Optimizing Pediatric Patients' Attainment of Outpatient Mental Health Services Following Emergency Department Care

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ABSTRACT

Introduction: Psychiatric emergency department (ED) visits among youth have risen in the United States in recent years. A major factor contributing to this increase is the lack of accessible inpatient and outpatient services, making the ED a safety net for mental and behavioral health emergencies. This study sought to assess outpatient mental and behavioral health care after ED discharge and understand barriers and facilitators that caregivers encounter when attaining outpatient care.

Methods: This was a mixed methods study conducted at a tertiary care pediatric ED. Patients ages 3 to 17 years seen for mental health concerns received a social work consult and were contacted 1 week after the ED visit by the mental and behavioral health navigator as part of ongoing quality improvement efforts. Descriptive data included types of outpatient care received, demographics, and repeat ED visit within 30 and 60 days. Results were analyzed via logistic regression. Patients' caregivers also were interviewed 4 weeks after the ED visit to explore barriers and facilitators to accessing outpatient care. Thematic content analysis was then performed.

Results: The navigator successfully reached 533 out of 720 (74%) patients. Most patients were unable to obtain follow-up mental and behavioral health care. Univariate regression analyses revealed that being White, having commercial insurance, or a positive suicide screen had higher odds of receiving intensive outpatient care. However, these variables were not statistically significant after multivariate analyses. Barriers to follow-up included long wait times and expense. Facilitators included support from ED staff and close relationships with primary care clinicians.

Conclusions: We found potential socioeconomic disparities that influence mental health care follow-up. Our findings highlight challenges patients face to receiving outpatient care, serving as a valuable guide for improving the transition from the ED to outpatient settings.

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INTRODUCTION

Prior to the COVID-19 pandemic, psychiatric emergency department (ED) visits among youth were rising in the United States. ¹⁻³ During the pandemic, mental health-related pediatric ED visits increased by nearly 31% for ages 12 to 17 years. ^{4,5} A cross-sectional study of children ages 5 to 17 years with primary mental health diagnoses showed a 7% rise in visits for suicidal ideations and/or self-injury. ⁶

A major factor contributing to the rise in ED mental and behavioral health (MBH) visits is the lack of accessible inpatient and outpatient services, making the ED a safety net for MBH emergencies.⁷⁻¹³ Long ED wait times cause frustration and suboptimal care, with patients often boarding for hours or even days due to lack of available inpatient psychiatric beds.¹⁴ Despite the urgent need for help, long waitlists for outpatient psychiatric interventions persist.³

Previous studies highlight the ED's essential role as a safety net for children

experiencing MBH crises and advocate for a more systematic approach. This includes trauma-informed care, culturally appropriate interventions, and stronger collaboration with outpatient services. The literature stresses the importance of specialized training, incorporating mental health professionals in EDs, utilizing telehealth, and creating a safe environment for these patients. Recommendations focus on enhancing ED preparedness, improving management strategies, and ensuring effective follow-up care, while calling for further research to optimize resources and improve outcomes for pediatric MBH care.¹⁵

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With increasing mental health-related ED visits, improving the transition of care from the ED to outpatient services for atrisk MBH patients is crucial. ¹⁶ The objectives of this project were to utilize our MBH navigator program to assess factors associated with obtaining outpatient MBH care after discharge from the ED and to conduct structured interviews with caregivers to understand barriers and facilitators encountered when seeking outpatient care.

MATERIALS AND METHODS

Setting

The study occurred at a large tertiary pediatric ED in an urban Midwestern city that has approximately 80 000 annual visits. ED clinicians are able to consult subspecialists, both in person and via phone, when providing care for their patients.

Design

This was a prospective cohort study with mixed methods incorporating both qualitative and quantitative components. Research was approved by the Medical College of Wisconsin Institutional Review Board (1829944-1).

Population

This study included patients from 3 to 17 years who presented to the ED with a mental health-related chief complaint, received a social work consult, and were discharged home. Exclusion criteria included involvement of child protective services or caregiver inability to participate in the interview (eg, if English was not their primary language). Further, patients with certain neurodevelopmental disorders such as autism spectrum disorder were excluded, as many have developmental delays that could preclude them from expressing their mental health concerns, potentially leading to inaccurate assumptions made by caregivers and clinicians.

