources, along with appropriate de-escalation language to help mitigate potential harms.

Strengthen Oversight and Accountability: Mandate ongoing safety monitoring, reporting of adverse events, and rigorous standards for tools used by children and adolescents, who may face heightened risks.

Limit Commercial Influence: Discourage or prohibit advertising within mental health chatbots, particularly for minors, and ensure that outputs remain free from sponsorship bias or commercial influence.

Protect Privacy and Security: Require strict data protection standards, including limits on data collection and retention, clear user consent for data use, and safeguards against unauthorized access or sharing of sensitive information.

The AMA emphasized that meaningful safeguards are essential to ensure AI tools complement—not replace—clinical care while safeguarding patients from harm. The organization reaffirmed its commitment to working with Congress to advance policies that promote innovation while prioritizing patient safety, clinical integrity, and public trust. ❖

RIDOH announces second measles case

PROVIDENCE — The Rhode Island Department of Health (RIDOH) announced a confirmed case of measles has been identified in Rhode Island, the second in 2026.

This individual is a female in her 20s who had traveled from outside the country to visit family in Rhode Island. This person was treated at Brown University Health Urgent Care in Middletown on April 24 and tested positive for measles at the Rhode Island State Health Laboratories. This person did not require hospitalization.

Measles is almost entirely preventable through vaccination. Approximately 97% of Rhode Island kindergartners have completed the Measles, Mumps, and Rubella (MMR) vaccine series, which protects against measles, mumps, and rubella. MMR vaccine is safe and effective.

"The chance of significant spread of measles in Rhode Island is very low because we have such a high MMR vaccination rate," said Director of Health **JERRY LARKIN, MD**. "But that degree of community protection depends on everyone who is eligible getting vaccinated. Any parent or guardian who has a child older than one year who has not been vaccinated against measles should talk to their child's healthcare professional. For any family with insurance issues or trouble accessing care, RIDOH can make vaccine available at no cost."

A healthcare professional may offer a preliminary diagnosis of measles for patients with fever, rash, and other measles symptoms. RIDOH's State Health Laboratories will confirm if the rash is caused by measles by testing nose swabs and looking for measles antibodies in blood. If you or your child has recently travelled internationally or to a place with an active measles outbreak and develop a rash along with the symptoms listed above, please contact your healthcare professional.

There is no specific antiviral therapy for measles. Supportive therapy includes fever reducing medications, fluids, and treatment of bacterial superinfections, such as bacterial pneumonia and ear infections. Treatment of other complications, such as seizures and respiratory failure, may also be necessary. There is a role for vitamin A in certain settings, and vitamin A supplementation may be beneficial for reducing measles severity and risk of complications.

For more information on measles, visit https://health.ri.gov/measles. ❖

RIDOH highlights encouraging STI data trends and promising prevention efforts

PROVIDENCE — In observance of National STI Awareness Week (April 12–19), the Rhode Island Department of Health (RIDOH) highlighted some encouraging trends in reducing the burden of sexually transmitted infections in Rhode Island. RIDOH is also promoting some of the innovative STI prevention strategies that have been implemented to reverse the increases in STI rates seen over the last decade.

In March, RIDOH released its 2024 HIV, Sexually Transmitted Infections, Viral Hepatitis, and Tuberculosis Surveillance Report. After several years of substantial increases in reports of cases of chlamydia, gonorrhea, and infectious syphilis, trends in Rhode Island are beginning to stabilize. Case counts declined in 2024 compared to 2023, and preliminary 2025 data suggest further decreases.

Over the past decade, reported chlamydia cases increased by 2.3%, from 4,575 cases in 2015 to 4,681 cases in 2024. Annual case counts peaked in 2019, with 5,717 cases reported, representing the highest burden in the past 10 years. Since that peak, reported cases have steadily declined. Notably, 2024 recorded the lowest number of chlamydia cases since 2015. But while there has been an overall drop in STIs, the burden of STIs is uneven among Rhode Island's at-risk populations.

