Physician assisted triage and medical assessment units: promoting patient throughput.

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Background: Internationally, the number of presentations to Emergency Department (ED) continues to rise. Australia is not immune to this trend where ED presentations increased from 6.7 million during the 2012-13 to 7.4 million in 2013-14[1]. The deleterious effects of ED crowding is well documented in the literature. Prolonged ED stays and crowding is noted to result in increased risk of mortality[2], delays in receiving time sensitive treatments[3] and decreased patient satisfaction[4]. Innovative models of care are required to address the pressures EDs are currently facing.

Methods: A retrospective comparative study of three models of care (standard care, physician assisted triage [PAT] and physician assisted triage and medical assessment unit [PATplusMAU]) was undertaken at a large public teaching hospital in south-east Queensland. All ED presentations where patients were between 18 and 65 years of age between 10th January 2013 – 25th February 2013 (Standard care [T1]: 10th January 2013 -25th January 2012, PAT [T2]: PAT: 26th January 2013 – 8th February 2013; PATplusMAU [T3]: 9th February 2013 - 25th February 2013) were included in the analysis. The primary outcome measure was ED length of stay (LOS), and secondary outcome measures included: time to be seen by a clinician, national emergency access targets (NEAT), admission rates and the proportion of patients who did not wait (DNW).

Results: A total of 8932 ED presentations were made to the ED over the study time period (T1: n = 3120; T2: n = 2624; T3: n = 3188). The demographic characteristics (age, gender) of ED presentations made during each time period were similar. Overall, median ED LOS was reduced with the implementation of both models of care (T1, 186mins; T2, 181mins; T3, 175mins: T1 vs T2, p = 0.099; T1 vs T3, p = <0.001; T2 vs T3, p =0.007). Other outcomes measured such as time to be seen by a clinician, NEAT and DNW rate were also noted to improve (to varying degrees) with the implementation of PAT and PATplusMAU.

Conclusion: Our results indicate that PAT and MAU are both viable models of care that can help reduce ED crowding and promote patient throughput, although direct effects on total ED LoS are small. Further research is required to continue to evaluate the efficacy of these models of care, both bundled and as separate models, to ensure health service delivery demands are met. Investigation of staff and other key stakeholders experience with PAT and PATplusMAU would also provide valuable insight into the efficacy of both models of care and possible areas for further model improvements.

References:

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