Reducing Opportunity Behavioral Health Admissions in the Emergency Department – A Randomized Trial Comparing Virtual Patient Navigation to Usual Care

Atrium Health - Emergency Departments at Huntersville, Mercy, Pineville, Southpark, Steele Creek, Union, University City, Waxhaw

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Background
Poor access to adequate community-based care and challenges in obtaining psychiatric medications often result in patients dealing with a behavioral health crisis to visit an ED. Virtual care offers an efficient means for patient evaluation, treatment recommendations, and follow-up care that could prevent the need of an admission. Due to the lack of coordinated resources and high recidivism, many behavioral health patients in the ED are admitted to a psychiatric facility, perhaps unnecessarily, in lieu of discharge. Integrating patient navigation into emergency mental health care delivery post-discharge may address many of the barriers to patient success.

Goals
1. Prevent unnecessary admissions among patients presenting to an ED in a behavioral health crisis
2. Increase patient engagement in their care plan
3. Decrease return visits with a self-harm diagnosis

Impection Process
Patients eligible for the Behavioral Health Virtual Patient Navigation (BH-VPN) program were compared to patients receiving usual care. If a discharge recommendation was made in the ED, the patient became eligible for the BH-VPN program for up to 45 days. Psychoeducation and personalized discharge coordination through virtual care were provided. Care provided by navigators included: clinical follow-up through weekly or as needed telephonic outreach, crisis planning, suicide reassessment, and coordination of care with community providers. Supportive listening was a large driver of the program which promoted the engagement of patients in their well-being while addressing social determinants of health.

Results
Among 637 patient encounters, there were 323 on days where the navigator program was offered and 314 on days of usual care. We showed a statistically significant reduction in patients returning to any location in Atrium Health within 45 days of their ED discharge with a self-harm diagnosis (BH-VPN, 36.8% vs. usual care, 45.5%; p=0.03).

There was an 8% reduction in admissions among days where the BH-VPN program was offered (55.1%) versus the usual care arm (63.1%). When modelling the relationship, we observed an odds ratio of 0.74 (0.54-1.02). Patients were 26% less likely to be admitted on days the BH-VPN program was offered. The p-value was not significant (p=0.06) but was in the direction of a beneficial impact.