



## ORIGINAL RESEARCH

# Healthcare quality during pediatric mental health boarding: A qualitative analysis

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## Abstract

**Background:** Following initial evaluation and management, youth requiring inpatient psychiatric care often experience boarding, defined as being held in the emergency department or another location while awaiting inpatient care. Although mental health boarding is common, little research has examined the quality of healthcare delivery during the boarding period.

**Objective:** This study aimed to explore the perspectives and experiences of multidisciplinary clinicians and parents regarding mental health boarding and to develop a conceptual model to inform quality improvement efforts.

**Design, Setting, & Participants:** We conducted semistructured interviews with clinicians and parents of youth experiencing boarding. Interviews focused on experiences of care and perceived opportunities for improvement were continued until thematic saturation was reached. Interviews were recorded, transcribed, and analyzed to identify emergent themes using a general inductive approach. Axial coding was used to inform conceptual framework development.

**Results:** Interviews were conducted with 19 clinicians and 11 parents. Building on the Donabedian structure-process-outcome model of quality evaluation, emergent domains, and associated themes included: (1) infrastructure for healthcare delivery, including clinician training, healthcare team composition, and the physical environment; (2) processes of healthcare delivery, including clinician roles and responsibilities, goals of care, communication with families, policies/procedures, and logistics of inter-facility transfer; and (3) measurable outcomes, including patient safety, family experience, mental health status, timeliness of care, and clinician moral distress.

**Conclusion:** This qualitative study summarizes clinician and family perspectives about care for youth experiencing boarding. The conceptual model resulting from this analysis can be applied to implement and evaluate quality improvement endeavors to support this vulnerable population.

## INTRODUCTION

There are 7.7 million children and adolescents in the United States who have a mental or behavioral health condition; these conditions affect one-in-six youth and incur healthcare costs in excess of \$11.6 billion annually.<sup>1,2</sup> The growing prevalence of mental health conditions, in tandem with a national shortage of mental health professionals, has contributed to an increasing number of youth presenting to hospitals with mental health crises.<sup>3-5</sup> From 2007 to 2016, emergency department (ED) visits for deliberate self-harm increased by more than 300%, with further increases observed during the COVID-19 pandemic.<sup>6-8</sup> Rates of hospital admission for patients with mental health conditions have increased concurrently.<sup>9</sup> When the need for inpatient psychiatric care exceeds bed availability, youth may experience mental health boarding, which has been defined by the Joint Commission as, “the practice of holding patients in the ED or another temporary location after the decision to admit or transfer has been made.”<sup>10</sup> Mental health boarding delays psychiatric care, adversely affects the patient flow and is costly to hospitals and health systems.<sup>11,12</sup>

Despite the growing prevalence of mental health boarding, our knowledge of healthcare quality and family experience of care during the boarding period is limited.<sup>13</sup> A recent systematic review identified only 11 studies describing pediatric mental health boarding; most were single-center studies focused on boarding duration and clinical risk factors.<sup>12</sup> Advocacy efforts related to mental health boarding have focused primarily on increasing community-based resources; while essential, efforts are concurrently needed to improve healthcare delivery for the growing number of youth currently boarding at acute care hospitals. This study aimed to explore the perspectives and experiences of families and clinicians from multiple disciplines regarding healthcare quality during mental health boarding and to develop a framework to conceptualize opportunities for hospital-based quality improvements.

## METHODS

### Approach

Given the limited research on this topic, this study employed qualitative research methods with the goal of generating a rich and nuanced understanding of healthcare quality related to pediatric mental health boarding. We conducted semistructured interviews with multidisciplinary clinicians and with parents/caregivers of youth who experienced mental health boarding, adhering to the Standards for Reporting Qualitative Research.<sup>14</sup> Research team members included a pediatric resident (Emily J. McCarty), medical students (Sean R. Halloran and Meera K. Nagarajan), a psychologist (Robert E. Brady), pediatric hospitalists (Samantha A. House and JoAnna K. Leyenaar), and a qualitative research scientist (Amanda St. Ivany). The hospital's institutional review board deemed the study exempt from further review.