Data Collection and Analysis

Quantitative Methods

At our tertiary-care pediatric hospital, ED visits for primary MBH concerns have surged to over 3000 children per year since 2018. Approximately 41% of these patients were considered high risk (an imminent threat to themselves or others, for instance) and required a social work consult for a more in-depth evaluation and resource provision. The treatment team assesses risk based on significant behavioral changes, safety concerns, and lack of existing mental health resources. When 1 or more of these concerns are present, a licensed social worker is consulted to formally evaluate the patient.

Our ED MBH navigator collaborates with our clinical and social work teams to support and coordinate mental health services after ED discharge. They engage closely with families to connect them to appropriate care settings, whether it is a behavioral health facility or community-based resources. The navigator is available for consultation to follow up with patients—even if their

primary ED concern was not mental health-related-provided social work was involved and psychiatric needs were identified. After discharge, the navigator ensures follow-up care and coordinates treatment options with families via phone within 2 weeks of the ED visit.

Patients were recruited from August 2021 to June 2022. As part of ongoing quality assurance work, all patients ages 3 to 17 years who presented to our ED with MBH concerns such as depression and anxiety and received a social work consult were contacted 1 week after discharge via phone by the MBH navigator. During this call, the navigator provided a study-specific consent-to-contact script. The navigator made a maximum of 3 phone call attempts to the caregiver. The following data were collected at the index visit: age, sex, race, insurance status, nonpsychiatric and/or psychiatric history, and repeat ED visit within the last 30 and 60 days. These data were collected by the navigator and via chart review and then secured in a REDCap database.

Analyses were performed using SAS 9.4 software (SAS Institute, Cary, North Carolina). Univariate logistic regression models were used for the outcome variables of follow-up (scheduled, completed, ongoing, none, or attempted) with the primary care clinician, psychiatrist, therapist and/or psychologist, school counselor, and intensive outpatient care. Predictor variables included demographics, nonpsychiatric and psychiatric histories, and recent ED visit frequency. Statistically significant odds ratios were represented by P < 0.05.

Qualitative Methods

To explore barriers (obstacles or challenges when attaining outpatient care) and facilitators (support or resources when attaining outpatient care), subjects were screened for eligibility by trained research staff during their ED visit. After initial contact by a member of the care team, the research staff introduced the study to the patient and their caregiver. If eligible, research staff discussed the study with caregivers and obtained informed consent for enrollment. Approximately 4 weeks after the initial ED visit, the caregivers reconfirmed consent during a telephone interview. Patients were excluded if they returned to the ED within 4 weeks of their initial ED encounter, which was based on the MBH navigator's workflow. Participants received a \$50 gift card after interview completion, delivered via mail or email.

A structured interview guide was used that incorporated open-ended questions evaluating experiences acquiring mental health care after the index ED encounter. The interviews were conducted by members of the research team, many of whom had prior experience conducting research-based interviews. Crisis resources were given to the caregivers during the telephone encounter, including the suicide prevention hotline and other local services. In addition to barriers and facilitators, caregivers were also asked to provide any recommendations for process improvement. Interviews were recorded, transcribed, and

entered into a secure REDCap database. Transcriptions were reviewed by 2 investigators using a grounded theory approach. In the open coding phase, they independently analyzed transcripts line by line, assigning codes to significant concepts. Investigators then convened to share codes generated and group them into broader categories during axial coding, where relationships between themes were identified and refined. Selective coding followed, focusing on developing a core theme that tied the analysis together. The process continued iteratively until theoretical saturation was reached, where no new themes or insights emerged from the data.

RESULTS

The MBH navigator successfully reached 533 out of 720 (74%) patients, representing 589 unique ED encounters. Most patients (83.3%) were 13 to 17 years old, with females comprising 72.6% of the population. The majority identified as White (58.5%), followed by Black (30.6%). Public insurance, including Medicaid, covered 55.0% of patients, while 45.0% had commercial insurance. Almost half (44.3%) were treated for both nonpsychiatric and MBH concerns. Around half (50.6%) had 2 or more psychiatric diagnoses, with 65.0% prescribed psychotropic medications, and 59.5% had 1 or more nonpsychiatric diagnoses. Few patients returned to the ED within 30 days (6.0%) or 60 days (9.4%).

