1st INTERCONTINENTAL Emergency Medicine Congress

15 - 18 May 2014 Gloria Golf Resort Hotel, Belek-Antalya



#### ED Management Key principles

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# Disclosure

No conflict of interest



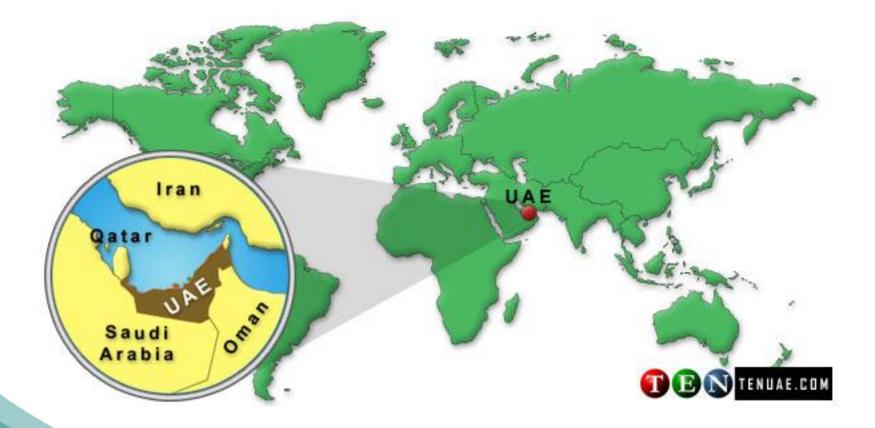
# **Objectives**

- Overview
- Four key components
- Review relevant literature
- Useful resources

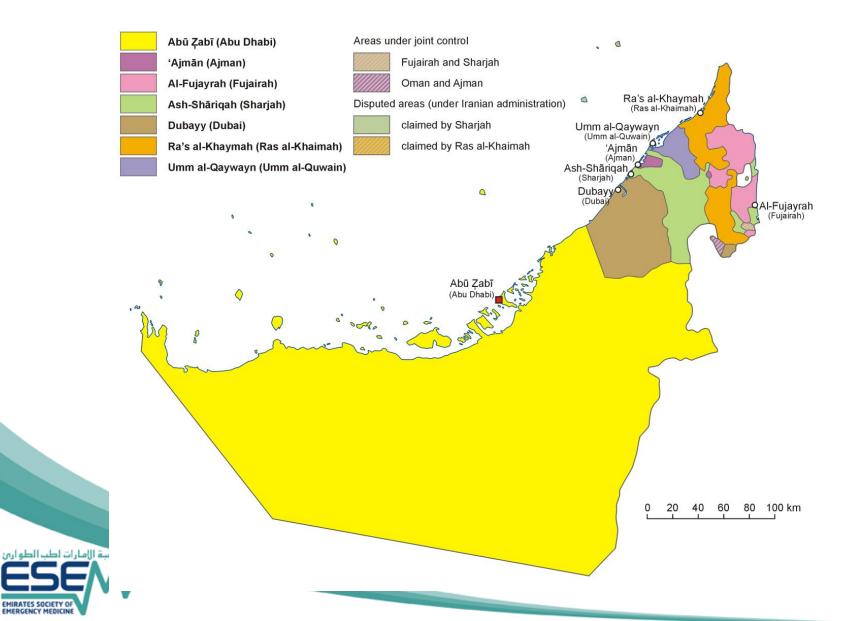


#### Where I'm from?

















#### **Academic Path**



# **Medical School:**



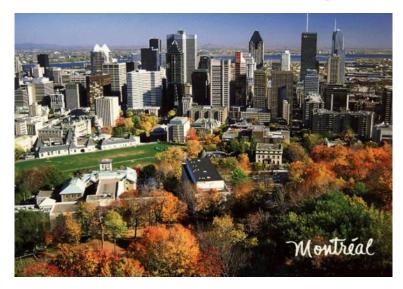


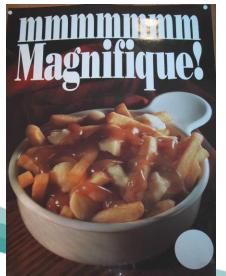


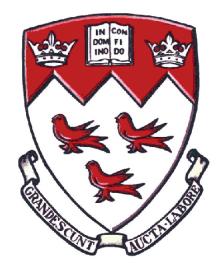


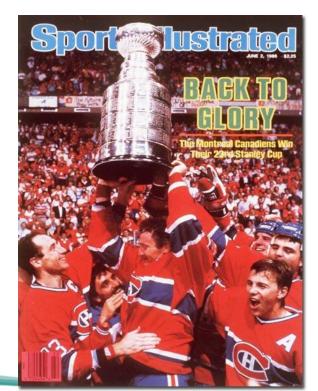