## Setting and context

This study was conducted at a tertiary care academic medical center in the Northeastern US with 22 licensed medical-surgical pediatric beds and no pediatric psychiatric beds. Youth presenting to the general (nonpediatric) ED with mental health concerns were first seen by an emergency medicine physician. Those with co-occurring medical issues requiring hospitalization were admitted to an inpatient service. Youth with acute mental health concerns were evaluated by a mental health professional after medical stabilization. If inpatient psychiatric care was recommended and a bed unavailable, youth either waited in the ED or were admitted, with the location of boarding based on age (with those <13 years of age preferentially moved to the inpatient unit), ED volumes, and bed availability. During boarding, youth were re-evaluated daily by a mental health professional and an ED physician or pediatric hospitalist. They received one-on-one safety supervision, typically by a licensed nursing assistant (LNA) with minimal mental health training. A resource specialist or care manager made referrals for inpatient psychiatric care and called facilities daily for updates on bed availability. Psychiatrists made recommendations for psychotropic medication management, but structured nonpharmacologic mental health therapies were not typically provided.

## Participants

Interviews were conducted with multidisciplinary clinicians from February to April 2020. We purposefully sampled nurses, LNAs, residents, physicians, and child life specialists from the ED, inpatient unit, and psychiatric consultation service with the goal of understanding their diverse experiences and perspectives.<sup>15</sup> From October 2020 through March 2021, we interviewed parents and guardians of youth <18 years of age. Inclusion criteria for parents and guardians (hereafter called parents) included age >18 years, English language proficiency, and presence at the bedside or availability by phone to provide consent. Parents were purposefully sampled to reflect ED and inpatient boarding locations and were interviewed either during their child's hospital stay or within 1 week of hospital discharge or interfacility transfer.

## Procedures and analysis

Clinicians were contacted by email to request participation, while parents were approached by a member of the research team during their child's acute care hospital stay. Following receipt of verbal informed consent, interviews were conducted in-person or via video conference, and were audio-recorded with permission. Clinician interview questions focused on self-described roles and responsibilities caring for youth during boarding, personal experiences in care delivery, training to care for patients with psychiatric conditions, and components of high and low quality of care during boarding. Parent

interview questions included those related to experience of care during boarding, information-sharing and communication between the medical team and families, the impact of boarding on the patient and family, and areas for improvement during boarding. Interviews were professionally transcribed and verified for accuracy, and all identifiers were removed.

The analytic team held a series of meetings throughout the study period to discuss concepts emerging from the data, with analysis following a general inductive approach. Emerging concepts were summarized in a jointly-developed codebook which included both concept labels and associated definitions. Analysis of the interviews with clinicians preceded analysis of interviews with parents; analysis of parent interviews began with the clinician codebook, which was expanded to add new concepts emerging in the parent interviews. Interview coding was conducted using Dedoose, a mixed-methods analysis program.<sup>16</sup> Two team members independently coded six clinician and three parent interview transcripts; discrepancies were resolved through discussion with associated modifications to the codebook when appropriate. Following assurance of coding consistency, the remaining interviews were coded by one team member with coding audits by a second reviewer. Following coding completion, related concepts were grouped into themes, and related themes into domains using an axial coding approach.<sup>17</sup> During this process, we recognized that several emerging themes aligned with the Donabedian structure-process-outcome framework, a conceptual model for evaluating the quality of healthcare delivery.<sup>18</sup> We, therefore, adapted this framework to summarize our findings. Analysis was conducted in parallel with the interviews, and interviews were stopped when members of the analytic team agreed that data saturation had been attained (at which time the team agreed that the same concepts were being observed repeatedly and no new themes were emerging).<sup>19</sup>

## RESULTS

A total of 30 interviews were completed, including 19 with clinicians and 11 with parents (Table 1). All parent interviews were conducted with the mother of the child with the exception of one where both parents participated. The mean patient age was 14 years; five patients were female. The most common primary diagnoses were depression with suicidal ideation and suicidal ideation with intentional overdose. The median boarding duration prior to inter-facility transfer or hospital discharge was 4.5 days.