New STI diagnosis rates in Rhode Island remain consistently high among adolescents, age 15–24. In 2024, RIDOH partnered with the Rhode Island Healthy Schools Coalition to launch the RIght to Know web app (righttoknowapp.com), which provides adolescents and young adults with accurate information about sexual and reproductive health, as well as places across Rhode Island to access resources like care and condoms. In 2025, a new section was added with information and resources for parents to help talk to their teens about sexual health.

"As this report details, these conditions disproportionately affect some populations in Rhode Island," said Director of Health **JERRY LARKIN, MD**. "RIDOH maintains a strong program to track these trends and tailor prevention and control efforts. While there is much more work to be done, we're very pleased to see data in our most recent report indicating that Rhode Island's innovative prevention efforts may be helping to reverse troubling STI trends."

Rhode Island saw an uptick of new HIV diagnoses in 2024. RIDOH noted this increase in real time and worked to enhance and expand prevention efforts. Rhode Island did not continue to see an increase in cases in 2025. Rhode Island's counts of newly diagnosed HIV cases in 2025 were below the State's 10-year average of 70 cases per year.

To help prevent ongoing HIV transmission, RIDOH launched the Rhode Island PrEP Champions Network in late 2024, creating a network of clinics that prescribe pre-exposure prophylaxis (PrEP) medication for HIV prevention, as well as Doxy PEP, an STI prevention strategy that involves taking the antibiotic doxycycline after a risky sexual encounter to prevent bacterial STIs. There are now PrEP Champions clinics in every region of Rhode Island. Learn more about PrEP and the Rhode Island PrEP Champions Network at health.ri.gov/prep.

RIDOH has launched several other prevention and testing initiatives in recent years that may be helping to reverse increases in STIs seen in previous years:

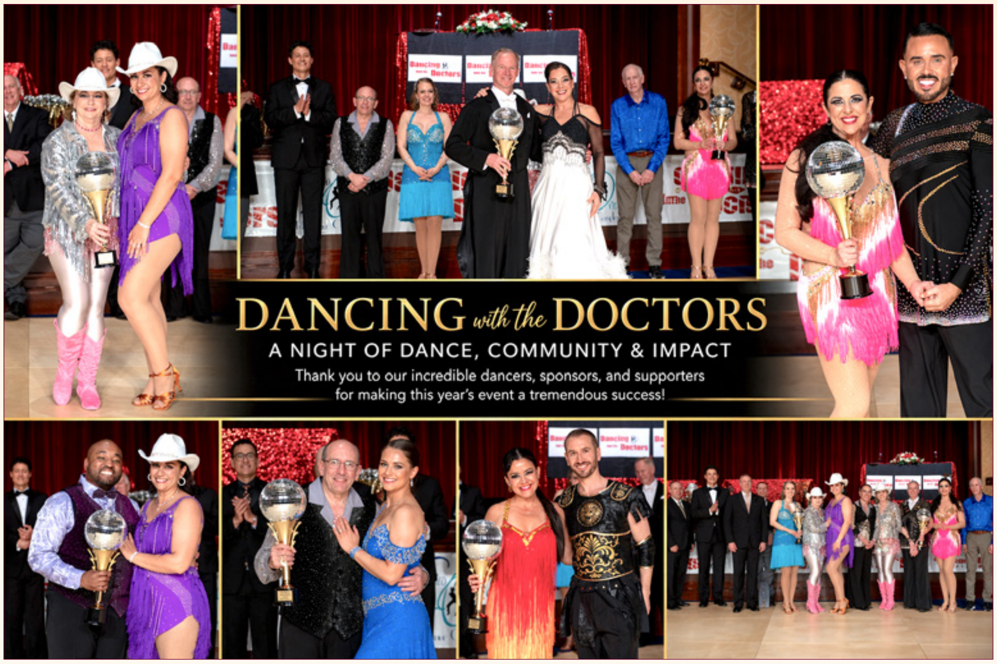
- RIDOH has created the TESTING 1-2-3 program to help Rhode Islanders get tested for HIV and other sexually transmitted infections (STIs) without a trip to a doctor's office. Learn more at testing123ri.com.
- RIDOH's "Your Health, Your Choice: Know Your Options," and "Your Guide to Safer Sex" web page at health.ri.gov/youroptions highlights the many options Rhode Islanders can consider to help prevent HIV and other STIs. This includes guidance on safer sex, and information on a variety of HIV and STI testing services.
- In 2025, RIDOH partnered with Dorcas International to develop a series of "What to Know About Health" fact sheets in English, Spanish, Portuguese, Cape Verdean Creole, Haitian Creole, and Khmer on HIV, STIs, tuberculosis, oral health, and vaccines.

