

MS²



Case Study

Medical Center ED (80K visits)

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└ └ **The Problem:**

Because of organic growth, this large volume Emergency Department developed pervasive problems with ED overcrowding, lengthy ED patient waiting times and ambulance diversions. As a consequence they have had to endure episodes of negative publicity, and the institution decided to engage MS2 to help them solve conclusively their ED issues by revamping ED patient flow operations.

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└ └ **Background and Approach:**

This 31-bed Emergency Department was well staffed and already had a large 12-bed Fast Track space but was unable to handle the current daily volume load within the allotted total capacity of 47 treatment spaces. A majority of the patients waiting in the ED Lobby were of intermediate acuity (i.e too sick to be seen in the Fast-Track but not sick enough to be rushed to the Main ED). These patients contributed the most to ED Lobby crowding, represented a high proportion of their patients leaving unseen, and a major safety concern. It was decided that the interventions to be designed and implemented should markedly decrease ED Lobby waiting times, provide a space to take care of intermediate acuity patients and increase the functional capacity of their main ED in order to decrease ambulance diversion hours (without physical expansion).

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└ └ **Recommendations implemented:**

1. Established a Rapid Clinical Evaluation model of care that provide the ability to have patients evaluated by an ED provider within minutes of arrival.
2. Established alternative treatment and processing areas to care for low-acuity patients without the placing them in beds for either evaluation or disposition.
3. Converted Fast-Track into an Intermediate Care Unit to treat intermediate acuity patient population and markedly reduce the need to use main ED beds.
4. Revamped interfaces with ancillary departments to support the new operational ED model and created shared data gathering and reporting mechanisms visible to the entire organization.

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Door to Provider times decreased by 67% on the first month post-implementation and reached an average of 19 minutes even as volumes increased to 100k visits a year. The rate of patients leaving the ED unseen decreased from 5% to less than 1% and Ambulance Diversions decreased by more than 60%. In addition, more than 40% of non-admitted patients are now able to leave the department within 2 hours from arrival and ED patient satisfaction levels have ranked at top national quartile levels since the initiative was undertaken. The institution was also able to delay a planned multi-million dollars ED expansion by several years and to then revise it to a much lower and cost-effective scale based on their actual needs.