Follow-up rates were low across various providers: 12.4% with primary care clinicians, 11.7% with psychiatrists, and only 3.9% with school counselors. Approximately one-third (33.7%) followed up with a therapist and/or psychologist, while over a quarter (28.5%) received intensive outpatient care.

Univariate logistic regression analyses for follow-up with the primary care clinician, psychiatrist, therapist and/or psychologist, and intensive outpatient care are shown in Tables 1 through 4, respectively. Race, insurance, and Ask Suicide-Screening Questions (ASQ) score were significant predictors for intensive outpatient care, with White race, commercial insurance, and a positive ASQ

Table 1. Primary Care Clinician Follow-up (n = 315) Comparing Outcome Variables: None/Attempted (n = 276) Versus Scheduled/Completed/Ongoing (n = 39)

| Predictor Variable | Levels | OR | 95% CI | <i>P</i> value |
|-------------------------------|--|-------|--------------|----------------|
| Age | 13–17 years vs 3–12 years | 0.715 | 0.307-1.666 | 0.4360 |
| Sex | Female vs male | 0.750 | 0.359-1.565 | 0.4421 |
| Race | Black vs other | 1.290 | 0.385-4.331 | 0.6789 |
| | Black vs White | 1.573 | 0.748-3.307 | 0.2313 |
| | Other vs White | 1.219 | 0.388-3.826 | 0.7338 |
| Insurance | Commercial/self-pay vs public/government | 1.291 | 0.657-2.536 | 0.4567 |
| ED visit reason | MBH vs nonpsychiatric | 0.523 | 0.182-1.503 | 0.2280 |
| | MBH vs MBH and nonpsychiatric | 0.740 | 0.351-1.557 | 0.4260 |
| | Nonpsychiatric vs MBH and nonpsychiatric | 1.414 | 0.519-3.857 | 0.4971 |
| Home psychotropic medications | No vs Yes | 1.280 | 0.632–2.592 | 0.4916 |
| Psychiatric history | 1 diagnosis vs 2+ diagnoses | 1.570 | 0.745-3.309 | 0.2351 |
| | 1 diagnosis vs none | 0.872 | 0.326-2.331 | 0.7844 |
| | 2+ diagnoses vs none | 0.556 | 0.213-1.447 | 0.2280 |
| Medical history | 1+ diagnoses vs none | 1.450 | 0.713-2.950 | 0.3040 |
| ASQ | Negative vs positive | 1.065 | 0.403-2.813 | 0.8986 |
| ED visit within last 30 days | No vs yes | 2.969 | 0.384-22.945 | 0.2959 |
| ED visit within last 60 days | No vs yes | 2.172 | 0.495-9.539 | 0.3031 |
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Abbreviations: OR, odds ratio; ED, emergency department; MBH, mental and behavioral health; ASQ, Ask Suicide-Screening Questions.

Table 2. Psychiatrist Follow-up (n=315) Comparing Outcome Variables: None/Attempted (n=278) Versus Scheduled/Completed/Ongoing (n=37)

| Predictor Variable | Levels | OR | 95% CI | <i>P</i> value |
|-------------------------------|--|-------|-------------|----------------|
| Age | 13–17 years vs 3–12 years | 0.467 | 0.210-1.040 | 0.0624 |
| Sex | Female vs male | 1.067 | 0.479-2.377 | 0.8734 |
| Race | Black vs other | 0.951 | 0.273-3.306 | 0.9364 |
| | Black vs White | 1.102 | 0.498-2.440 | 0.8097 |
| | Other vs White | 1.159 | 0.371-3.628 | 0.7988 |
| Insurance | Commercial/self-pay vs public/government | 0.600 | 0.296-1.217 | 0.1564 |
| ED visit reason | MBH vs nonpsychiatric | 1.241 | 0.390-3.949 | 0.7139 |
| | MBH vs MBH and nonpsychiatric | 1.687 | 0.807-3.526 | 0.1636 |
| | Nonpsychiatric vs MBH and nonpsychiatric | 1.360 | 0.415-4.450 | 0.6106 |
| Home psychotropic medications | No vs yes | 0.586 | 0.257–1.337 | 0.2034 |
| Psychiatric history | 1 diagnosis vs 2+ diagnoses | 0.443 | 0.183-1.068 | 0.0696 |
| | 1 diagnosis vs none | 0.696 | 0.191-2.532 | 0.5815 |
| | 2+ diagnoses vs none | 1.573 | 0.513-4.820 | 0.4265 |
| Medical history | 1+ diagnoses vs none | 0.899 | 0.448-1.802 | 0.76320 |
| ASQ | Negative vs positive | 0.342 | 0.077-1.523 | 0.1581 |
| ED visit within last 30 days | No vs yes | 0.504 | 0.158-1.605 | 0.2451 |
| ED visit within last 60 days | No vs yes | 0.632 | 0.225-1.775 | 0.3831 |