Figure 1 summarizes the five domains and corresponding themes that emerged in this analysis. The domains of infrastructure for healthcare delivery, processes of healthcare delivery, and measurable outcomes align with Donabedian's structure-process-outcome framework. Representative quotes and key concepts associated with these domains are summarized in Table 2. Domains that emerged as relevant contextual factors included available community-based resources, healthcare financing, and public policy. Within these domains, clinicians expressed frustration over the lack of community

**TABLE 1** Characteristics of study participants

Clinician characteristics (n = 19)	n (%) or median (interquartile range)
Age, years <sup>a</sup>	34.5 (29.75, 46.25)
Gender	
Female	12 (63.2%)
Male	7 (36.8%)
Race and ethnicity <sup>b</sup>	
Non-Hispanic White	16 (94.1%)
Department	
Pediatric inpatient unit	11 (57.9%)
Emergency department	6 (31.6%)
Child and adolescent psychiatry	2 (10.5%)
Primary role	
Attending physician	6 (31.6%)
Resident physician	6 (31.6%)
Nurse	4 (21.1%)
Licensed nursing assistant	2 (10.5%)
Child life specialist	1 (5.3%)
<b>Parent participant characteristics (n = 12)</b>	
Age, years <sup>c</sup>	45 (39.5, 46.5)
Sex	
Female	11 (91.7%)
Male	1 (8.3%)
Race or ethnicity	
Non-Hispanic White	12 (100.0%)
Relationship to child	
Mother	11 (91.7%)
Father	1 (8.3%)
Marital status	
Single	3 (25.0%)
Married	8 (66.7%)
Divorced or separated	1 (8.3%)
Educational attainment	
High school or general educational development	2 (16.7%)
Some college or 2-year degree	4 (33.3%)
4-year college graduate	2 (16.7%)
More than 4-year college degree	4 (33.3%)
<b>Patient characteristics (n = 11)</b>	
Age, years <sup>d</sup>	14 [14,16]
Sex	
Female	5 (45.5%)
Male	6 (54.5%)

(Continued)

**TABLE 1** (Continued)

Patient characteristics (n = 11)	
Primary payer <sup>d</sup>	
Private insurance	5 (50.0%)
Public insurance	5 (50.0%)
Admission diagnosis <sup>d</sup>	
Severe depression	1 (10.0%)
Suicidal ideation (SI)	4 (40.0%)
SI with intentional overdose or self-injury	4 (40.0%)
Aggressive behavior	1 (10.0%)
Length of boarding, days <sup>d</sup>	4.5 (3.25, 6.75)

<sup>a</sup>Data missing for three participants.

<sup>b</sup>Data missing for two participants; one participant preferred not to answer.

<sup>c</sup>Data missing for one participant.

<sup>d</sup>Data missing for one participant; all percentages based on a denominator of nonmissing data.

mental health resources, a “broken” system, and the systemic problems of boarding. Parents similarly expressed that lack of community resources contributed to their child’s presentation to the hospital in crisis. Consistent with our objective, our analyses focused on hospital-based opportunities for quality improvement.

## INFRASTRUCTURE OF HEALTHCARE DELIVERY

Themes within the Infrastructure of Healthcare Delivery domain included: (i) physical environment, (ii) healthcare team composition, and (iii) clinician training and education.

In describing the physical environment, clinicians described their emphasis on maintaining safety, but noted potential risks to patients’ mental health during boarding because “it’s really not a therapeutic environment in any way, shape, or form, both in a physical layout [and] the services they get.” Given activity and movement restrictions, both clinicians and parents drew analogies between the physical environment during mental health boarding and prison (Table 3). According to parents, the pediatric unit environment was more therapeutic than boarding in the ED. However, parents still noted that the physical environment “very much felt like it was a holding pen or...a cell.”