Note: The lag between 2024 and early 2026 data is typical when assessing trends in this field. The data included in RIDOH's 2024 HIV, Sexually Transmitted Infections, Viral Hepatitis, and Tuberculosis Surveillance Report represent the most accurate, comprehensive, up-to-date snapshot we have of HIV, STIs, viral hepatitis, and TB in Rhode Island. ❖

Dancing with the Doctors 2026 raises $140,000 for Open Door Health, RIPHI

LINCOLN — Dancing with the Doctors (DWTDocs), produced by Studio One RI and the non-profit organization, Dancing for a Cause, delivered an unforgettable evening of entertainment, inspiration, and community impact on April 11, 2026, at Bally's Twin River Event Center—raising $140,000 in support of Open Door Health, an initiative of the Rhode Island Public Health Institute (RIPHI).

Now in its eighth year, the sold-out gala brought together more than 600 guests to witness 14 local physicians step out of their comfort zones and onto the dance floor. Paired with professional dance instructors, these dedicated doctors spent months preparing and fundraising, all in support of expanding access to inclusive, comprehensive healthcare for Rhode Islanders.



Dancing with the Doctors (DWTDocs), produced by Studio One RI and the non-profit organization, Dancing for a Cause, was held on April 11, 2026, at Bally's Twin River Event Center. Physicians and healthcare professionals stepped out of their comfort zones and onto the dance floor, paired with professional dance instructors, for the fundraising "competitive" event.

"The energy in the room was absolutely electric," said **DEE SOARES**, co-founder of Dancing with the Doctors and co-owner of Studio One RI. "This event truly embodies what can happen when a community comes together with passion, purpose, and heart. We are incredibly proud of our doctors, our supporters, and the impact we've made together."

Guests were treated to an evening filled with high-energy dance performances, emotional storytelling, and a shared commitment to a meaningful cause. From elegant ballroom routines to crowd-pleasing performances, each doctor brought their unique personality and dedication to the stage—transforming months of hard work into a spectacular show.

Proceeds from this year's event directly benefit Open Door Health, Rhode Island's first and only LGBTQ+ focused community health clinic, which provides integrated services including primary care, behavioral health, sexual health, and HIV prevention and treatment. Support from events like DWTDocs helps

Participants in the event included, from left, **Amy Goldfarb, MD**, winner of the People's Choice Award, raising $20,330 in votes and sponsors; **John Soares**, owner of Studio One RI; **Amy Nunn, ScD**, CEO of Open Door Health and one of the dancers; **Philip Chan, MD**, Chief Medical Officer of Open Door Health as well as one of the dancers this year; **Dee Soares**, Director of Dancing with the Doctors/Dancing for a Cause; and **Allan Tunkel, MD**, winner of the People's Choice Award, raising $31,210 in votes and sponsors.

ensure that vital, affirming healthcare remains accessible to all.

Since its inception, Dancing with the Doctors has featured more than 125 physicians and raised over $850,000 for local charities—demonstrating the powerful intersection of healthcare, community, and the arts. "This is more than just a dance competition," added Soares. "It's a movement—one that continues to open doors, change lives, and celebrate the incredible spirit of giving."

An advisory board plays an important role in selecting the beneficiary each year. Throughout the year, the organization considers a variety of thoughtful recommendations that aligns with its mission. All beneficiaries must be registered nonprofits and serve communities across Rhode Island and Southern New England.

Past recipients include:

- HopeHealth Hospice
- The Izzy Foundation
- Rhode Island Free Clinic
- Blood Cancer United (Leukemia and Lymphoma Society)
- Pink Heals RI (local police and fire that supports all people battling cancer)
- Gloria Gemma Breast Cancer Foundation

Plans are already underway for next year's event, planned for April 10, 2027. For more information, visit https://www.dwt-docs.com/about-dancing-for-a-cause ❖

The winner's circle at this year's event.