Abbreviations: OR, odds ratio; ED, emergency department; MBH, mental and behavioral health; ASQ, Ask Suicide-Screening Questions.

score showing higher odds of receiving intensive outpatient care (P < 0.05). However, these variables did not retain significance after multivariate analysis (Table S1). No predictor variables were statistically significant for follow-up with primary care clinician, psychiatrist, or therapist and/or psychologist. Models for school counselor were not feasible due to limited data, with only 2.3%

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of patients in the "scheduled/completed/ongoing" category.

Table 5 depicts caregiver quotes of negative and positive experiences when accessing outpatient mental health care, identified during interviews conducted 4 weeks after the initial ED visit. The sample size was determined based on achieving data saturation, which was reached after reviewing 13 interviews. Themes were categorized into facilitators, barriers, and solutions to outpatient MBH care.

Facilitators of follow-up care included supportive ED staff, such as social workers, and assistance from the hospital's MBH walk-in clinic. Close involvement of patients' primary care clinician, efficient scheduling, and providers accepting new mental health patients were also highlighted.

Limiting factors included personal (such as time and expense), systemic (waitlists and scarcity of MBH services), and familial concerns (relating to family members and legal resources). Caregivers mentioned long wait times, limited clinic hours, provider restrictions on insurance networks for new patients, and scheduling difficulties due to age or parental schedules as barriers to follow-up MBH care.

Our qualitative analysis, along with caregiver input, highlighted several areas for improvement in outpatient mental health care. These include establishing more school-based mental health support, offering more flexible clinic time slots (including evenings), and providing clearer ED discharge instructions (Table 5).

DISCUSSION

Racial and income disparities in outpatient mental health care were observed in our study, with White patients and those with commercial insurance having higher odds of receiving care than minori-

tized and publicly insured groups. However, these variables lost significance in the multivariate analyses, likely due to overlapping effects between race and insurance status. Similar disparities—particularly for Black patients and those with public insurance—have been reported in previous survey-based studies, but less so in prospective evaluations.¹⁷ Our work highlights the need

Table 3. Therapist and/or Psychologist Follow-up (n = 315) Comparing Outcome Variables: None/Attempted (n = 209) Versus Scheduled/Completed/Ongoing (n = 106)

| Predictor Variable | Levels | OR | 95% CI | P value |
|-------------------------------|--|-------|-------------|---------|
| Age | 13–17 years vs 3–12 years | 0.678 | 0.366-1.257 | 0.2168 |
| Sex | Female vs male | 0.671 | 0.395-1.138 | 0.1385 |
| Race | Black vs other | 0.514 | 0.220-1.200 | 0.1235 |
| | Black vs White | 1.030 | 0.591–1.794 | 0.9176 |
| | Other vs White | 2.005 | 0.932-4.315 | 0.0751 |
| Insurance | Commercial/self-pay vs public/government | 0.937 | 0.586-1.498 | 0.7841 |
| ED visit reason | MBH vs nonpsychiatric | 0.774 | 0.349-1.715 | 0.5264 |
| | MBH vs MBH and nonpsychiatric | 1.158 | 0.703-1.908 | 0.5633 |
| | Nonpsychiatric vs MBH and nonpsychiatric | 1.497 | 0.681-3.287 | 0.3140 |
| Home psychotropic medications | No vs Yes | 1.169 | 0.706–1.935 | 0.5430 |
| Psychiatric history | 1 diagnosis vs 2+ diagnoses | 0.925 | 0.546-1.568 | 0.7714 |
| | 1 diagnosis vs none | 0.908 | 0.419-1.966 | 0.8052 |
| | 2+ diagnoses vs none | 0.981 | 0.477-2.019 | 0.9588 |
| Medical history | 1+ diagnoses vs none | 0.985 | 0.612-1.586 | 0.9510 |
| ASQ | Negative vs positive | 0.851 | 0.424-1.708 | 0.6477 |
| ED visit within last 30 days | No vs yes | 1.562 | 0.550-4.438 | 0.4015 |
| ED visit within last 60 days | No vs yes | 1.749 | 0.723-4.233 | 0.2143 |