When discussing the composition of the healthcare team, clinicians described good rapport between the pediatrics, ED, and psychiatry teams, but commented on the lack of adequate personnel to provide mental health services. As noted by one ED physician: “I think we kind of bridge the psych and the medical divide...” Participants highlighted the importance of the LNAs on the healthcare team who served to provide one-on-one safety supervision for youth: “All the team members really should listen to the

sitters because they are the one person sitting there for the 12 hours...the doctors leave but the sitter is the one sitting there seeing the emotions, seeing the escalation or de-escalation of a situation.” Clinicians from all specialties reported feeling restricted in the care they could provide: “we just wait and our hands are tied in terms of not being able to offer them counseling while they’re [boarding].”

In discussing training and education, clinicians frequently commented on their lack of expertise in psychiatric care and expressed a desire for additional educational opportunities to “optimize our role...with these kids.”

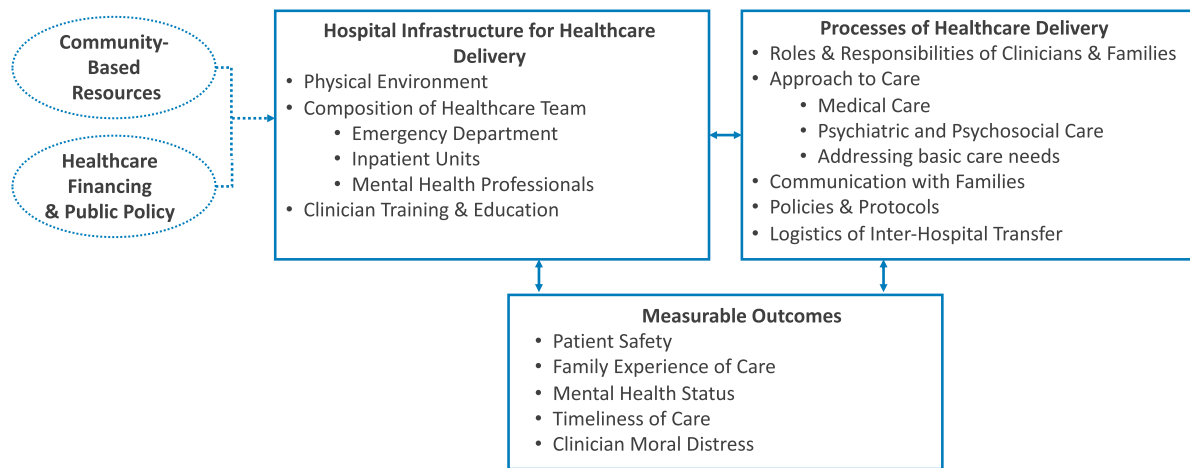
## PROCESSES OF HEALTHCARE DELIVERY

Within this domain, emergent themes included: (i) roles and responsibilities of clinicians and families, (ii) approach to care, (iii) communication with families, (iv) policies and protocols, and (v) logistics of interfacility transfer.

When describing roles and responsibilities, clinicians expressed variability and uncertainty about who was primarily responsible for caring for these patients, which contributed to “inconsistent care” and unclear expectations. However, as expressed by one clinician, “the moral responsibility is shared.” Many nonpsychiatric clinicians viewed their role “to evaluate for any potential medical cause for their symptoms...and then ultimately...to keep them safe while they wait [for inpatient placement].” Parents expressed a desire to not only focus treatment on the child but on the family as a whole, a concept not described by clinicians.

When describing the approach to care, almost all interviewees acknowledged that clinicians approached care differently. Parents highlighted the importance of addressing basic care needs, such as engaging in physical activity and wearing regular clothing instead of scrubs because “they’re not physically sick.” When discussing the value of policies and protocols, clinicians and parents expressed frustration with the restrictive and nonindividualized policies currently in place, but also a lack of standardized protocols, schedules, and treatment plans. For example, one clinician stated “There’s no schedule. You don’t know when psychiatry is going to come” and “[Patients] can’t really plan anything.” In the words of one parent, “There was no consistency in the rules.”

