SYNOPSIS

KEY POINT SUMMARY

OBJECTIVES

The primary objective of the study was to evaluate the impact of an EmPATH unit (an open design concept for up to 12 patients) on hospital psychiatric admissions.

Emergency psychiatric assessment, treatment, and healing (EmPATH) unit decreases hospital admission for patients presenting with suicidal ideation in rural America

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Key Concepts/Context

The number of patients in Emergency Departments (EDs) with mental health issues and suicide ideation has been on the rise, and studies outline the impact on outcomes such as delays in care and ED overcrowding and boarding. Emergency Psychiatric Assessment, Treatment, and Healing (EmPATH) units support increased access to mental healthcare with reduced burdens on EDs. This study found an EmPATH unit was a viable approach to reducing hospital admissions and increasing 30-day follow-up care.

Methods

The retrospective study of 962 adult patients with suicidal ideation looked at measures before (435 patients) and after (527 patients) the implementation of the EmPATH unit (a crisis stabilization center) at an academic medical center in the U.S. Midwest. The unit consisted of an open plan with recliners for up to 12 patients, as well as restrooms, a laundry facility, and a calming room.

Research interns entered data from blinded patient records into a database for analysis. The records spanned six months prior to the operationalization of the unit, and six months following, with a one-month wash-out period. While the primary measure was the proportion of psychiatric admissions, any admission and incomplete admissions (bed requested but discharge from ED prior to admission) were also compared. Other measures included follow-up visits scheduled at discharge, return visits within 30 days, the amount of time in the ED (boarding time), the overall length of stay (LOS), the use of restraints, and the use of emergency codes (code green).

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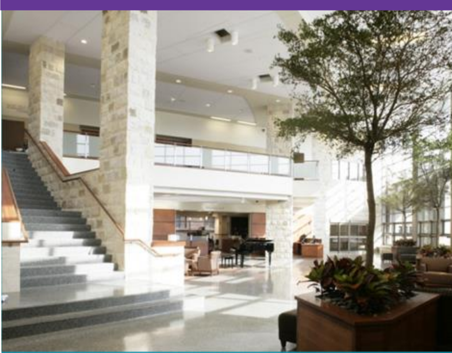

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A chi-square analysis was conducted of the sample characteristics, and the data were analyzed to establish the relative risk (RR) and a 95% confidence interval (CI). Non-linear data were log-transformed to allow beta estimates from linear regression. Covariates included demographics such as gender, age, race, insurance, mode of arrival, and an indicator for homelessness.

Findings

There were no differences in age, race, insurance, or homeless status in the patient population before and after the EmPATH intervention, although there were greater proportions of women and a greater proportion of walk-in patients or patients arriving by private vehicle (versus ambulance or police) in the post-EmPATH period. Significant results for patients with suicidal ideation included the following:

(1) admission to the psychiatric unit following the intervention dropped from 57% to 27%. This represents a relative risk (RR) of 0.48 (95% CI = 0.40-0.56), meaning 0.48 times the risk of being admitting (i.e., less than half);

(2) the rate for any admission type also dropped (RR = 0.65, 95% CI = 0.58-0.73);

(3) incomplete admissions dropped (RR = .22, 95% CI = 0.11-0.43);

(4) 30-day return to the ED was reduced from 20.3% to 15.2% (RR = 0.74, 95% CI = 0.56-.098;

(5) an increase in scheduled follow-ups following discharge from 39.4% to 63.2% (RR = 1.40-1.83);

(6) overall ED boarding time following the intervention was 0.33 times that of the pre-EmPATH ED boarding time (CI = 0.23-0.37) — 0.34 for those with complete admissions and 0.37 for incomplete admissions; and

(7) hospital LOS for a completed admission was 0.81 times that of the pre-EmPATH ED (CI = 0.67-0.99)

Results that did not meet a level of significance included:

(1) total hospital LOS;

(2) hospital LOS for an incomplete admission;

(3) use of restraints; and (4) code green in the ED.

Limitations

The authors highlight six limitations including the retrospective design, the use of diagnostic codes to determine suicidal ideation, potential unmeasured factors in the

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patient population, other facility-level factors such as any changes in psychiatric care (none were explicitly identified), no long-term follow-up, and the use of a single site for analysis.

Design Implications

While the authors (physicians) do not provide extensive detail, plans, or photographs of the EmPATH unit design, they conclude that their EmPATH unit was an effective intervention to reduce hospitalization and improve outpatient follow-up for patients with suicidal ideation.If used, this style is “Number."

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