

Nurse Navigators in the emergency department: implementation and evaluation of the role

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Aim: Implementation and evaluation of an emergency department (ED) Nurse Navigator (NN) role.

Background: Prolonged ED stays impact patients, staff and quality of care, and are linked to increases in morbidity and mortality. The challenge is to find innovative strategies to facilitate patient flow. One solution is the ED Navigator: a nurse supporting staff in care delivery to facilitate efficient, timely movement of patients through ED. However, there is a lack of rigorous research into this emerging role.

Methods: This controlled observation study utilised a mixed methodology. The role was implemented during peak activity in a week-off-week-on pattern. Durations between various time-points were calculated for all presentations during the 20-week-study with data comparisons for off-weeks versus on-weeks. Qualitative data were collected via the NNs' diary of observations, and multi-disciplinary focus-groups conducted at midway and conclusion.

Results: During the on-weeks, fewer patients experienced ramping (47.8%) and ramp-times were shorter by over 7 minutes (mean difference 7.45, SE1.36, 95%CI 4.79-10.12; $t(2005) = 5.485$, $p < 0.001$). Several other relevant time intervals were significantly shorter [Table 1]. More patients met both 2 hour admission-request and National-Emergency-Access-Time (NEAT) targets [Table 2]. Thematic analysis of diary-data revealed the iterative processes of the NNs growing into the role and ED staff incorporating it into flow processes. Focus groups revealed initial differences in acceptance between staff groups but confirmed subsequent collaboration and overall endorsement by the team.

Conclusion: NNs can enhance ED flow-times and NEAT-compliance.

Table 1. Time intervals from arrival

Time intervals (mins)	Navigator		Significance <i>p</i>
	OFF (n)	ON (n)	
Ambulance ramp time	36.97 (997)	29.33 (903)	< 0.001
Arrival to S/B treating clinician	64.65 (9754)	62.36 (9883)	0.011
Arrival to consultation request	180.72 (6215)	168.02 (6507)	0.001
Arrival to ready to depart	216.97 (9826)	212.11 (9951)	0.008
ED length of stay	247.25 (9826)	242.54 (9949)	0.037

Table 2. Time-based performance indicators

		Navigator		Significance <i>p</i>
		Off	On	
NEAT 240 mins	Not met	39.9% (3917)	37.8% (3760)	0.003
	Met	60.1 (5909)	62.2% (6187)	
Cons Referral 120 mins	Not met	54.4% (3383)	52.8% (3434)	0.063
	Met	45.6% (2832)	47.2% (3073)	