Within the theme of communication with families, many clinicians expressed a need to improve the content of information and how it is conveyed because “the waiting and not knowing if and when they’re going to go [for inpatient psychiatric care], and where they’re going to go, is really hard on kids and parents alike.” Some parents felt that the severity of the event leading to their child’s hospitalization was not explicitly addressed by the care team, with clinicians avoiding conversations about inciting mental health crises. Parents also expressed frustration with conflicting information and lack of transparency: “I didn’t expect concrete answers, but I just wanted to be kept in the loop.”



**FIGURE 1** Conceptual model illustrating foci for quality improvement in the care of children and adolescents experiencing mental health boarding.

The theme of logistics of interfacility transfer included challenges associated with determining bed availability, insurance approvals, and arranging transportation. As one clinician stated, "It's not always clear whether...they have too many high acuity patients at a program that they can't take this one because they're concerned about the safety. Or sometimes [they] won't tell us that actually [the patient was] here a year ago and they will never be allowed to come here again because of something that happened previously."

## MEASURABLE OUTCOMES

Within this domain, emergent themes included: (i) patient safety, (ii) family experience of care, (iii) mental health status, (iv) timeliness of care, and (v) clinician moral distress.

Many clinicians and parents emphasized patient safety as an aspect of care that was consistently provided. In the words of one clinician, "...there's somebody with them watching them, keeping them safe. I think that's really appreciated."

When talking about family experience of care, clinicians perceived many frustrations with families' experiences of care, including extended boarding periods without significant therapeutic intervention, with one stating, "sometimes by the end...they've been stable, the parents are sick of it, the kid's sick of it, they're saying, 'Look, I'm no longer suicidal. Get me out of here.'" Parents expressed that the boarding process was anxiety-provoking and "scary" for their children. However, one family noted positive experiences during boarding, reporting that their child felt "increasingly comfortable" and "she felt like she was being listened to...and her feelings were taken into account."

Within the theme of mental health status, both clinicians and families expressed concern that the boarding process could worsen mood and exacerbate symptoms of anxiety and depression because "it doesn't nurture them in any way." One parent stated, that hospitals "can be pretty anxiety-inducing...especially if they're already

prone to it," while a clinician recalled, "one child told me that they felt like they were going crazy here because they were just staring at blank walls all day. It's not a productive space for them to be in."

Timeliness of care was also described as a measurable outcome to evaluate mental health boarding, with one clinician stating: "If we're able to get a kid to an inpatient psychiatric facility within 24–48 h it feels like a huge success... But then I have seen patients stay for weeks or over a month at times."

Numerous clinicians described the experience of moral distress in caring for youth during mental health boarding, as well as frustration, disappointment, and helplessness. One clinician gave an example of feeling "I'm trapped in this situation and I need, I'd like to extricate myself," while another stated, "[clinicians] didn't go into medicine to not do anything for people."

## DISCUSSION

In this qualitative analysis, clinicians and families identified several foci for quality improvement. An analogy between mental health boarding and prison was drawn by both clinicians and families. While parents emphasized the importance of addressing basic care needs and maintaining clear communication, clinicians expressed frustration about finding the balance between providing therapeutic care and maintaining safety. Suboptimal care structures and processes were described as influencing patients' moods and mental health symptoms, family experience of care, and clinician moral distress.

Mental health boarding is a national challenge that has increased during the COVID-19 pandemic.<sup>13</sup> In a recent survey of community and children's hospitals, almost all reported that they boarded youth awaiting mental healthcare, yet few quality improvement interventions aiming to improve care during the boarding period have been disseminated.<sup>12,13</sup> Furthermore, measures to evaluate healthcare quality during boarding have been largely limited to boarding prevalence and duration, with little attention to other dimensions

