

Changing the model of care to improve patient flow in the ED

Jo Morey¹, Julia Morphet^{1,2},

1 Dandenong Emergency Department, Monash Health, David Street, Dandenong, Victoria, 3175, Jo.Morey@monashhealth.org

2 School of Nursing & Midwifery, Monash University, PO Box 527 Frankston, Victoria, 3199, Julia.morphet@monash.edu

3 [Click here and enter an Organisation, Postal Address, State, Postcode, Email Address for Author 3]

Background

In 2014, this metropolitan emergency department in Victoria treated 65,130 patients, an increase of 22.4% over a five year period. In response to this increasing demand, and in order to meet the National Emergency Access Target (NEAT), an interdisciplinary team-based model of care was introduced, with the aim of improving patient care and flow.

The new model of care relied on an interdisciplinary teamwork approach to patient care. The ED was divided into 5 clinical areas (resuscitation, main team gold, main team green, fast track, and short stay). A team of nursing, medical and allied health staff were allocated to each clinical area, and worked together to deliver patient care.

The introduction of this interdisciplinary model of care, the challenges introducing the model, and the effects on patient flow will be presented in this paper.

Method

A retrospective analysis of ED performance data was undertaken including: time to being seen by a medical officer, time to decision re care / referral, and ED length of stay (LOS). Data were compared for a six month period prior to the intervention (1st December 2012 -31st May 2013) and a six month period after the intervention (1st December 2014 – 31st May 2015). Descriptive statistics were used to analyse the data.

Results

There were 28,959 patient presentations to the ED in the 6 month period pre intervention, and 32,739 patient presentations in the 6 month period post intervention. The team model of care had a positive impact on patient flow in the ED, including an improvement in the number of patients seen by a medical officer within the allocated triage time (80.4% pre versus 88.2% post), a significant increase in the number of patients who left the ED within 4 hours (58.7% pre versus 86.2% post), and a decreased number of patients leaving without treatment commencing (1424, 4.9% pre versus 664, 2.0% post). The average length of stay for patients returning home from ED reduced from 209 minutes to 142 minutes. Importantly, the average length of stay for patients being admitted to the hospital reduced from 557 minutes to 268 minutes.

Conclusion

There were several challenges associated with the introduction of the interdisciplinary team model of care, but these results demonstrated that this model improved patient throughput in the ED.