Redesigning the Front-end

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Outline

- The case for improving the front-end - why what we are doing is so important!
- 10 things you need to address in order to fix your front-end.

Can this Happen In *Your* ED?

Death of heart attack victim in Illinois hospital waiting room ruled homicide

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WAUKEGAN, Ill. (AP) — A coroner's jury has declared the death of a heart attack victim who spent almost two hours in a hospital waiting room to be a homicide.

Beatrice Vance, 49, died of a heart attack, but the jury at a coroner's inquest ruled Thursday that her death also was "a result of gross deviations from the standard of care that a reasonable person would have exercised in this situation."

A spokeswoman for Vista Medical Center in Waukegan, where Vance died July 29, declined to comment on the ruling.

Vance had waited almost two hours for a doctor to see her after complaining of classic heart attack symptoms — nausea, shortness of breath and chest pains, Deputy Coroner Robert Barrett testified.

She was seen by a triage nurse about 15 minutes after she arrived, and the nurse classified her condition as "semi-emergent," Barrett said. He said Vance's daughter twice asked nurses after that when her mother would see a doctor.

When her name was finally called, a nurse found Vance slumped unconscious in a waiting room chair without a pulse. Barrett said. She was pronounced dead shortly afterward.

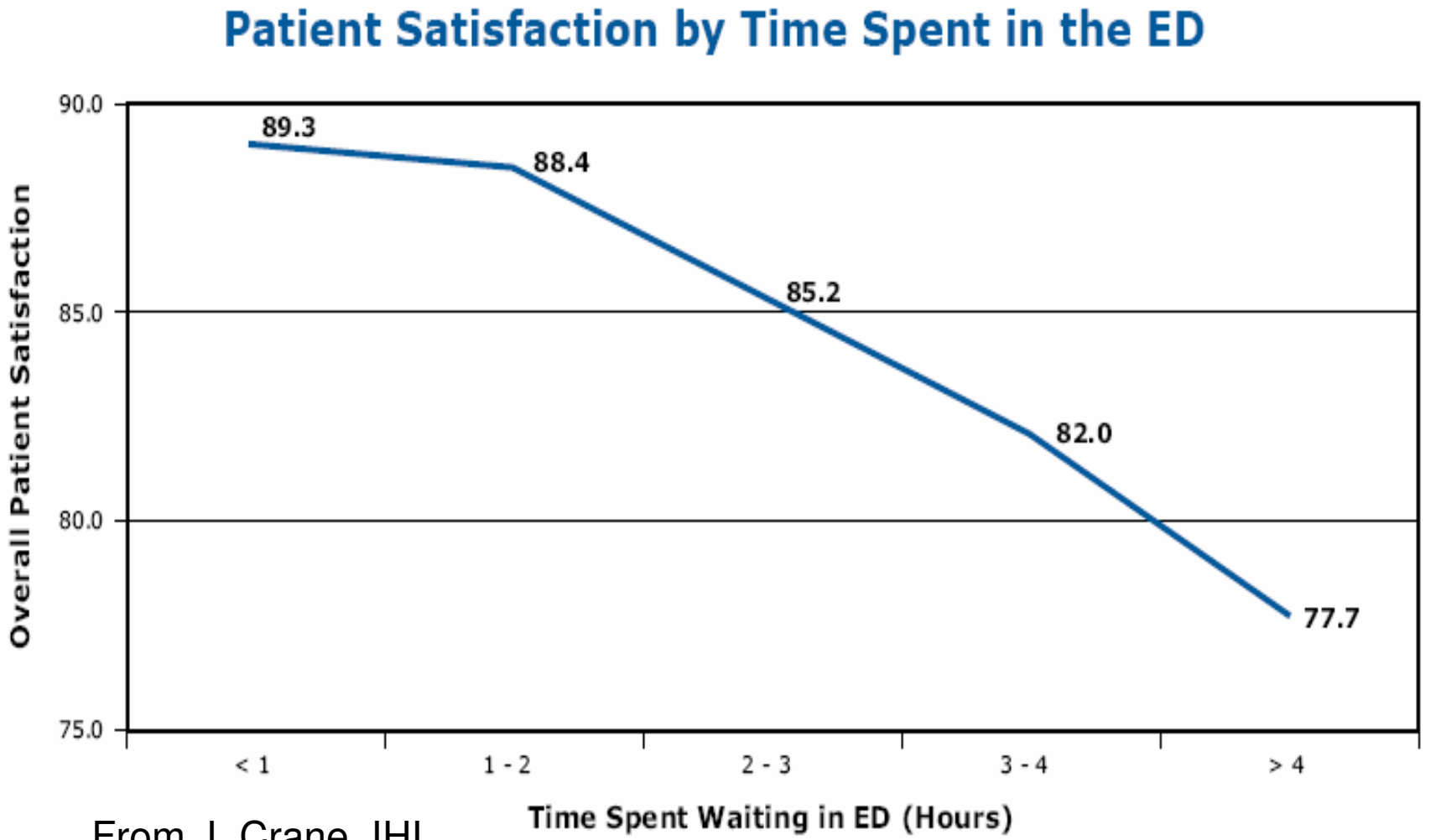
Barrett said he subpoenaed records after finding discrepancies in the hospital's version of events.

