FLO on Flow: Front Line Ownership of Emergency Department, Hospital, and Health System Patient Flow – A Novel Approach to ED Overcrowding
(Part 1)

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Introduction
Hospital access block, often called Emergency Department (ED) overcrowding when it manifests there, is an important public health issue and seemingly intractable problem in our evolving Health Care system. The multiple, dynamic, and inter-dependent factors influencing its cause (and potential solutions) may best fit a complex adaptive systems analysis and approach. One technique described in similar contexts is Front Line Ownership (FLO) based on the theoretical framework of positive deviance. The aim of this study is to discover where pragmatic “bottom-up” insights and adaptive work-arounds can be elicited, described, iterated, and potentially implemented at a broader scale to catalyze systems change, in service of improving patient flow.

Methods
This is a qualitative study which identified, convened, and surveyed stakeholders representing three components of the system. Purposive sampling was used to gather a full range of perspectives from three groups: 1) patients and or families, 2) front-line providers, and 3) management/leaders. Interviews were recorded and transcribed by a third party, then each transcription was coded independently by two investigators (at least one of which was the PI). Informed consent was obtained from all participants and each was offered the opportunity to review the transcription to ensure accuracy. A framework analysis was used to synthesize, reflect upon, and interpret the data from multiple perspectives using a structured, iterative approach.

Results
In part 1 of this study, three broad over-lapping themes emerged from the analysis as being areas of opportunity for reducing hospital access block. They are: 1. Boundary Conditions (the historical, organizational cultural, psychologic, economic, and other contexts influencing system performance), 2. Systems Integration (how well the parts interface with each other relate to the whole), and 3. Operations management (the more technical aspects of patient flow). When these three broad themes are cross-analyzed with a more conventional input-throughput-output approach, previously under-emphasized avenues for improvement may become apparent.

Conclusion
A front-line ownership analysis of ED overcrowding is feasible. There are adaptive behaviors by some front-line individuals at each "level" of perspective that have been identified and could be modified and implemented locally to improve patient flow in the ED (and the rest of the health system).