

The impact of a patient flow strategy for patients presenting to ED for mental health care

Nerolie Bost¹, Julia Crilly^{1,2}, Karen Wallen¹

1 Emergency Department, Gold Coast Hospital & Health Service, Southport, 4215, Queensland, Australia

2 Griffith University, Queensland, Australia

Objectives: To compare characteristics and outcomes for patients presenting to an Emergency Department (ED) with mental health (MH) diagnosis before and after the implementation of a targeted patient flow improvement strategy.

Methods: The setting for this retrospective observational study was a 420 bed public, teaching hospital in South East Queensland, Australia. Data pertaining to ED patient presentations with one of the 26 ICD-10 codes for 'Psychiatric' listed in the Emergency Department Information System (EDIS) over a 12 month period (5th September 2011 – 4th September 2012) were analysed. To provide additional in-depth information regarding care delivery and outcomes, a health care records review was performed for those who had one of the five most frequent MH diagnoses.

Results: Of the 66,678 ED presentations, 4.5% (n=3,037) were diagnosed with a MH condition (n=1,511 pre and 1,526 post). Following the implementation of the patient flow improvement strategy, the median ED LOS decreased (pre 296 mins vs. post 255 mins, p= 0.64) and the proportion of MH patients discharged from the ED within 4 hours improved (pre: 40% vs. post: 47%, p<0.001). For those requiring hospital admission, the proportion of those waiting longer than 8 hours decreased (pre 29% vs. post: 21%, p<0.001). In depth analysis revealed that outcomes and care were dependent on diagnosis. Patients diagnosed with schizophrenia were more likely to require hospitalisation (64%) with an improvement of ED LOS within 4 hours for a higher proportion of admitted patients (pre: 38% vs. post 60%; p=0.002). Those diagnosed with anxiety were more likely to have nursing observations (88%) and medical tests (76%) performed and be discharged home (96%).

Conclusion: Although there was an improvement in ED LOS, particularly for those admitted, following the implementation of the patient flow strategy, further strategies are required to improve the time to care delivery and meet NEAT targets for all MH presentations.

Key words: mental health, emergency department, patient outcomes, patient flow