It wasn't immediately clear if the ruling would lead to criminal charges. Dan Shanes, a chief of felony review for the state attorney's office, said his division needed to review the case.

Vista Medical Center spokeswoman Cheryl Maynen said the hospital, just north of Chicago, cooperated with the coroner's investigation and had also investigated the incident. She declined to comment on the homicide ruling.

From J. Crane, IHI

Patient Satisfaction - LOS



From J. Crane, IHI

Get the provider to the patient

- More stream-lined front-end processes get the provider to the patient faster:
  - Faster time to assessment/treatment
  - Decreased door to antibiotics
  - Decreased door to analgesia
  - Decreased time to thrombolysis or cath lab
  - Improved patient satisfaction
  - Decreased LOS

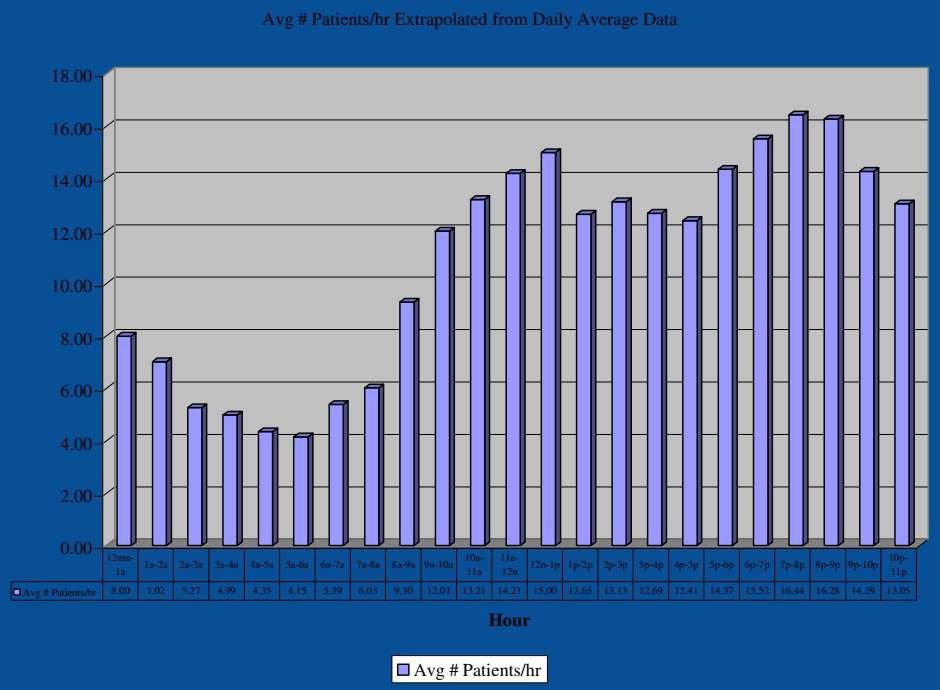
10 Key components

- 1. Understand patient demand by hour
- 2. Match triage/reg. capacity to demand
- 3. A system for patient segmentation
- 4. Distinct processes for different segments
- 5. Properly staffed FT or supertrack
- 6. Point of use supplies
- 7. Radiology/lab services available at the front-end
- 8. Rapid assessment zone (virtual bed concept) and results waiting area
- 9. Patient and results tracking system
- 10. Motivated staff with a burning platform

Adapted from J. Crane, IHI

1. Some measure of patient demand by hour and system designed to handle it

- You should know your arrivals by hour of day
- Busy and slow days
- Broken down by
  - Chief complaint
  - Triage/EMS arrivals
  - CTAS level
  - Ancillary Utilization
- This is predictable!