2026 Dancing with the Doctors Participants/Awardees

Awards are given to the top female and top male dancers in each category. Most Technical, Most Entertaining, and the People's Choice Award go to the doctors who raise the most money.

Robert Bartro, DDS

Shawn Binns, MD, Lincoln Pediatrics/Brown Health
Winner: Most Entertaining Award

John Cassese, MD, Radiology & Pediatrics,
Assistant Professor of Radiology, Department of Pediatrics,
The Warren Alpert Medical School of Brown University

Philip Chan, MD, Chief Medical Officer, Open Door Health

Alyssa Doody, DO, South County Hospital, Wakefield, RI

Margaret Furtado, MD, Medical Associates of Rhode Island,
Bristol, RI

Amy Goldfarb, MD, RIPHI/Open Door Health Board Member
Winner: People's Choice Award

Jerome Larkin, MD, Director,
Rhode Island Department of Health

Lola McLaren Cevallos, MD, East Greenwich
Brown Health Medical Group Primary Care
Winner: Most Entertaining Award

Edward McGookin, MD, MHCDS, FAAP, Chief of Primary Care,
Brown Health Medical Group Primary Care

Amy Nunn, ScD, Chief Executive Officer,
Rhode Island Public Health Institute

Stephanie Ros Saposnik, MD, MSCI, Women & Infants/
Brown University
Winner: Most Technical Award

Allan Tunkel, MD, PhD, MACP, Brown University Health;
Former Senior Associate Dean for Medical Education,
The Warren Alpert Medical School of Brown University
Winner: People's Choice Award

Eric F. Walsh, MD, Ortho Rhode Island,
The Foundry, Providence
Winner: Most Technical Award

Appointments

Leanne Barrett, MA, IMH-E®, named executive director of the Rhode Island Association for Infant Mental Health

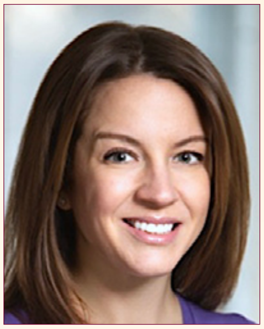
PROVIDENCE — The Rhode Island Association for Infant Mental Health (RIAIMH) announced the appointment of **LEANNE BARRETT, MA, IMH-E®**, as its next executive director. Barrett follows long-time executive director and RIAIMH founding member **SUSAN DICKSTEIN, PhD, IMH-E®**, who announced her retirement at the end of 2025.

Barrett brings more than two decades of non-profit leadership experience in early childhood, state and national policy development, grant writing and stewardship, and fostering community partnerships. She has dedicated her career to advocating for policies and practices that advance the health and well-being of young children and their families.

"The Rhode Island Association for Infant Mental Health has a strong history of supporting infant and early childhood professionals through training, reflective practice, endorsement credentialing, and advocacy. I am honored to be chosen to lead RIAIMH through its next chapter," said Barrett. "I look forward to working with RIAIMH's talented and dedicated board, staff, almost 300 members, and partners, to honor the legacy of RIAIMH and ensure its growth and continued success. RIAIMH's role is more important than ever. As we see family stress increase, the percentage of young children in Rhode Island who have identified mental health challenges has grown significantly—from 10% in 2017 to 22% in 2025 among children under age 6 with Medicaid insurance. In order for young children and families to thrive, RI needs to support a strong and stable workforce."

Barrett most recently served as the director of Early Childhood Policy and Strategy for Rhode Island KIDS COUNT, where she worked for almost 22 years. Prior to KIDS COUNT, she worked for the United Way of Rhode Island as VP Community Initiatives and a Program Manager at Work/Family Directions.

She holds an MA in policy from Tufts University and earned her BA in psychology at Brown University. ❖



Rachel E. Beard, MD, joins CNE as division chief of hepatobiliary and pancreas surgery

PROVIDENCE — **RACHEL E. BEARD, MD**, has joined Care New England Health System as division chief of hepatobiliary and pancreas surgery.

