Identification of Emergency Department Patients Appropriate for Evaluation in Mobile Medical Clinic

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Objectives: Identify a subset of patients utilizing the emergency department for non-emergent issues that could have safely been seen in the outpatient setting within 24 hours. Emergency department crowding and increasing wait times are significant challenges for United States healthcare, and these have been further exacerbated by the COVID pandemic. A common reason cited is the lack of access to primary care facilities. Addressing this issue could reduce the burden on emergency departments.

Methods: A retrospective chart review utilizing the electronic health record of all patients seen in a tertiary-care emergency department (ED) in Southwest, VA, from 1/1/2020 through 1/31/2020. A total of 8,020 encounters were abstracted and 1437 were selected for full review. Three emergency medicine residents reviewed all emergency severity index (ESI) level 4 encounters. A detailed review of the ED encounter was utilized to determine if the patient could have safely been seen in the outpatient setting within 24 hours. All ESI level 5 encounters were presumed safe to be seen in the outpatient setting within 24 hours.

Results: During this one-month period, a total of 736 ED encounters were assessed as safe to be seen in the outpatient setting within 24 hours. This includes 138 ESI level 5 encounters and 598 out of the 1437 ESI level 4 encounters (41.6%). Among the 736 encounters, 273 (37%) did not have a primary care doctor on record, 551 (75%) had Medicaid or were uninsured, and 73 (10%) identified English as a second language. The supervising faculty emergency medicine physician and all three resident physicians reviewed the first 30 charts to determine a Kappa coefficient among the three reviewers. The Kappa was calculated to be 0.70.

Conclusions: A significant percentage of ED ESI level 4 and 5 encounters can be safely seen in the outpatient setting within 24 hours. Wiler et al. have previously estimated the average cost of an ESI level 4 ($342.16) and level 5 ($276.12). Thus, the estimated cost of the 736 encounters is $242,716.24. Many of these 736 patients had significant barriers to primary care. Addressing barriers such as language, cost, and access to primary care could reduce the burden on overcrowded EDs, reduce cost, and permit continuity of care. The above data was analyzed as part of a grant application to justify the expense of a mobile health clinic to serve as an alternative healthcare resource for these patients.