**TABLE 2** Domains, themes, key concepts, and associated representative quotes from clinicians and parents

Domains and associated themes	Representative quotes		Key concepts and opportunities for quality improvement
	Clinician interviews	Parent interviews	
Domain 1: Infrastructure of healthcare delivery			
A. Physical environment	"We have to maintain their safety, which means keeping them often in a secluded room. There's no windows, they have very little things for entertainment that we can offer them to keep them safe and they don't get any therapeutic intervention." (C6)	"It's an alternate reality, right? They're not in their schools. They're not with their friends. Their normal stressors are not around them. So, you're teaching them a coping skill outside of an environment where they typically use the coping skill." (P1)	<ul style="list-style-type: none"> <li>• Clinicians prioritize safety, which may come at the expense of creating a therapeutic environment</li> <li>• Physical space is nontherapeutic and anxiety-inducing, particularly in the ED</li> </ul>
B. Composition of healthcare team	"The pediatric patients are somewhat challenging because we don't always technically have true pediatric psychiatry providers available all the time..." (C16)		<ul style="list-style-type: none"> <li>• Importance of relationships between ED, inpatient, and mental health professionals; united team provides more consistent care</li> <li>• Licensed nursing assistants providing one-on-one supervision have unique insight</li> <li>• Inconsistent availability of pediatric mental health professionals</li> </ul>
C. Clinician training and education	"I think continued education and learning about how to talk about some of these problems with teens, how to be balanced, maintaining relationship and not being alarmist but also being direct in communication about the concerns, the medical long-term risk factors and concerns that I have as a physician, I think we could do more training and practice around that." (C8)		<ul style="list-style-type: none"> <li>• Lack of mental health training (for nonpsychiatry providers)</li> <li>• Clinicians desire additional education related to mental health care, including behavioral de-escalation and effective communication skills</li> </ul>
Domain 2: Processes of Healthcare Delivery			
A. Roles and responsibilities of clinicians and families	"It's hard because like, no one group can be the definitive person for...all psychosocial, medical, all the stuff that's going on. Like it's going to have to be a team effort, but...there needs to be a more and more of a strategy." (C15)	"A child to come in, in crisis, on a Friday afternoon and then we saw so many people and every person we saw was great, but we had never seen them before..." (P7)	<ul style="list-style-type: none"> <li>• Large numbers of clinicians involved in care may create uncertainty regarding the primary clinician and respective team member roles and responsibilities</li> <li>• Clinicians recognize the importance of sharing the responsibility for care</li> <li>• Importance of family as part of child's recovery</li> </ul>
C. Approach to care	"So I find that, primarily speaking, working alongside them one-on-one instead of jumping the gun and over-analyzing their behavior, I try to accept their behavior and work alongside with them." (C17)	"This was a life or death thing, but the actual like talking him through what he did, why he did it and addressing those things...there hasn't been any of that. And it almost like makes me nervous...that there's nothing to deter him the next time." (P1)	<ul style="list-style-type: none"> <li>• Varied approach by clinicians</li> <li>• Important to address basic needs (i.e. food, physical activity, normal clothing)</li> <li>• Parents fear avoidance by team to discuss severity of suicide attempt/hospitalization</li> </ul>
D. Communication with families	"And then [the patient's] dispo ends up being really variable... I've been in situations where we have kids waiting for an inpatient bed for days and then the psychiatry team says,	"I had to check somebody down to ask if my husband could bring something for him. And then they had to find out, so the communication there was a little	<ul style="list-style-type: none"> <li>• Clinician uncertainty of boarding length of time amplifies family uncertainty and frustration with unknown next steps</li> </ul>

(Continued)



TABLE 2 (Continued)