Dr. Beard, who specializes in hepatobiliary and pancreatic surgery, surgical oncology and advanced general surgery, stepped into the role on April 1. She completed a residency at Beth Israel Deaconess Medical Center in Boston and fellowships at the University of Pittsburgh Medical Center. She is also an associate professor of surgery at Brown University's Warren Alpert Medical School. ❖

Travis Cotton, MD, to lead CNE Thyroid and Parathyroid Surgery Program

PROVIDENCE — Care New England recently announced the appointment of **TRAVIS COTTON, MD, FACS**, as the chief of endocrine surgery and leader of the newly established Thyroid and Parathyroid Surgery Program. Dr. Cotton is a nationally recognized endocrine surgeon who treats routine and complex conditions of the thyroid, parathyroid, and adrenal glands. He has maintained a dedicated endocrine surgery practice in Rhode Island for over a decade and is a high-volume surgeon, performing over 400 endocrine-surgery operations per year.

"I look forward to taking care of our endocrine surgery patients at Care New England. The development of this new Thyroid and Parathyroid Surgery Program reflects Care New England's commitment to expanding access to specialized surgical care and advancing clinical excellence in our community," said Dr. Cotton. "It represents an important step in providing comprehensive, specialized, and multidisciplinary care for patients with thyroid and parathyroid disorders."

Originally from Texas, Dr. Cotton graduated with a BS in biomedical science from Texas A&M University. He went on to receive his medical degree from the University of Texas Medical School at San Antonio. He then completed his residency in general surgery at the University of North Carolina at Chapel Hill. He subsequently completed the Norman Thompson Endocrine Surgery Fellowship at the University of Michigan. Following the fellowship, Dr. Cotton was recruited to the Department of Surgery at Brown University, where he is clinical associate professor of surgery while also serving as the Department's executive vice chair of surgery. ❖

Appointments

Thundermist appoints Jeffrey Gaines, MD, chief medical officer

WOONSOCKET — Thundermist Health Center recently announced that **JEFFREY GAINES, MD, MHCM, FACEP**, has joined the organization as its new chief medical officer. He succeeds **DAVID BOURASSA, MD**, who had served as chief medical officer since 1998 and who will continue to provide patient care as a pediatrician at the Thundermist's Woonsocket health center.

Before joining Thundermist, Dr. Gaines served as chief medical officer and vice president of medical affairs at Newport Hospital, part of Brown University Health. He is also currently an assistant professor of medical science at the Warren Alpert Medical School of Brown University.

"Dr. Gaines is not only an experienced physician and leader, but he also understands the healthcare needs of Rhode Islanders and the barriers many face in accessing care," said **CHUCK JONES**, president and CEO of Thundermist. "His background in emergency medicine will complement the work we do in community health, often serving patients with complex needs. His commitment to patient care and his record as a collaborative leader who inspires his teams are impressive. We're excited to welcome him to the Thundermist team."

In his new role, Dr. Gaines will lead a team of more than 100 providers across three locations and oversee all aspects of clinical operations. Thundermist currently employs more than 650 individuals and serves more than 65,000 patients across the state. Thundermist provides services to everyone regardless of their insurance status or ability to pay.

"What stands out most to me about Thundermist is its mission to remove barriers and deliver exceptional care—and its deep commitment to creating an environment where every team member can make the greatest possible impact," Dr. Gaines says. "After more than 16 years of living in Rhode Island and raising my family here, I'm honored to join this incredible organization and its dedicated team. I'm excited to listen, learn, and partner in support of the communities we serve."

Dr. Gaines earned his medical degree from the University of Michigan, completed his residency in Emergency Medicine at the University of Pittsburgh, and received a Master of Health Care Management from the Harvard T.H. Chan School of Public Health. He has served as the chair of the board of Coastal Medical and chair of the Brown University Health Wellness and Resiliency Council. He is also a board member of the American College of Healthcare Executives of Rhode Island and is a fellow at the American College of Emergency Physicians. ❖

Recognition

South County Hospital named a 2026 Castle Connolly Top Hospital for C-Section, Spine Surgery

WAKEFIELD — South County Hospital has been named a 2026 Castle Connolly Top Hospital for C-Section, Spine Surgery, and Hernia Surgery, placing it among the top hospitals nationwide for excellence in these specialties.

