

Grant Innes and his group did a fantastic study on the full capacity protocol, a true “before and after” study, at his institution, with ED volume of 31,000. You can see his abstract in Acad Emerg Med 2007; 14(5), S1:S85, abstract 206.

Before implementation, the average wait time was 3 hours for patients presenting to the ED. After implementation of their protocol, mean ED LOS for admitted patients fell from 18.9 to 13.9 hr, with ED LOS falling by 9, 1.6, and 9.2 hours for admitted medical, surgical, and mental health patients. Overall hospital LOS fell by 1.0, 0.8, and 0.8 days. Waiting time to be seen was essentially eliminated.

Let me repeat what was shown above, loudly and clearly: by reducing the ED LOS for admitted patients by FIVE hours via moving boarded admitted patients out, the total length of stay in the hospital was reduced by TWENTY FOUR hours, and the ED was able to function as an ED.

Below are some of his abstracts, courtesy of Dr. Innes:

2007 CJEM / AEM Abstract: IMPACT of an overcapacity care protocol on emergency department overcrowding

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Introduction: In 2005, at this tertiary inner city hospital, because of prolonged boarding of admitted patients, 9249 triage level 2 and 3 (emergent and urgent) patients were blocked in ED waiting areas for 3 hours (estimated access gap= 27,750 hrs). Serious adverse events and waiting room deaths led to implementation of the overcapacity protocol (OCP) in February, 2006. The OCP dictates that arriving level 1-3 patients are placed in overcapacity ED care spaces rather than waiting areas. When the ED goes overcapacity by 2 patients, admitted patients boarded in the ED move to overcapacity care spaces on inpatient units. Our objective is to describe OCP impact on EDLOS and patient flow. **Methods:** This before-after analysis uses administrative data to compare the post-OCP period (March through August, 2006) to the corresponding control period in 2005. Outcomes include mean ED LOS for admitted patients as well as EDLOS and hospital LOS for admitted medical, surgical and mental health (MH) patients.

Results: During the post-OCP period, ED volume rose from 30483 to 30846 (1.2%), CTAS 1-3 volume rose from 13078 to 13828 (5.7%), and daily ambulance arrivals rose from 46.1 to 46.6 per day (1%). Despite this, mean ED LOS for all admitted patients fell from 18.9 to 13.9 hrs ($p < 0.001$). EDLOS fell by 9.0 hours, 1.6 hours and 9.2 hours for admitted medical, surgical and MH patients respectively. Similarly, hospital LOS fell by 1.0, 0.8 and 0.8 days for medical, surgical and MH patients ($p < 0.001$ for all). After OCP, arriving emergent-urgent patients were rarely left in ED waiting areas. During the post-OCP period, no critical events were reported in ED waiting areas or inpatient

OCP care spaces. **Conclusions:** A 5.0 hour mean reduction in EDLOS for 8200 annual admissions provides access to an additional 41,000 hours of ED stretcher and nursing time, more than the access gap estimated prior to OCP implementation. The OCP reduces ED LOS for admitted patients, reduces ED access block and appears to reduce adverse outcomes for ED patients.

Key Words: Triage, Overcrowding, Overcapacity