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EDITORIAL

A reality check for emergency department crowding interventions

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In this issue of *CJEM*, Loch and colleagues present a realist evaluation of introducing a dedicated senior Emergency Physician Leader 14 h per day 5 days a week to improve emergency department (ED) throughput [1]. This involved a 'floating' senior decision maker who was not responsible for the overall care of any one patient, but rather acted as a facilitator—to initiate test requests, orders for treatment and disposition decisions early in the patient journey for any ED patient.

Realist evaluation is appropriate to better understand the impacts of change in complex healthcare settings. By exploring the perceptions of stakeholders who were involved either directly (as the agents of change) or indirectly (as other staff impacted by the change) one may understand why a change may or may not have been not successful, due to a variety of mechanisms being applied in different contexts. Loch and colleagues have conducted a methodologically sound qualitative study, using inductive analysis of structured interviews to generate theories about the context and mechanisms that were associated with the outcome of throughput after introducing their Emergency Physician Leader role.

The theories generated from their inquiry pass the tests of plausibility and common sense. For example, in the context of insufficient nursing staff, tasks that might improve throughput (such as timely order completion) could not be done. In that context, Loch and colleagues recommend that the Emergency Physician Leader should consider directing their attention to other actions not requiring availability of nursing staff. An example of an alternative strategy in that context might be requesting radiological tests so that the primary physician responsible for the patient has that test result immediately available when they see the patient. This was tempered by potential inefficiencies such as unnecessary test ordering which may increase costs and delay separation from the ED. So, the author's goal of providing 'lessons for the implementation of future interventions' was by and large achieved. Having situational awareness with respect to whole department and current pressures elsewhere in the hospital, for example in radiology and in-patient services, is important for an Emergency Physician Leader. Multiple inter-related factors need to be considered when deciding on which interventions are best to maximise overall ED flow at a particular point in time. Other departments seeking to implement similar changes in Emergency Physician roles would be wise to take these lessons on board.

An interesting finding in the present study was that the Emergency Physician Leader was felt to prioritise lower acuity, less complex patients. No reasons were postulated for this and it would have been interesting to know why this was. A key barrier to throughput for complex patients is the availability of admitting teams and hospital ward beds, lack of which leads to inpatients being stuck in ED waiting for a ward bed after their ED phase of care is complete (termed Access Block, Exit Block or 'boarding' in different jurisdictions). Interventions that do not address those barriers may not impact meaningfully on throughput for those patients and it may be that the Emergency Physician Leader was not able to influence Access Block and directed their energy elsewhere. That the Emergency Physician Leader was only present limited hours for 5 days a week is also likely to have lessened the impact on throughput overall.

That context and mechanisms influence the outcomes of change is not a new concept in the world of evaluation in social and health sciences. It has been recognised for the better part of two decades that successful change management in healthcare requires an understanding of the social, political, economic, technological, legal and environmental

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context of the change, as well as knowing the barriers and facilitators that may influence the success of the change process [2].

What is missing from the current manuscript is an operational definition of 'throughput' and the impact the Emergency Physician had on this. As a result, we are left with staff opinions of the impact of the change on throughput, without knowing whether the Emergency Physician Leader programme changed throughput meaningfully or not. In the program theory (supplementary material) twelve potentially measurable outcomes are listed, yet we are unsure what if any impact the Emergency Physician had on these. Real time reduction in ED crowding is the point of the Emergency Physician Leader role and measuring this is the best marker of their impact, both in real time with ED Occupancy and longer term with multiple measures. Future research in this space would be strengthened using a mixed methods approach, where the views of staff were supported by quantitative data demonstrating differences in validated throughput measures, such as ED length of stay [3]. Such research would also be strengthened by including the perspectives of the patients as end users of the Emergency Department.

The Australasian College for Emergency Medicine recently used a mixed methods approach in their review of the impact of time-based targets for ED length of stay, where the political and cultural contexts and mechanisms of implementation of targets in different jurisdictions lead to different outcomes, both positive and negative. It was found that when implemented with a focus on quality of care for patients and without an overly punitive regime of enforcement, such targets could be used to improve throughput without reducing quality of care. In some jurisdictions, these targets were associated with reduced mortality for acute patients [4, 5].

ED crowding is the result of a complex interplay of physical and staff resources in the ED, hospital and community settings; patient complexity; and ED and hospital culture. To have a meaningful impact on throughput and reduce ED crowding, interventions need to be multifaceted and address all of these factors. The findings of Loch and colleagues will be useful for those considering an Emergency Physician Leader or similar role as part of a suite of interventions, although such a role in isolation may have limited impact on ED crowding.

Declarations

Conflict of interest No authors have any conflicts of interest.

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