## **EM Residency...**











# **EMS Fellowship**











# **DM Fellowship:**









## **MPH/DrPH Program**









#### If you want a fun EM career..

Come and see me!



# Why ED management is Important?









Number 335 • June 4, 2003

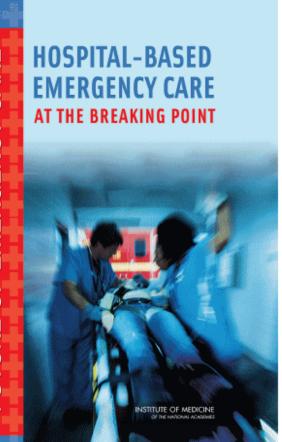
#### National Hospital Ambulatory Medical Care Survey: 2001 Emergency Department Summary

by Linda F. McCaig, M.P.H., and Catharine W. Burt, Ed.D., Division of Health Care Statistics



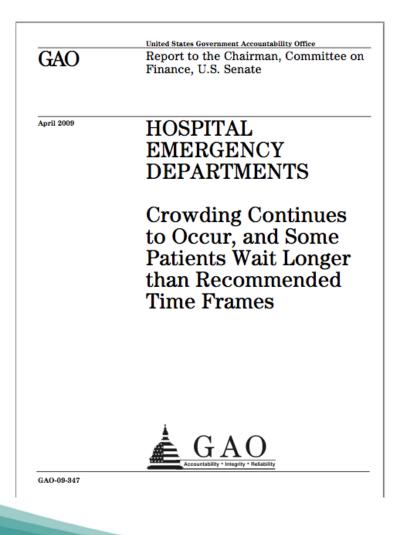


# FUTURE OF EMERGENCY CARE





# Why?





# **Common problem**

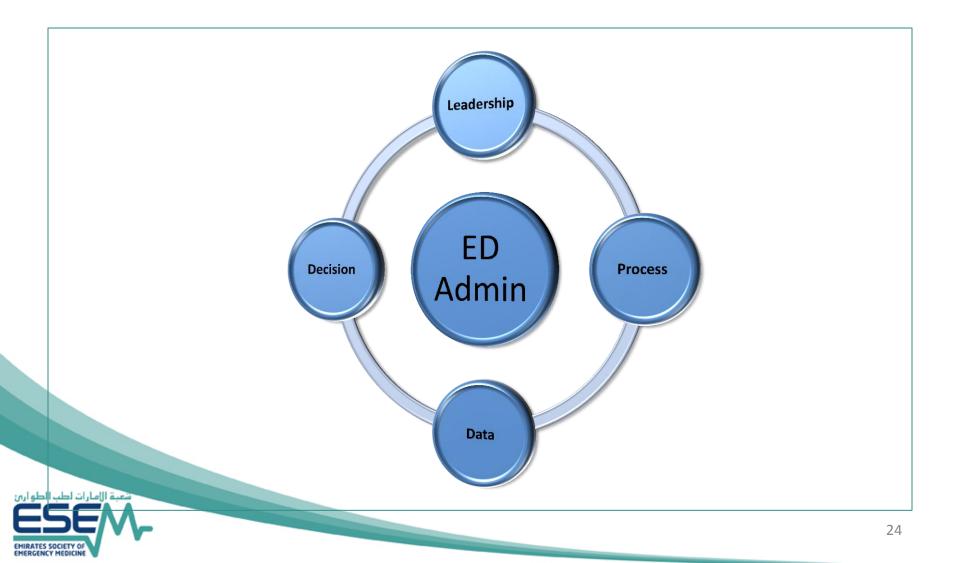
- Overcrowding
- Waiting time
- Understaffing
- Boarded patients