"We're proud to receive this recognition across multiple specialties," said **AARON ROBINSON**, president and CEO of South County Health. "It reflects the high-quality, patient-centered care our teams deliver every day and reinforces our position as a trusted leader in advanced surgical care."

The Castle Connolly Top Hospitals designation is a data-driven program that evaluates hospitals nationwide based on clinical excellence, patient safety, outcomes, and physician expertise. By analyzing comprehensive claims data, Castle Connolly highlights hospitals that are setting new standards in specialized care.

MARTHA MOE, MD, medical director of the Center for Women's Health, reflected that "this recognition in C-section care highlights the strength of our obstetrics team and their dedication to providing safe, compassionate care for mothers and babies during one of life's most important moments."

MICHAEL BRADLEY, MD, MBA, president of Ortho Rhode Island, added, "We are honored to partner with South County Hospital through the Center for Advanced Orthopedic Surgery in providing world-class spine care. This recognition is a testament to the expertise of our surgeons—Drs. Ian Madom and Diana Douleh—and to our shared commitment to achieving the best possible outcomes for our patients."

KEVIN CHARPENTIER, MD, chief medical officer, said "We are proud to be recognized for excellence in hernia care, which reflects our surgical team's precision, innovation, and commitment to delivering safe, effective outcomes that help patients return quickly to their daily lives." ❖

Recognition

Women & Infants Hospital recognized among *Money's* Best Hospitals for Maternity Care 2026

PROVIDENCE — Women & Infants Hospital announced it has once again been recognized as one of *Money's* Best Hospitals for Maternity Care of 2026. Among 75 hospitals nationwide included on this year's list, Women & Infants earned an A+ rating, underscoring its leadership in maternal and newborn care.

This distinction highlights the hospital's ongoing commitment to delivering exceptional, patient-centered care for mothers and newborns. *Money's* evaluation considers key indicators of quality, including care before, during, and after birth, patient satisfaction, safety outcomes, and notable maternity care accreditations.

"Women & Infants Hospital is honored to be recognized by *Money* for our maternity care services," said Interim President and Chief of OBGYN, Women & Infants Hospital, **METHODIUS G. TUULI, MD, MPH, MBA**, "This achievement reflects the dedication of our entire team, who work tirelessly every day to provide the highest-quality care and support to the families we serve."

The ranking methodology draws on patient ratings from the Centers for Medicare & Medicaid Services (CMS) as well as distinctions from leading accrediting bodies such as the Baby Friendly Hospital Initiative and The Joint Commission.

View the full list of *Money's* Best Hospitals for Maternity Care 2026 here. ❖

Rep. Bennett, Sen. Bissaillon honored by Thrive Behavioral Health

STATE HOUSE — Rep. **DAVID A. BENNETT** and Sen. **JACOB E. BISSAILLON** have been honored by Thrive Behavioral Health as its Legislators of the Year.

Senator Bissaillon (D-Dist. 1, Providence), who chairs the Senate's Housing and Municipal Government Committee, was selected for the award for his strong and successful advocacy for behavioral health, particularly mobile crisis response and stabilization services.

"I am deeply humbled to receive this recognition from Thrive Behavioral Health, which does such outstanding and vitally important work to support Rhode Islanders, and to share the honor of Legislator of the Year with Representative **DAVID BENNETT**, who is a tireless champion for behavioral health in our state. Through my experience in public service and professional life, I know firsthand that access to critical supports and services can be powerfully and positively transformative for individuals, families, and communities. Securing essential resources and strengthening Rhode Island's behavioral health infrastructure will always be a priority for me, and I am grateful to everyone who shares in that commitment," said Senator Bissaillon.

Said Thrive President and CEO **DAWN ALLEN**, "Sen. Jake Bissaillon has been an invaluable ally to Thrive and to the communities we serve. His steadfast focus on equitable health care, accessible mental health treatment, and stable housing reflects a profound understanding of the challenges facing our communities, and a genuine commitment to meeting them. His advocacy aligns seamlessly with our mission and has made a real and lasting difference in the lives of those who need it most."