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Suicide-Screening Questions.

Table 4. Intensive Outpatient Care Follow-up (n=239) Comparing Outcome Variables: None/Attempted (n=171) Versus Scheduled/Completed/Ongoing (n=68)

| Predictor Variable | Levels | OR | 95% CI | P value |
|-------------------------------|--|-------|--------------|---------|
| Age | 13–17 years vs 3–12 years | 1.284 | 0.546-3.021 | 0.5650 |
| Sex | Female vs male | 1.216 | 0.611-2.421 | 0.5753 |
| Race | Black vs other | 0.538 | 0.171–1.700 | 0.2899 |
| | Black vs White | 0.485 | 0.237-0.992 | 0.0474 |
| | Other vs White | 0.900 | 0.325-2.494 | 0.8388 |
| Insurance | Commercial/self-pay vs public/government | 1.964 | 1.107-3.485 | 0.0212 |
| ED visit reason | MBH vs Nonpsychiatric | 4.318 | 0.937-19.891 | 0.0604 |
| | MBH vs MBH and nonpsychiatric | 1.086 | 0.606-1.947 | 0.7814 |
| | Nonpsychiatric vs MBH and nonpsychiatric | 0.251 | 0.055-1.145 | 0.0741 |
| Home psychotropic medications | No vs Yes | 0.613 | 0.317–1.188 | 0.1463 |
| Psychiatric history | 1 diagnosis vs 2+ diagnoses | 0.719 | 0.379-1.364 | 0.3108 |
| | 1 diagnosis vs none | 1.163 | 0.430-3.146 | 0.7648 |
| | 2+ diagnoses vs none | 1.618 | 0.643-4.073 | 0.3055 |
| Medical history | 1+ diagnoses vs none | 0.673 | 0.380-1.191 | 0.1730 |
| ASQ | Negative vs positive | 0.376 | 0.145-0.970 | 0.0432 |
| ED visit within last 30 days | No vs yes | 1.538 | 0.489-4.842 | 0.4599 |
| ED visit within last 60 days | No vs yes | 1.764 | 0.634-4.911 | 0.2759 |

Abbreviations: OR, odds ratio; ED, emergency department; MBH, mental and behavioral health; ASQ, Ask Suicide-Screening Questions.

for closer, more frequent contact between the treatment team and non-White patients with public insurance, including considering inpatient psychiatric treatment or intensive outpatient care as potential interim solutions. Reflecting on our findings, race appears to serve as a proxy for the true barrier of health insurance. Intensive outpatient care may not be readily available

given transportation costs and parental job flexibility for those who have public insurance.

Our findings did not show associations between positive ASQ, past psychiatric history, and follow-up with primary care clinicians, psychiatrists, school counselors, or therapists/psychologists. We expected that individuals with current or previous psychiatric and/or nonpsychiatric conditions would be more likely to transition from ED to outpatient care, but our data did not support this.

While a significant portion did not follow up with primary care clinicians, about one-third followed up with therapists or psychologists. These results are particularly interesting when compared to our qualitative review of caregiver interview themes, where many caregivers mentioned the long wait times for therapy appointments. Our findings highlight the need for better communication—potentially initiated by the ED care team—and stronger engagement with primary care clinicians during the waiting period for outpatient

mental health care. Close contact with primary care clinicians could provide critical resources that patients and caregivers often struggle to access while awaiting therapy appointments.