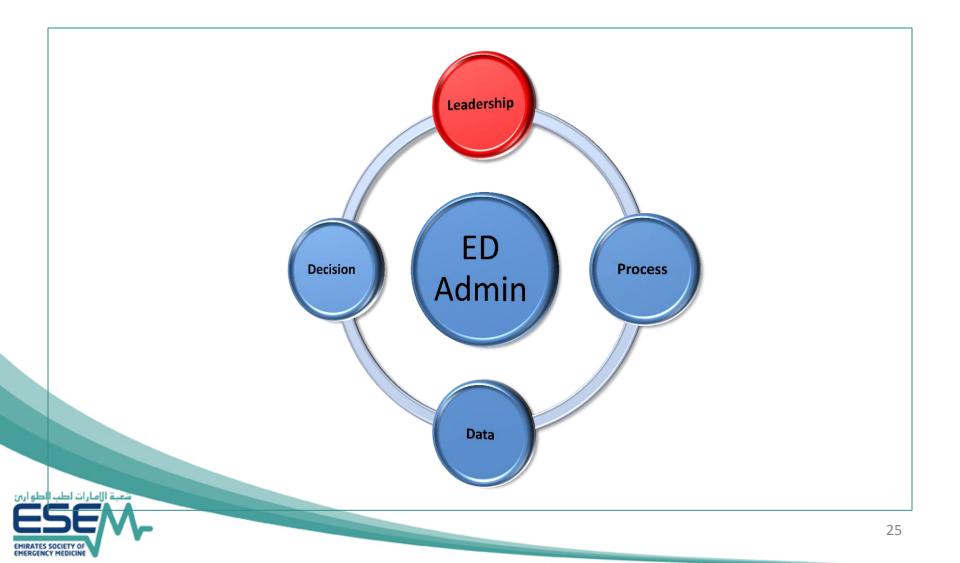
#### Think ED like a business



# **Key components**



# **Key components**















- Leader vs. manager
- Building a team







- Management skills
  - Vision
  - Hiring and firing
  - Good meetings
  - Execution







- Management skills
  - Vision
  - Hiring and firing
  - Good meetings
  - Execution
  - Staff satisfaction





Journal of Applied Psychology 2002, Vol. 87, No. 2, 268-279 Copyright 2002 by the American Psychological Association, Inc. 0021-9010/02/\$5.00 DOI: 10.1037//0021-9010.87.2.268

#### Business-Unit-Level Relationship Between Employee Satisfaction, Employee Engagement, and Business Outcomes: A Meta-Analysis

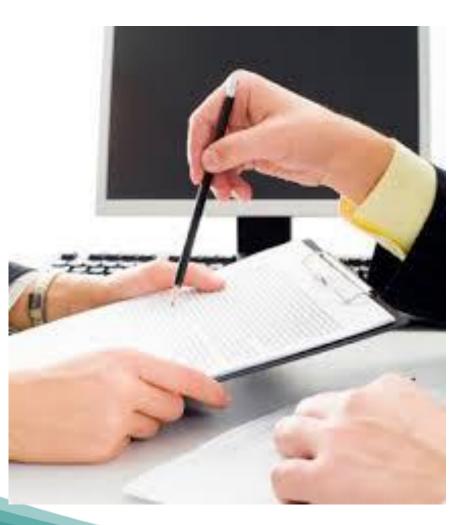
James K. Harter The Gallup Organization Frank L. Schmidt University of Iowa

Theodore L. Hayes U.S. Immigration and Naturalization Service

Based on 7,939 business units in 36 companies, this study used meta-analysis to examine the relationship at the business-unit level between employee satisfaction–engagement and the business-unit outcomes of customer satisfaction, productivity, profit, employee turnover, and accidents. Generalizable relationships large enough to have substantial practical value were found between unit-level employee satisfaction– engagement and these business-unit outcomes. One implication is that changes in management practices that increase employee satisfaction may increase business-unit outcomes, including profit.