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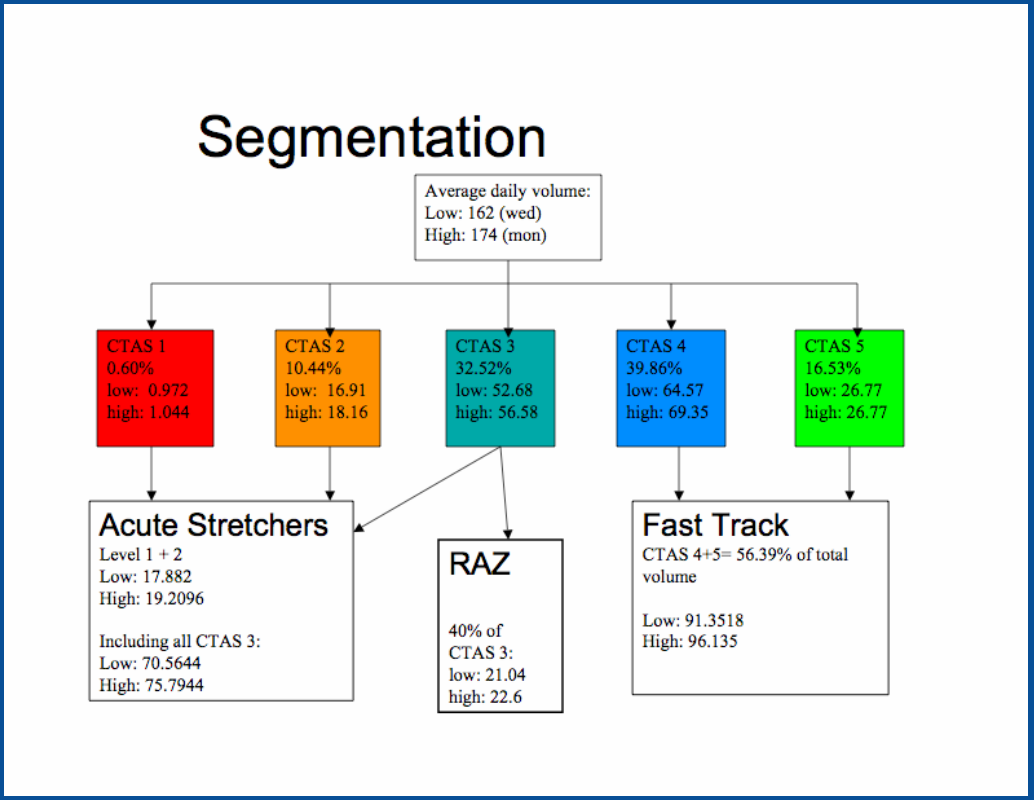
2. Match capacity to demand

- Triage should:
  - Only collect enough information to determine CTAS, resource utilization and demographics to get into the system
  - Never be the bottleneck
  - Take into account patient arrivals per hour and ensure enough staffing capacity to handle the volume at the peaks