Domains and associated themes	Representative quotes		Key concepts and opportunities for quality improvement
	Clinician interviews	Parent interviews	
	'Well nevermind, you can go home if we can get X, Y, and Z set up outpatient for you.' And again, having the whole medical team and then also having the family wrap their head around that is tough." (C10)	off. More communication there would be good." (P10)	<ul style="list-style-type: none"> <li>• Consistency and transparency are important for families and patients</li> </ul>
E. Policies and protocols	"Dealing with children, if somebody comes in with a broken ankle, I know how to fix that. If somebody comes in that's suicidal or they're really depressed, there's not a set plan that's going to be the same for everybody. And how do you individualize it for these people?" (C5)	"And then, the other thing that he had a big problem with, like I said, was being watched...sort of nerve wracking for him, especially when he has anxiety...So when I was asking about, 'Could we do something about that?'...They're like, 'You can't close the curtain'..." (P10)	<ul style="list-style-type: none"> <li>• Frustration regarding lack of standardization and clarity of protocols and treatment plans</li> <li>• Balancing hospital's safety standards with patient needs and what is therapeutic</li> </ul>
F. Logistics of interhospital transfer	"By...drying up of mental health services, we're seeing a higher volume of sicker kids coming into our emergency room without us having reasonable places to put those kids. We're having to sit on them for longer periods of time until beds open up." (C19)	"When in transferring him from [name] to [name], there was some back-and-forth discussion about whether I can take him there or whether he needed an ambulance... I think it wasn't totally, um, coordinated. But it was all happening very quickly." (P6)	<ul style="list-style-type: none"> <li>• Frustration with unclear and inconsistent communication from inpatient mental health facilities</li> <li>• Confusion surrounding logistics</li> <li>• Parent frustration with turnaround time</li> </ul>
Domain 3: Measurable outcomes			
Patient safety	"If people are really amped up and aggressive, or kind of manic, the ER is one of the only places that can really get that person settled down and safe for themselves and the others. I think we're pretty good at doing that without hurting patients, or causing a minimal harm or trauma as possible..." (C15)	"And we know that their, their safety is paramount, but we don't want them to feel like, feel like a criminal in any way." (P7)	<ul style="list-style-type: none"> <li>• Prioritized by clinicians and valued by families</li> <li>• Must balance patient safety with therapeutic environment</li> <li>• Emphasize de-escalation over using security to maintain patient safety</li> </ul>
Family experience of care	"Parents are often frustrated that their kids are stuck and not much is happening so they're like, 'Come on, come on, come on. Can't you do more?' I think they think we can do more than what we can really deliver, and also that they're impatient for, 'If you can't do it let's get them to the next place' or, 'Let's get them to where good things can happen,' so there's frustration." (C19)	"The experience in the emergency room was difficult. It was, um, a very cold kind of environment. It was definitely not suited to a child... it was a little bit scary, I would say, for her and for us. We felt very nervous leaving her there, but we didn't really feel as though we had any other option." (P7)	<ul style="list-style-type: none"> <li>• Clinicians acknowledge family frustration but lack solutions during boarding period</li> <li>• Pediatric unit preferred over emergency department</li> </ul>
Mental health status	"I would not want my child in psychiatric crisis boarding for days in the ED. In some ways, we worry it makes them worse. It's really not a therapeutic environment in any way, shape, or form, both in a physical layout [and] to the services they get." (C6)	"Again, it's, it's a very kind of—it's just the medical model in general. It's very focused on deficit. Um, I worry that sometimes he starts to begin to identify with these diagnoses as opposed to what his assets are." (P9)	<ul style="list-style-type: none"> <li>• Boarding and length of stay worsens patient mood and perceived selfworth</li> <li>• Boarding may be anxiety-inducing; lack of activities during boarding contribute to boredom and perseveration</li> </ul>

(Continued)

TABLE 2 (Continued)

Domains and associated themes	Representative quotes		Key concepts and opportunities for quality improvement
	Clinician interviews	Parent interviews	
Timeliness of care	"And then the children who actually need inpatient level of care who then board in the emergency department for hours, more likely days, sometimes over a week, and that's where we really struggle because we have no therapeutic intervention for these children." (C6)	"I didn't like that she had to wait before seeing someone who could help her...and we just felt like we were just sitting there twiddling our thumbs... It would have been nice to see the psychiatrist immediately or, you know, have them get on adjusting her meds." (P3)	<ul style="list-style-type: none"> <li>• Unpredictable and variable length of boarding period</li> <li>• Long boarding periods evoke frustration with lack of active therapeutic interventions</li> <li>• Parents and patients feel forgotten</li> </ul>
Clinician moral distress	"I certainly can see that they're hurting and have psychiatric needs that I can't adequately address, which is challenging as somebody who's used to being able to at least help and address needs." (C8)		<ul style="list-style-type: none"> <li>• Personal and systemic distress with feelings of helplessness</li> <li>• Frustration with systemic barriers</li> <li>• Feelings of guilt when displacing internal frustration towards patients</li> </ul>