#### **Peer review**





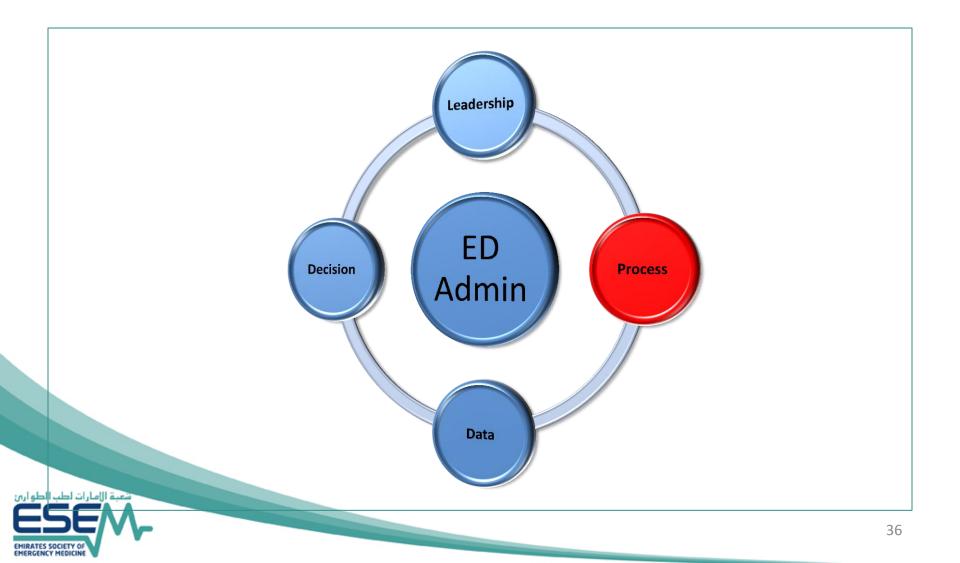
# **Core Competencies**

- Patient Care
- Medical/Clinical Knowledge
- Practice-Based Learning and Environment
- Interpersonal and Communication Skills
- Professionalism
- System-based Practices





# **Key components**

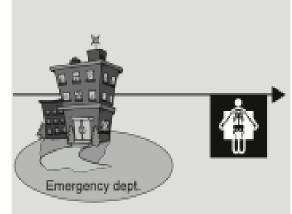






#### INPUT:

Patient demand for emergency department care prior to arrival at the emergency department. Demand may be affected by access to health care elsewhere in the community.

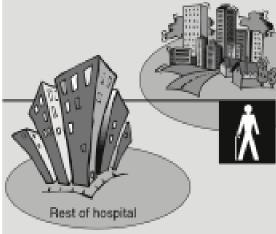


#### THROUGHPUT:

Patient treatment experiences in the emergency department, including triage, diagnostic evaluation, and physician treatment.

Source: GAO analysis of published literature, Art Explosion (graphics).





#### OUTPUT:

Patient dispositions following emergency department treatment, including discharge from the emergency department, hospital admission, and transfer to another facility.

## **Process - Input**

THE PRACTICE OF EMERGENCY MEDICINE/CONCEPTS

### Optimizing Emergency Department Front-End Operations

Jennifer L. Wiler, MD, MBA Christopher Gentle, MD James M. Halfpenny, DO Alan Heins, MD Abhi Mehrotra, MD Michael G. Mikhail, MD Diana Fite, MD From the Division of Emergency Medicine, Washington University in St. Louis School of Medicine, St Louis, MO (Wiler); the Department of Emergency Medicine, Christiana Care Health Services, Newark, DE (Gentle); Forrest Hills Hospital, Forrest Hills, NY (Halfpenny); the Department of Emergency Medicine, University of South Alabama College of Medicine and Medical Center, Mobile, AL (Heins); the Department of Emergency Medicine, University of North Carolina, Chapel Hill, NC (Mehrotra); the Department of Emergency Medicine, St. Joseph Mercy Hospital, Ann Arbor, MI (Mikhail); and the Department of Emergency Medicine, University of Texas Medical School at Houston, Houston, TX (Fite).