Representative Bennett (D-Dist. 20, Warwick, Cranston), in whose district Thrive is located, was honored for his longtime support and advocacy for the agency and his understanding of the direct impact of behavioral health services on local communities.

From left, Thrive Behavioral Health Board Chairperson **Jennifer Wheelehon**, Rep. **David A. Bennett**, Sen. **Jacob E. Bissaillon** and Thrive Behavioral Health President and CEO **Dawn Allen** at Thrive's Legislative Breakfast, where the agency presented Representative Bennett and Senator Bissaillon with its Policy Impact Award.

"A healthy behavioral care system means healthier communities where more people can thrive. I have seen firsthand the community benefits of accessible behavioral health services as both a psychiatric nurse and in my time representing my constituents in the State House. Students do better in schools, substance abuse declines and social isolation lessens as communities become more connected and resilient. An investment in behavioral health is an investment in a happier, healthier Rhode Island," said Representative Bennett.

Said Allen, "Representative David Bennett has long been one of Thrive's most valued allies. With a deep, personal understanding of the important work we do and the high-quality services we deliver, he has consistently shown up as a tireless advocate and an unwavering source of support. He is someone we can always count on to stand with us when it matters most."

The behavioral and mental health services provider presented the awards at a legislative breakfast held April 10 at its Warwick headquarters. The event featured remarks from Congressman **SETH MAGAZINER**, Senate President **VALARIE J. LAWSON** (D-Dist. 14, East Providence) and Thrive leadership, as well as a powerful client story highlighting the real-world impact of behavioral health services. ❖

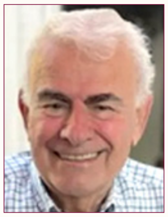
Obituaries

ALFRED ALBERT ARCAND, MD, 91, of Coventry, passed away peacefully on April 2, 2026, surrounded by his family. He was married for 62 years to Louise (Parent) Arcand.

He graduated from St. Joseph College (The University of Moncton, New Brunswick, Canada) and received his MD from The University of Laval (Quebec, Canada). He enlisted in the Army in 1961 and served in Vietnam as a doctor. After receiving an honorable discharge in 1963, he moved to West Warwick, where he started his private medical practice. He remained in private practice until his retirement in 2012. He was affiliated with Kent County Memorial Hospital in Warwick and served as president of the medical staff from 1990-1992. Prior to his retirement, he served as director of VNA Hospice from 2007-2012.

He is survived by his wife, Louise Arcand; his six children: Dr. Michel Arcand and his wife Dominique Poulin of Chepachet; Dr. Paul Arcand and his wife Claudia of Sutton, MA; Dr. Albert Arcand and his wife Erica of East Greenwich; Dr. Helene Shea and her husband Scott of Rutland, MA; Dr. Denise Arcand and her husband Greg Pettinella of Ashburnham, MA; Dr. Nicole Arcand of Exeter; and 14 grandchildren. He was predeceased by his beloved son-in-law, Jim Fink (Nicole Arcand) and twin grandchildren Elsa and Ludger Fink.

Funeral arrangements were made at the Potvin-Quinn Funeral Home in West Warwick. A private mass and burial will be held later this year. In lieu of flowers, donations may be made to the Alzheimer's Association, P.O. Box 96011, Washington, DC 20090. ❖



THOMAS D. DELLA TORRE, MD, 84, of Providence, passed away peacefully on April 2, 2026.

He was a graduate of Classical High School and Providence College, and earned his medical degree from the University of Bologna in 1968. He served his country as a Captain in the United States Army Reserve Medical Corps from 1971 to 1977.

For more than 40 years, Dr. Della Torre practiced as a compassionate ear, nose, and throat physician and surgeon at RI ENT. Patients and colleagues alike remembered him for his clinical skill, surgical expertise, and—most of all—his genuine warmth and heartfelt care.