TABLE 3 Parent and clinician described parallels between mental health boarding and incarceration

Quotes from interviews with clinicians	Quotes from interviews with parents
"I know that they don't like the wait. The kids do not like waiting here, they prefer to go onto their next placement...They think this is like a prison. I think one child told me that they felt like they were going crazy here, because they were just staring at blank walls all day." (C1)	"It's more like a jail cell. Uh, you know, there are locking doors, there is a video camera in the corner, uh, the furniture is plastic, uh, it feels like a jail cell." (P2)
"There's no windows and there's nothing nice to look at and there's really nothing to do. And you're not allowed to go out of your room. Kind of confined. It's kind of like jail..." (C3)	"Just being able to have more of a communication is going to obviously make anybody feel more comfortable...rather feeling like in jail..." (P5)
"I think the kids have this idea that it's kind of like going to jail and often afraid because they worry...Does it mean they're crazy?" (C12)	"It's just all white, and the lights are blinding and it's just a tough place to live for 48 h. Very much felt like it was a holding pen or like a, a cell. It was really... It was, it was challenging." (P7)
"They've tried to provide for some of these things with skylights or windows or something just to add more lights, and then an area where they can walk around more...just so it didn't feel so much like a prison." (C14)	

of quality.<sup>20-23</sup> The conceptual framework developed through this qualitative analysis can be used to prioritize future quality improvement efforts and to inform the selection of quality measures to evaluate patient, family, and clinician experience associated with mental health boarding.

A study describing adolescent perspectives about mental health boarding by Worsley et al. is one of the only previously published qualitative analyses on this topic.<sup>24</sup> Similar to our study's findings, adolescents in this study described the importance of physical comfort and transparency about the hospitalization and next steps, as well as challenges with unclear communication and boredom. A related theme emerging in our study, articulated most frequently by parents, was concern that their child's basic care needs were not addressed during mental health boarding, including the need for physical activity. In the adult literature, patients who received psychiatric care in EDs and community mental health centers

similarly identified the value of addressing basic care needs, such as being permitted to wear comfortable clothing and have activities to occupy their time.<sup>25,26</sup> Concerns around the deterioration of mental health during boarding, raised in our study by clinicians and parents, warrant future investigation in a larger study sample.

Our study also summarizes the potential consequences of mental health boarding for clinicians, with moral distress emerging as an important theme. Moral distress was defined by Jameton as when one "knows the right thing to do, but institutional constraints make it nearly impossible to pursue the right course of action."<sup>27</sup> While studies exploring moral distress in healthcare workers are limited, one cross-sectional study evaluating the clinical and ethical needs of ED clinicians found that caring for youth with mental health conditions was a common source of distress.<sup>28,29</sup> This highlights the importance of not only developing therapeutic interventions for patients but ensuring staff is supported in providing clinical care.



The results of this study should be interpreted with consideration of several limitations. The study was conducted at a single hospital without pediatric psychiatric beds and the findings may not be transferable to other centers. However, the majority of children who present with mental health concerns are cared for at nonpediatric hospitals.<sup>30,31</sup> Participants were English-speaking only with limited diversity in race and ethnicity. These demographic characteristics are consistent with the region where the study was performed but under-represent more diverse perspectives. Youth were not interviewed directly; however, our results align with the findings elicited from youth by Worsley et al.<sup>24</sup> Last, while the importance of community-based resources, healthcare financing, and public policy emerged as themes in our analysis, an in-depth exploration of these themes was beyond the scope of this study.

## CONCLUSION

This study highlights the lack of infrastructure and resources for children and adolescents experiencing mental health boarding and suggests a need to improve care paradigms during the boarding period. Our study adds to the literature by including parent and clinician experiences while simultaneously presenting a conceptual framework to identify areas for quality improvement and future interventions.

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## CONFLICT OF INTEREST

The authors declare no conflicts of interest.

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