As administrators evaluate potential approaches to improve cost, quality, and throughput efficiencies in the emergency department (ED), "front-end" operations become an important area of focus. Interventions such as immediate bedding, bedside registration, advanced triage (triage-based care) protocols, physician/practitioner at triage, dedicated "fast track" service line, tracking systems and whiteboards, wireless communication devices, kiosk self check-in, and personal health record technology ("smart cards") have been offered as potential solutions to streamline the front-end processing of ED patients, which becomes crucial during periods of full capacity, crowding, and surges. Although each of these operational improvement strategies has been described in the lay literature, various reports exist in the academic literature about their effect on front-end operations. In this report, we present a review of the current body of academic literature, with the goal of identifying select high-impact front-end operational improvement solutions. [Ann Emerg Med. 2010;55:142-160.]



## **Process - Throughput**

### The Impact of Input and Output Factors on Emergency Department Throughput

Phillip V. Asaro, MD, Lawrence M. Lewis, MD, Stuart B. Boxerman, DSc

#### Abstract

**Objectives:** To quantify the impact of input and output factors on emergency department (ED) process outcomes while controlling for patient-level variables.

**Methods:** Using patient- and system-level data from multiple sources, multivariate linear regression models were constructed with length of stay (LOS), wait time, treatment time, and boarding time as dependent variables. The products of the 20th to 80th percentile ranges of the input and output factor variables and their regression coefficients demonstrate the actual impact (in minutes) of each of these factors on throughput outcomes.

**Results:** An increase from the 20th to the 80th percentile in ED arrivals resulted in increases of 42 minutes in wait time, 49 minutes in LOS (admitted patients), and 24 minutes in ED boarding time (admitted patients). For admit percentage (20th to 80th percentile), the increases were 12 minutes in wait time, 15 minutes in LOS, and 1 minute in boarding time. For inpatient bed utilization as of 7 AM (20th to 80th percentile), the increases were 4 minutes in wait time, 19 minutes in LOS, and 16 minutes in boarding time. For admitted patients boarded in the ED as of 7 AM (20th to 80th percentile), the increases were 35 minutes in wait time, 94 minutes in LOS, and 75 minutes in boarding time.

**Conclusions:** Achieving significant improvement in ED throughput is unlikely without determining the most important factors on process outcomes and taking measures to address variations in ED input and bottlenecks in the ED output stream.

ACADEMIC EMERGENCY MEDICINE 2007; 14:235–242  $\circledast$  2007 by the Society for Academic Emergency Medicine

Keywords: crowding, hospital emergency services, bed occupancy, patient care, regression analysis



