

Supplemental Information

MEDLINE AND PSYCINFO SEARCH STRATEGIES

OID MEDLINE SEARCH STRATEGY

The search was conducted on July 29, 2019, and November 26, 2019.

1. board*.mp.
2. (emergency or ED or Hospital).mp.
3. (pediatric* or child* or adolscen* or youth).mp.
4. 1 and 2 and 3
5. ((hold* or wait) adj6 (emergency or hospital)).mp.
6. 3 and 5
7. 4 or 6
8. Exp Mental Disorders/
9. (psychiatric or behavioral).mp.
10. 8 or 9
11. 7 and 10

Note that there are no medical subject headlines for boarding.

PSYCHINFO SEARCH STRATEGY

The search was conducted on November 26, 2019.

(board* or hold* or wait*) N6
("emergency room*" or "emergency department*" or "emergency service*")

SUPPLEMENTAL TABLE 3 Modified Newcastle-Ottawa Quality Assessment Domains and Corresponding Quality Appraisal

Author: Article	Quality Appraisal ^a	Selection ^b	Comparability ^c	Outcome ^d
Campbell and Pierce ²² : A Retrospective Analysis of Boarding Times for Adolescents in Psychiatric Crisis	Poor	2	0	2
Claudius et al ²³ : Impact of Boarding Pediatric Psychiatric Patients on a Medical Ward	Poor	2	0	3
Conrad et al ²⁴ : The Impact of Behavioral Health Patients on a Pediatric Emergency Department's Length of Stay and Left Without Being Seen	Poor	3	0	2
Gallagher et al ²⁵ : Psychiatric Boarding in the Pediatric Inpatient Medical Setting: A Retrospective Analysis	Poor	2	0	3
Hoffmann et al ²⁶ : Factors Associated With Boarding and Length of Stay for Pediatric Mental Health Emergency Visits	Good	2	2	3
Mansbach et al ²⁷ : Which Psychiatric Patients Board on the Medical Service?	Good	2	2	3
Nolan et al ²⁸ : Psychiatric Boarding Incidence, Duration, and Associated Factors in United States Emergency Departments	Good	3	2	3
Santillanes et al ²⁹ : Is Medical Clearance Necessary for Pediatric Psychiatric Patients?	Could not assess	N/A	N/A	N/A
Smith et al ³⁰ : Factors Associated With Length of Stay in Emergency Departments for Pediatric Patients With Psychiatric Problems	Poor	2	0	3
Wharff et al ³¹ : Predictors of Psychiatric Boarding in the Pediatric Emergency Department: Implications for Emergency Care	Good	2	2	3
Worsley et al ³² : Adolescents' Experiences During "Boarding" Hospitalization While Awaiting Inpatient Psychiatric Treatment Following Suicidal Ideation or Suicide Attempt	Could not assess	N/A	N/A	N/A

N/A, not applicable.

^a Quality appraisal determined on the basis of previously established decision rules for Newcastle-Ottawa Quality^{19,20} modified for our study as follows. Good quality: 2 or 3 stars in selection domain AND 1 or 2 stars in comparability domain AND 2 or 3 stars in outcome/exposure domain. Fair quality: 1 star in selection domain AND 1 or 2 stars in comparability domain AND 2 or 3 stars in outcome/exposure domain. Poor quality: 0 or 1 star in selection domain OR 0 stars in comparability domain OR 0 or 1 stars in outcome/exposure domain.

^b Maximum selection score is 3 (modified from a maximum of 4 in the original Newcastle-Ottawa quality assessment tool to exclude "Demonstration that outcome of interest was not present at start of study," which was not applicable to most studies in this review). Score of 3 indicates that the exposed cohort is representative, the nonexposed cohort was drawn from the same community, and the exposure was ascertained from a secure record or structured interview.

^c Maximum comparability score is 2 and indicates that the study controls for at least 1 baseline patient-level demographic factor and at least 1 additional factor that acknowledges potential other clinical differences between the groups (eg, disease severity, comorbidities).

^d Maximum outcome score is 3, with a score of 3 indicating sufficient and transparent follow-up of participants to evaluate the outcome and either independent blind assessment of outcomes or identification of outcomes via record linkage.