



One size does not fit all: the complexities of addressing flow in contemporary EDs

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Emergency department (ED) crowding is a vexing problem that has persisted for decades. In this issue of *CJEM*, Crowder and colleagues describe a comprehensive initiative using ED physician lead roles to improve flow-related metrics at two large academic EDs [1]. They found impacts on objective measures varied between sites and they gained insights from participants from multiple disciplines. The single most important observation, however, may be that when it comes to solutions to such a complex issue that varies over time and by location, one size does not fit all.

We applaud Crowder et al. for reporting on an initiative that arose within the ED to mitigate the impacts of crowding. The fact that one site noticed a positive impact in flow and the other did not speak both to the difficulty in tailoring an intervention to a root cause and to the challenges of balancing team stability with the need to adapt.

There are two reasons why physician lead roles may not have had uniformly positive effects.

First, it may be that the impact of early assessment, early orders, early referrals, and even early discharge of a select few patients by physicians may be lost if the measurement of interest is ultimate length of stay for all patients. If the aim is to ensure that those who are waiting are properly assessed, monitored, and cared for, then metrics reflecting

these goals would be useful. Not that physician leads do not have an important impact on *some* patients, but rather that their impact on *all* patients was moderate at best.

Second, it is likely that the physician lead role is more useful at some times than at others. The positive impact that exists on crowded days may be mitigated by the lack of effect on days when crowding is less of an issue. Rather than putting in place a fixed model, employing a more flexible one—perhaps using a physician lead model on some days and not others, or adjusting staffing levels with creative backup call models—may allow for more precise responses to changing circumstances. Any benefit achieved with this or other similar models is dependent on optimal communication among nurses and on-duty doctors to ensure that early assessment of unstable patients occurs without necessarily requiring additional physician hours.

In some institutions, a fixed physician lead role may be appropriate. In one example that demonstrates the international prevalence of ED overcrowding, an ED in France introduced a senior physician triage role specifically to facilitate flow [2]. The main difficulties in that ED besides volume included output obstructions leading to (mostly) elderly patients on stretchers waiting for beds, high variation in physicians' abilities to manage flow, and an enduring 15% to 20% deficit in nursing numbers. Again, metrics are important; physician triage was associated with a decrease in left without being seen rates (to 2.5 from 4.5%) and fewer days requiring ambulance diversion, whereas the effect on overall ED length of stay was modest (a decrease of 11 min among non-admitted patients, and no difference among admitted patients). A senior physician with strong experience in the triage role to assess urgency and manage workflow as a “regulator” was important, a construct validated in another study from Taiwan wherein attending physicians tended to perform better than residents in predicting the need for hospital admission [3].

One feature of the study by Crowder et al. is the opportunity to deploy supernumerary physician hours, which brings

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into question determination of best value for resources spent. Given their observations, there may be alternatives to using funds for additional physician coverage, especially considering the existing challenges in physician supply and the high relative cost of physician staffing. In one of our departments, (HO) performance funds were used to invest heavily in nurse practitioner and physician assistant positions to help doctors in their roles. Overall, physicians value having support from these colleagues as much as or more than having another doctor in the department.

Departmental responses can do only so much to address systemic issues. Emergency departments are unique in that they are sensitive to strains in both primary care (more patients coming to the ED) and in inpatient and long-term care settings (resulting in impediments to patients being discharged from the ED). No matter how resources are deployed within a department, if a disruption occurs in either of these areas or, worse and frequently, in both, then EDs will experience crowding. A willingness of leaders from across the system to identify ED flow as a priority is required for meaningful, sustained improvement. In one of our EDs (GB), new resources targeted to improving ED wait time metrics were deployed at the institutional level rather than the department level [4]. This created accountability at the organizational senior management table and brought more possible solutions to bear than would have arisen within the department alone. This is consistent with the philosophy of an Ontario-wide pay-for-results program initiated in 2008 that provides hospitals with incentives to improve flow and rewards them with discretionary funding annually based on their results. Hospitals have primarily used the funds on salaries, with most going to additional registered nurse positions as well as nurse practitioner and physician assistant roles [5].

Finally, we welcome the authors' efforts to include provider experience as an assessment outcome. A main driver of burnout and decreased wellness is loss of autonomy or control over one's work [6]. Exerting some control, wherever and however modest that may be, to mitigate the stresses of the unrelenting demands of emergency care can go a long way to improving provider satisfaction and longevity. The authors report on the negative impact of adding more scheduled hours to the physician cohort, even if it presumably meant more collective resources (income) for them. The critical roles of triage nurses and of nursing more broadly are also brought into focus with themes related to physicians being inadequately prepared to function optimally without nursing support and the increased workload and responsibility that physician lead activities place on nurses. These

are less tangible, but no less important, considerations in assessing the impact of an intervention. If improvement in a numerical metric that may not be correlated with individual quality of care comes at the cost of increased burden to an already stretched provider population, it may not ultimately be a good investment. For example, it is critically important that ambulance crews be freed to return to their core work outside of the hospital; but if that comes at the cost of increased burnout and patients being unattended to in busy waiting rooms due to nursing shortages, the unintended consequence is that the problem just gets concentrated, yet again, in the ED.

Complex issues require nuanced, system-wide solutions that consider effects on providers. We encourage more clinical leaders in EDs to publish the results of their process interventions. Iterative change, propelled by thoughtful initiatives that are well studied and shared through peer-reviewed literature, will help us all gravitate with confidence toward effective solutions.

Data availability No data was used for the research described in the article.

Declarations

Conflict of interest None of the authors have a conflict of interest to declare.

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