### **Process - ED Design**













## **Patients satisfaction**

- Good team
- Courtesy
- Time to Listen
- Informative
- Concern for Comfort

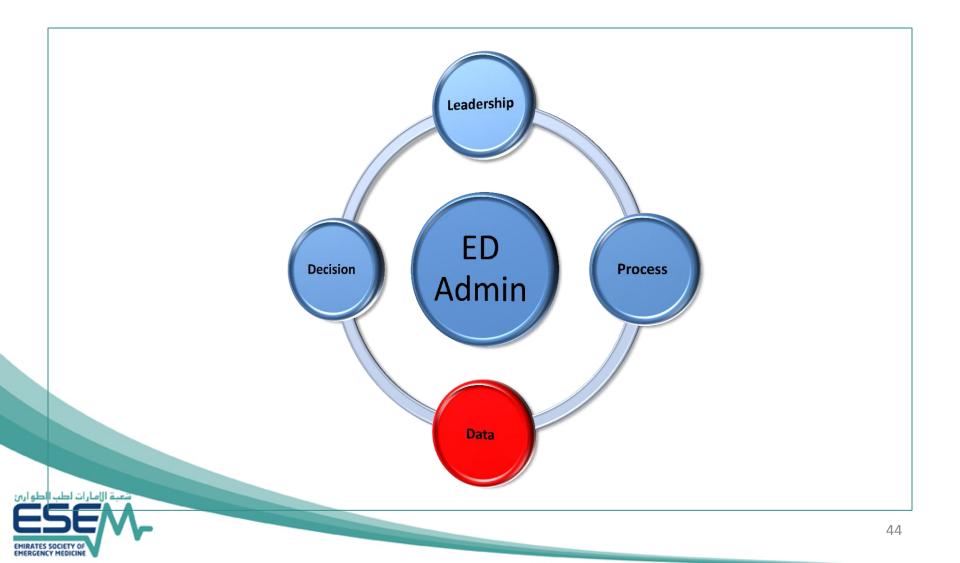


## **Patients satisfaction**

- Complaints:
  - Harm
  - Mistreatment
  - Didn't meet expectations



# **Key components**





### If you cannot measure it...... you cannot manage it.....



### Data

#### **ARTICLE IN PRESS**

#### HEALTH POLICY/CONCEPTS

### Emergency Department Operational Metrics, Measures and Definitions: Results of the Second Performance Measures and Benchmarking Summit

Shari J. Welch, MD, Brent R. Asplin, MD, MPH, Suzanne Stone-Griffith, RN, MSN, Steven J. Davidson, MD, MBA, James Augustine, MD, Jeremiah Schuur, MD, MHS

From the Intermountain Institute for Health Care Delivery Research, Salt Lake City, UT (Welch); Department of Emergency Medicine, Mayo Clinic College of Medicine, Rochester, MN (Asplin); Emergency Services, EMS and Traum, HCA-Continental Division, Nashville, TN (Stone-Griffith); Maimonides Medical Center, Brooklyn, NY (Davidson); EMP, Canton, Ohio, and Department of Emergency Medicine, Wright State University, Dayton, Ohio (Augustine); Department of Emergency Medicine, Brigham & Women's Hospital, and Harvard Medical School, Boston, MA (Schuur), for the Emergency Department Benchmarking Alliance.\*

There is a growing mandate from the public, payers, hospitals, and Centers for Medicare & Medicaid Services (CMS) to measure and improve emergency department (ED) performance. This creates a compelling need for a standard set of definitions about the measurement of ED operational performance. This Concepts article reports the consensus of a summit of emergency medicine experts tasked with the review, expansion, and update of key definitions and metrics for ED operations. Thirty-two emergency medicine leaders convened for the Second Performance Measures and Benchmarking Summit on February 24, 2010. Before arrival, attendees were provided with the original definitions published in 2006 and were surveyed about gaps and limitations in the original work. According to survey responses, a work plan to revise and update the definitions was developed. Published definitions from key stakeholders in emergency medicine and health care were reviewed and circulated. At the summit, attendees discussed and debated key terminology and metrics and work groups were created to draft the revised document. Workgroups communicated online and by teleconference to reach consensus. When possible, definitions were aligned with performance measures and definitions put forth by the CMS, the Emergency Nurses Association Consistent Metrics Document, and the National Quality Forum. The results of this work are presented as a reference document. [Ann Emerg Med. 2010;xx:xxx.]





Identifier	O EHR Yes	OUC Yes	O Yes Pediatrics	O OB-GYN Yes	Obs Unit Yes
	O EHR №		O No Pediatric		O Obs Unit No
Hospital Type	Bedsp	Fast Track			OBS Beds Number
	OBurkeys N		Live Tracking		
ED Visit Volume	OB volume % F	ediatric Volume %		Ambulance Arrivals	% 
Number of Doctors Total Daily	Doctor Hours Percent Admiss	ione		ente ente ente ente enternetten	con actor altra actor actor actactation actor actor ac
			Quality Indica	tors Time	to Antibiotics Sepsis
Patient per Provider Hour Rat	VU per Clinical FTE Patient S	Satisfaction			
atient per Provider Hour Rat	Patient 3	Satisfaction		Time	to Antibiotics HCAPS
				Lime	e to Aspirin MI
LOS Door to Doct	or % AMA % LWB	s		Time	e to CT Stroke
				Time	e to CT Trauma
				Doo	r to Balloon or to Needle