Caregivers reflected on the helpfulness of resources beyond the ED, including close contact with primary care clinicians and school counselors. Therefore, we advocate for increased school counselor availability and ensuring that they are well-trained, connected, and knowledgeable about MBH resources. Based on our qualitative analysis of caregiver interviews, the ED serves a critical role in acute care-particularly with access to social work and other resources-yet primarily functions as a safety net in its current capacity. The inability of the ED psychiatry providers to prescribe psychotropic medications highlights a limitation for long-term MBH care. Training ED or primary care clinicians (particularly the latter, who have closer patient contact and can thus monitor the effects of psychotropic medications) to initiate these prescriptions while patients await outpatient MBH care could be beneficial. Caregivers identified barriers that underscore the ongoing need for an improved transition from ED to outpatient mental health care.

Additionally, factors facilitating better transition included follow-up communication from staff, and advocacy for expanding the MBH navigator role beyond the ED to other clinical settings. Knowing that the ED is a safety net may allow utilization of resources, such as dialectic behavioral therapy tools, to combat

Table 5. Themes and Quotes From Caregiver Interviews Regarding Facilitators, Barriers, and Proposed Solutions for Outpatient Mental Health Support **Themes** Quotes **Facilitators** Primary care clinician "And, you know, his doctor was involved the whole time...and I think they gave involvement me some resources too' Support from ED staff "I think that everyone...should have to talk to a social worker before they leave. But we did and she was very helpful" Support from MBH navigator "I guess the call back was the one thing that maintained it" Mental health walk-in clinic "So to have the amount of support, you know, that you guys offer, especially knowing that you have [mental health walk-in clinic]" **Barriers** Long wait times "Because everybody had a 3- to 6-month waiting period, if not longer" "Being able to find someone who was available soon" "...Just it takes a very long time to see a psychiatrist" "Told it's gonna take a year to see somebody" Having to reach out to "I think I called about seven places" multiple providers "We had to call many providers...between emails and phone calls, probably 10" Insurance concerns "She was released after 3 weeks 'cause the insurance would not advocate for her to stay there, would not pay for her to stay there' "Not everyone takes our insurance and the long waiting list" **Proposed Solutions** "So, at his school, they do have a psychiatrist and then therapists. there's four School-based MBH programs of them" Flexible time slots "I guess later hours would be my biggest thing" "Just being able to have MyChart and you guys calling me" Clear ED discharge planning Abbreviations: ED, emergency department; MBH, mental and behavioral health.

MBH problems such as anxiety in the short term as patients seek outpatient care.¹⁸

Our study is limited by an inability to demonstrate causation due to primarily descriptive results. Unfortunately, we did not have the resources to translate the survey or conduct the qualitative interview in languages other than English, limiting the generalizability of our findings to non-English-speaking caregivers. Furthermore, for the qualitative portion of our study, we excluded patients who returned to the ED within 4 weeks of their initial visit. Future research should investigate the reasons for these patients' return to the ED. We also acknowledge that the qualitative questions in our mixed methods study were limited in scope, which may have contributed to premature thematic saturation.

Our findings highlight critical societal challenges in accessing outpatient mental health care in the community. This study offers valuable insights to inform future initiatives aimed at enhancing the transition of care from the ED to outpatient settings. Addressing these issues is essential for improving mental health care delivery and outcomes for pediatric patients.

Acknowledgements: The authors would like to acknowledge the Children's Research Institute Pilot Award Program for funding this research and would also like to thank Maya Guenther, medical student at Medical College of Wisconsin, for assisting with data collection.

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Funding/Support: None declared.

Financial Disclosures: None declared.