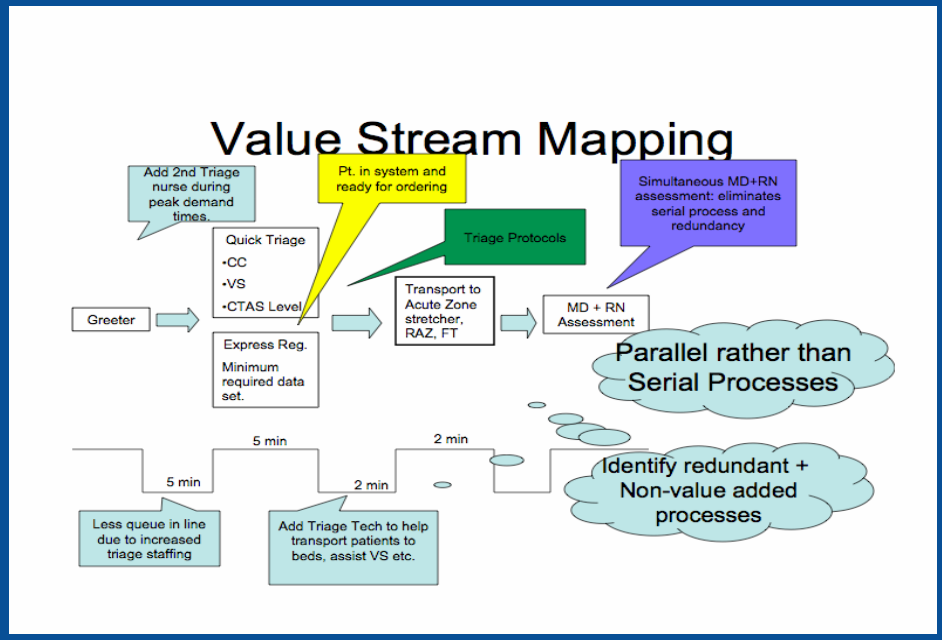
3. Patient segmentation

- Based on:
  - CTAS level
  - What resources do they need?
  - Chief complaint
  - Etc.



4. Distinct processes for different patient segments

- Segmentation will make things worse unless you design more stream-lined processes.
- Eliminate waste/redundancy from the patient's perspective



5. Dedicated resources for FT or Supertrack

- Need to have dedicated staff for FT
- Consider “supertrack” concept where easy level 4/5s are seen at or near triage/RAZ
- Nurse practitioners, Physician assistants??

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6. Bring provider + supplies closer together

- Dedicated procedure carts (laceration, I+D etc.)
- Bring staff, commonly used supplies, equipment closer together to the patient to reduce wasted movement
- MD at Triage, RAZ, Team-based assessments

7. Radiology and lab accessible close to front-end

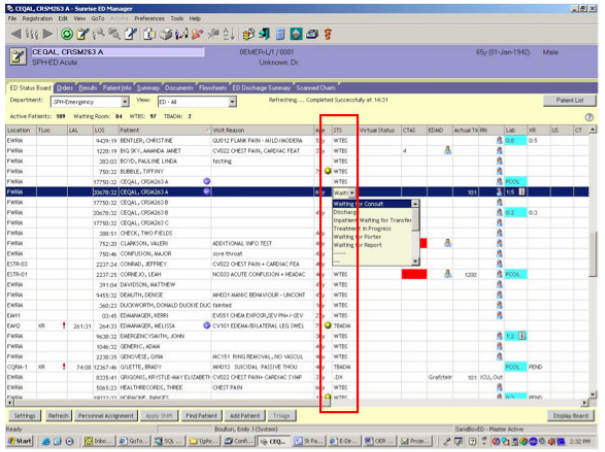
- Bring lab and radiology as close to the front-end as possible
- Lab draw available at or near triage/RAZ
- Utilize porters

8. Virtual Bed concept

- Rapid assessment zone , Streaming concept (Richmond, LGH, Kelowna, St. Pauls, etc…)
- A process where patients are rapidly assessed, investigations and treatments started..
- Virtual beds use vs dwell mode increases capacity
- Results waiting area

9. Tracking patients and results

- Need a system to track where patients are in their journey
- Need a system to track results
- Ideally electronic but can be a manual whiteboard
- Progress Chaser



10. Will + burning platform

- Need to motivate our staff and hospital to create a burning platform for transformation
- Need to move towards a culture of continuous improvement
- Need to convince staff that the status quo is no longer possible or acceptable
- Show them how it help them do their jobs better and more easily

Summary

- Optimizing the front-end processes is the key to safe, efficient ED operations
- There are many proven strategies that can be modified and adopted in your institution
- ED's with < 30,000 visits will benefit less from segmentation
- ED's > 30,000 should consider segmentation