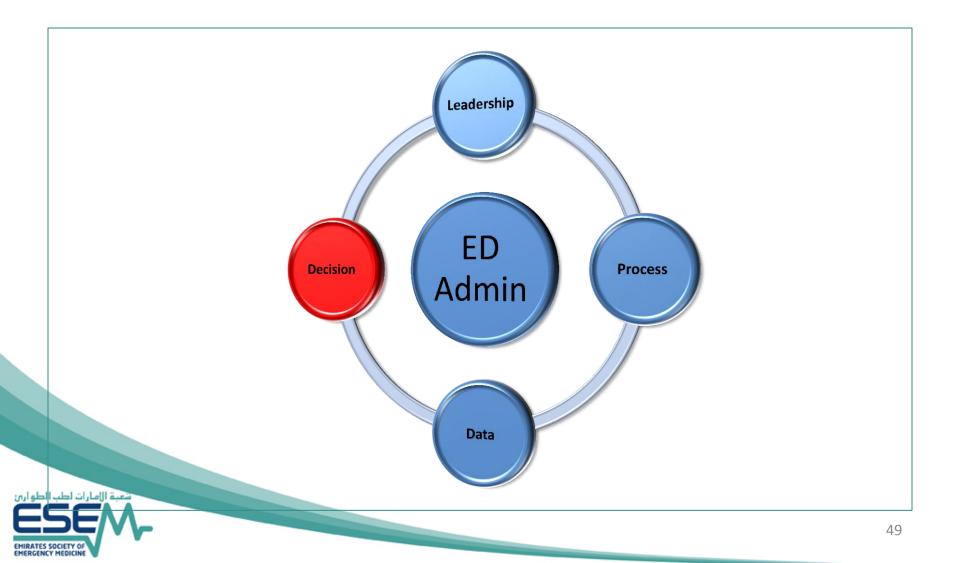








# **Key components**



### Decision



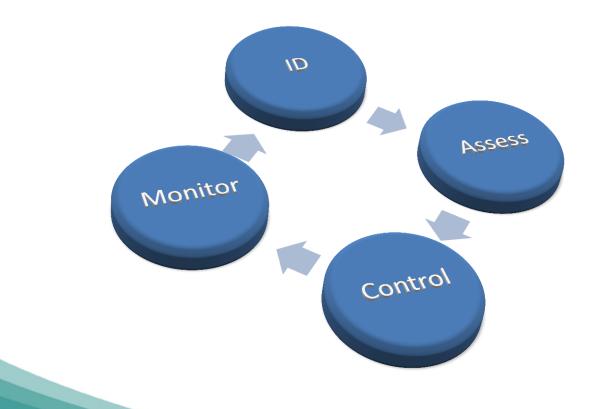


## Decision

- Logistics
- Human resources
- Finances
- Relationships
- Medicolegal



## **Risk management:**





# **Risk management:**

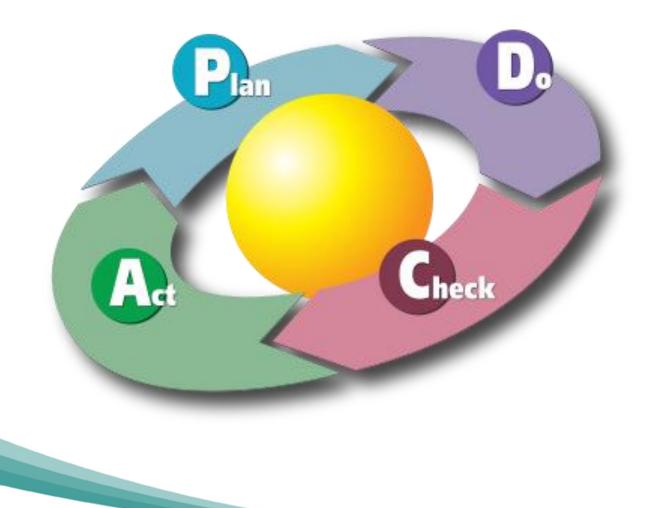
- Patient safety
- Documentation
- Discharge instructions
- Clinical Practice Guidelines
- Communication
- Handover