REFERENCES

- 1. Children's mental health: data and statistics on children's mental health. Centers for Disease Control and Prevention. Updated August 20, 2024. Accessed June 13, 2024. https://www.cdc.gov/children-mental-health/data-research/?CDC_AAref_Val=https://www.cdc.gov/childrensmentalhealth/data.html
- **2.** Whitney DG, Peterson MD. US national and state-level prevalence of mental health disorders and disparities of mental health care use in children. *JAMA Pediatr.* 2019;173(4):389-391. doi:10.1001/jamapediatrics.2018.5399
- **3.** Kalb LG, Stapp EK, Ballard ED, et al. Trends in psychiatric emergency department visits among youth and young adults in the US. *Pediatrics*. 2019;143(4):e20182192. doi:10.1542/peds.2018-2192
- **4.** Mapelli E, Black T, Doan Q. Trends in pediatric emergency department utilization for mental health-related visits. *J Pediatr.* 2015;167(4):905-910. doi:10.1016/j. ineds.2015.07.004
- **5.** Simon AE, Schoendorf KC. Emergency department visits for mental health conditions among US children, 2001-2011. *Clin Pediatr.* 2014;53(14):1359-1366. doi:10.1177/0009922814541806
- **6.** Shankar LG, Habich M, Rosenman M, et al. Mental health emergency department visits by children before and during the COVID-19 pandemic. *Acad Pediatr.* 2022;22(7):1127-1132. doi:10.1016/j.acap.2022.05.022
- **7.** Krass P, Dalton E, Doupnik SK, et al. US pediatric emergency department visits for mental health conditions during the COVID-19 pandemic. *JAMA Netw Open*. 2021;4(4):e218533. doi:10.1001/jamanetworkopen.2021.8533
- **8.** Cloutier P, Thibedeau N, Barrowman N, et al. Predictors of repeated visits to a pediatric emergency department crisis intervention program. *CJEM*. 2017;19(2):122-130. doi:10.1017/cem.2016.357
- **9.** Leon SL, Polihronis C, Cloutier P, et al. Family factors and repeat pediatric emergency department visits for mental health: a retrospective cohort study. *J Can Acad Child Adolesc Psychiatry.* 2019;28(1):9-20.

- **10.** O'Donnell EP, Yanek L, Reynolds E, Manning Ryan L, Ngo TL. Characteristics of mental health patients boarding for longer than 24 hours in a pediatric emergency department. *JAMA Pediatr.* 2020;174(12):1206-1208. doi:10.1001/jamapediatrics.2019.5991
- **11.** Hoffmann JA, Stack AM, Samnaliev M, et al. Trends in visits and costs for mental health emergencies in a pediatric emergency department, 2010-2016. *Acad Pediatr.* 2019;19(4):386-393. doi:10.1016/j.acap.2019.02.006
- **12.** Cutler GJ, Rodean J, Zima BT, et al. Trends in pediatric emergency department visits for mental health conditions and disposition by presence of a psychiatric unit. *Acad Pediatr.* 2019;19(8):948-955. doi:10.1016/j.acap.2019.05.132
- **13.** Santiago LI, Tunik MG, Foltin GL, et al. Children requiring psychiatric consultation in the pediatric emergency department: epidemiology, resource utilization, and complications. *Pediatr Emerg Care*. 2006;22(2):85-89. doi:10.1097/01. pec.0000199568.94758.6e
- **14.** Chun TH, Duffy SJ, Grupp-Phelan J. The increasing burden of psychiatric emergencies: a call to action. *Pediatrics*. 2019;143(4):e20190251. doi:10.1542/peds.2019-0251
- **15.** Saidinejad M, Duffy S, Wallin D, et al. The management of children and youth with pediatric mental and behavioral health emergencies. *Pediatrics*. 2023;152(3):e2023063256. doi:10.1542/peds.2023-063256
- **16.** Hansen AS, Telleus GK, Mohr-Jensen C, et al. Parent-perceived barriers to accessing services for their child's mental health problems. *Child Adolesc Psychiatry Ment Health.* 2021;15(1):4. doi:10.1186/s13034-021-00357-7
- **17.** Whitney DG, Peterson MD. US national and state-level prevalence of mental health disorders and disparities of mental health care use in children. *JAMA Pediatr.* 2019;173(4):389-391. doi:10.1001/jamapediatrics.2018.5399
- **18.** Linehan MM. Rationale for dialectical behavior therapy skills training. In: *DBT Skills Training Handouts and Worksheets*. 2nd ed. The Guilford Press; 2015:3-24.



WMJ (ISSN 1098-1861) is published through a collaboration between The Medical College of Wisconsin and The University of Wisconsin School of Medicine and Public Health. The mission of *WMJ* is to provide an opportunity to publish original research, case reports, review articles, and essays about current medical and public health issues.

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