

**Emergency Department Operations and Management
Pre-Conference Workshop
19th International Conference on Emergency Medicine
ICEM 2020 - Buenos Aires, Argentina
June 14, 2020 – Half a day**

In English

Beth Israel Deaconess Medical Center / Harvard Medical School - Department of Emergency Medicine

Faculty:

Leon D. Sanchez, MD MPH

David T. Chiu, MD MPH

Joshua W. Joseph, MD MS

Peter S. Antkowiak, MD

Bryan A. Stenson, MD

Description:

Emergency department (ED) operations and management is a complex problem full of highly variable queues, limited space, and complex staffing. Trying to find the ideal alignment is a difficult task as the amount of knowledge and research in this area is limited with “educated trial and error” predominating most staffing models. This session will be interactive and composed of a mix of didactics, small-group interaction, and question/answer sessions. Sessions will focus on topics including: resource bottlenecks, queuing theory, schedule optimization, process/change management. Upon completion, attendees will leave the session with a practical operational skill set and understanding of principles to be applied to any ED to help improve throughput, staffing, and resource alignment. Our approach to ED operations and management is data driven. Prior to the session, each conference attendee will receive a data set that reflects a real-world ED problem. This data will serve as a foundation for analysis, practice, and small-group discussion.

Participants will need to have a laptop and Excel installed to maximally benefit from the workshop. The participants will work through a number of sample illustrative problems covering major themes in ED operations, scheduling and flow. If enrollment in the workshop occurs with enough lead time we may be able to survey the registered participants to tailor the workshop to address their main interests and concerns. While the workshop will be conducted in English we will have bilingual faculty members available.

Goals & Objectives:

1. Learn the basics of queuing theory; understand its application to operations decision making
2. Use volume data to optimize scheduling using the *staircase model* of physician and APP staffing
3. Develop analytic insight to readily identify resource bottlenecks and apply strategies to optimize ED flow based on data
4. Enhance data extraction and communication skills to optimize information sharing with administration that most efficiently drives process/behaviour change

Welcome Remarks	<ul style="list-style-type: none"> - Introduction - Welcome ice breaker with attendees 	Sanchez, Chiu	5 m
Survey Review	<ul style="list-style-type: none"> - Discuss survey findings - Goal/objectives 	Antkowiak, Stenson	5 m
Basics of Queuing Theory	<ul style="list-style-type: none"> - Introduce queuing theory - Outline relevant data set - Use dataset to explain application of queuing theory - Q&A 	Joseph, Sanchez	30 m
Schedule Optimization	<ul style="list-style-type: none"> - Use dataset to extract patient per hour, door-to-bed times - Explain traditional staffing models - Teach staircase model and show how to use data to optimize application of staircase staffing 	Stenson, Chiu	45 m
Bottleneck Management	<ul style="list-style-type: none"> - Discuss bottlenecks, query attendees on perception of largest bottle necks - Use dataset to identify bottlenecks within flow data - Relay strategies to address bottlenecks that do not increase resource utilization 	Sanchez, Chiu, Joseph	45 m
Behaviour Change & Data Visualization	<ul style="list-style-type: none"> - Using data to “Manage Up” - Strategies for difficult conversations - Applying data to drive group/individual behaviour change 	Antkowiak, Sanchez	30 m
Application & Pitch	<ul style="list-style-type: none"> - “Administrator Challenge” mini-competition - Participants pair off to practice translating a dataset to meaningful visualization and messaging - Groups present lightning pitch (2 minutes per group) 	All	60 m
Review /Q&A	<ul style="list-style-type: none"> - Review skills learned - Take home messages - Session feedback 	Chiu, Sanchez	10 m