ECC Report to Floor Form <ol> <li>This firms is to be used on all patients attented to the longital.</li> <li>Called upper is no be attempted fort. If the scopping zone is unamiable, the reporting sume will complete this floor, contry the darps name of enciving floor and that the films in the scopping floor (ecception is Folicistic, for to XXXX). The darps name will retire and dispatients ation, will call the segonting more for which communication. If you call has been measured within them minute, the segment patients for which communication. If you call has been measured within them minute, the segment patient to be hold briefly for code +4, Rapid Response or Dr. Throng no unit.</li> <li>Its FORMCLANNOT BE USED FOR ICU TRANSFERS.</li> </ol>	
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B	
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### Success is the ability to go from one failure to another with no loss of enthusiasm...

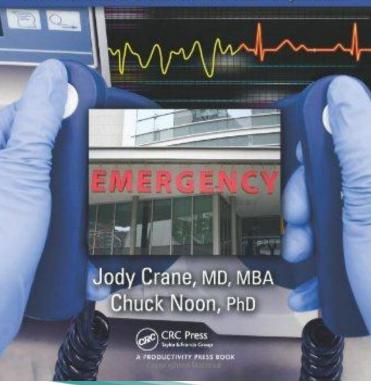
Sir Winston Churchill (1875-1965)



### References

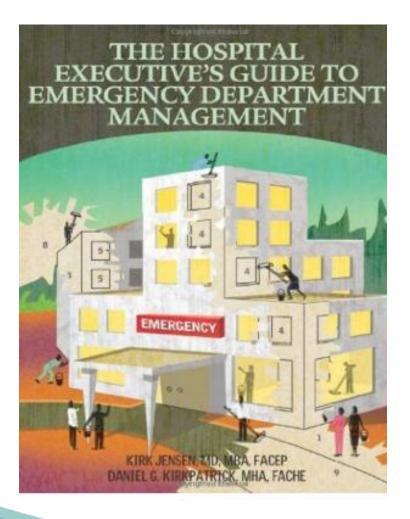
### The Definitive Guide to Emergency Department Operational Improvement

Employing Lean Principles with Current ED Best Practices to Create the "No Wait" Department



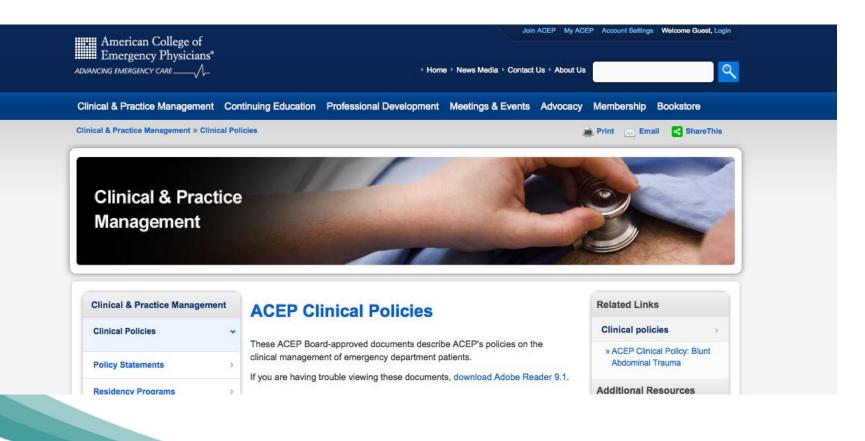


### References





### References







### Save the Date

### 5 - 9 December 2014

### www.esem2014.com