In addition to his wife Grazia, he is survived by his loving children: Patricia "Tica" Della Torre and her husband David Burke of Stamford, CT; Elizabeth "Betty" Reger and her husband John of North Andover, MA; and Thomas "Tommy" Della Torre, MD, and his wife Laura of Smithfield. He was the cherished grandfather of Michael Burke, Thomas, Giulia, and Matthew Della Torre, and James and Victoria Reger. He is also survived by his sister Elena Belluso and her husband Ricardo of Warwick, along with many cherished nieces and nephews.

Gifts may be made to the Dana-Farber Cancer Institute in memory of Thomas D. Della Torre, MD, to support cancer research and patient care at: Dana-Farber Cancer Institute, P.O. Box 849168, Boston, MA 02284, or to the American Heart Association, PO Box 840692, Dallas, TX 75284-0692. Visit NardolilloFH.com for online condolences. ❖

KHODARAHM "RAMI" KHODARAHMI, MD, 96, died peacefully on April 1, 2026, in Arlington, Massachusetts. He was born on December 2, 1929, in Yazd, Iran. After completing medical school in Tehran, he embarked on an ambitious move across the world to New York City in 1958. During his training in radiology there, he was one of the first recipients of an award in nuclear medicine.

A career opportunity later took him to Vancouver, British Columbia, where he met his future wife, Judith, a nurse. The newlywed couple returned to New York in 1965, and later moved to Rhode Island.

He had a decades-long private radiology practice in Providence and was a well-known member of the medical community.

He is survived by his wife of 61 years, Judy; son John (Stephanie), daughters Sue (Steve Uccello) and Donna Wren, MD, (Christopher); and four grandchildren.

A celebration of his life will be held at a later date. In lieu of flowers, the family asks that donations be made to the Audubon Society of Rhode Island in his memory. ❖

JAMES "JIM" RUDOLPH, MD, father, physician, and reluctant visionary, died after a long illness on March 26, 2026. He is survived by his wife, Maura, of Wrentham, Massachusetts, and his children, Luke, Allison, and Erin.

Raised on Chicago's south side, he studied at the University of Illinois at Urbana-Champaign, where he left electrical engineering for chemistry and biochemistry before entering Loyola University Chicago Stritch School of Medicine. There, a mentor in geriatric medicine set the course of his career. He completed his internal medicine residency at Brown University, and trained in geriatrics at Harvard, later returning to Rhode Island after 13 years in Boston.

Dr. Rudolph was a professor of medicine at The Warren Alpert Medical School of Brown University and professor of health services, policy and practice at the Brown University School of Public Health. At the Providence VA Medical Center, Dr. Rudolph served as director of the Center of Innovation in Long-Term Services and Supports. He also held appointments in Brown's Center for Gerontology and Healthcare Research. He held national leadership roles in geriatrics, palliative care, and patient safety, including directing VA research centers and co-founding the American Delirium Society. His work influenced CDC policy during COVID, and his mentorship shaped a generation of clinicians and researchers.

In 2024, Brown University awarded him the Beckwith Teaching Award. Less than two weeks before he passed, he was honored with the 2026 Dean's Award for Faculty Research Mentoring from the Alpert Medical School and The Dean's Award for Excellence in Mentoring in Public Health from the School of Public Health.

An avid runner, he completed four World Marathon Majors, more than 50 half marathons, and countless 5Ks. Diagnosed with myelofibrosis, he viewed illness as an unexpected gift, one that allowed him to focus on family, meaning, and gratitude. He especially treasured time with his children during "evening ski" at the water.

He remained devoted to improving the lives of older adults until a second, more aggressive sarcoma cancer ended his life. He will be remembered for his humility, humor, mentorship, and unwavering dedication to family and service of older people.

In his memory, the family suggests a donation in his memory to causes he deeply supported:

- American Delirium Society – a community dedicated to reducing delirium-related suffering in hospitalized patients. He was a founding leader and longtime contributor. https://americandeliriumsociety.org/donate
- Helen (Sundall) Goyer RN Memorial Scholarship at Loyola University Chicago – supporting first-generation nursing students in honor of his grandmother. Donate: Helen Sundall Goyer Scholarship Donation (select "in memory of") https://loyolauniversitychicago3.my.site.com/ascendportal/s/give?appeal=26Y02

He also believed strongly in the impact of blood donation—please consider donating blood in his honor. ❖