



8th Nordic Course in Emergency Radiology
May 8-11, 2023 – Aarhus, Denmark

NORDICFORUM www.nordictraumarad.com
TRAUMA & EMERGENCY RADIOLOGY

Building a new ER division



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 **Sunnybrook**
HEALTH SCIENCES CENTRE
when it matters
MOST



Disclosure

I have nothing to disclose pertaining to this talk

...except my gratitude to Dr. Masoom Haider



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Starting an Emergency Radiology Division Scheduling and Staffing, Compensation, and Equity and Parity



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KEYWORDS

- Emergency radiology division • Management • Scheduling • Staffing • Compensation • Equity • Parity

KEY POINTS

- Emergent imaging volumes and complexity for acutely ill and injured patients and demands for rapid final report turnaround times continue to increase.
- Many practices have established emergency radiology divisions to cope with these needs, and many other departments are considering doing so.
- Establishing a new division of emergency radiology in a practice with long standing traditional operations practices poses both challenges and opportunities.
- A panel of experts share their experiences with establishing, growing and managing an emergency radiology division in a question and answer format.

...except my gratitude to Dr. Masoom Haider

...I *by no means* did everything right!



Our current state

Hybrid model:

- Overnights (10p – 7a): in house Emergency & Trauma Radiologist
- Day / evening (8a – 10p): organ based subspecialty

Trainees: 1 resident overnight, at times a fellow (4 fellow spots future)

Dedicated reporting room in ED, next to ED CT (Siemens Force)



Our setup





Our setup





Our setup



1325 beds
678 acute care
128 ICU

> 12.000 employees
> 1.000 docs
> 350 Medical Imaging



Our setup





Our setup



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May 8-11, 2023 – 8th Nordic Course in ER – Building a new ER division

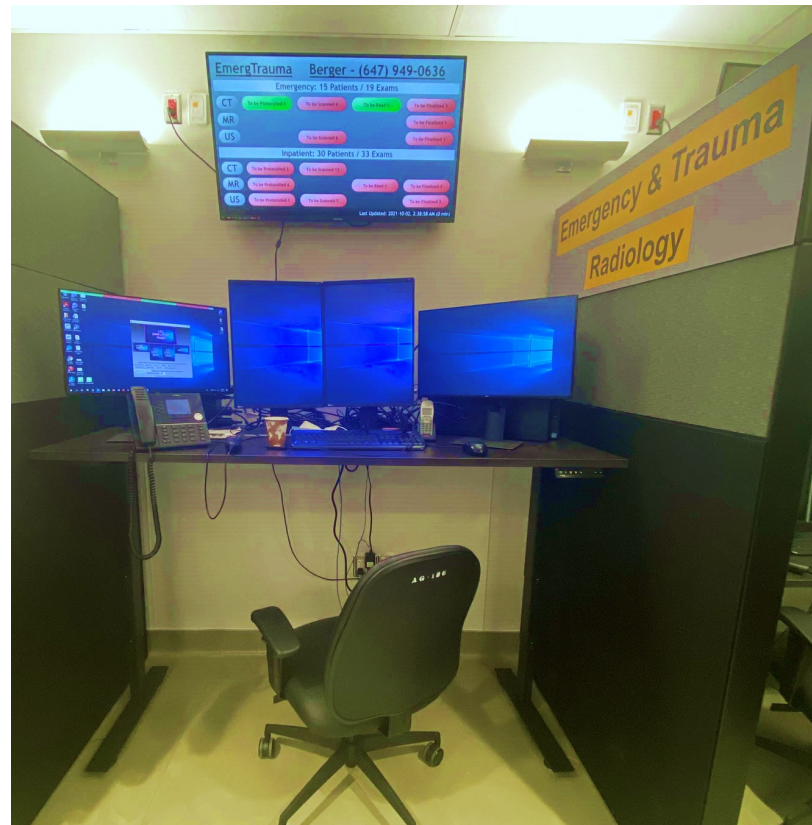


Our setup





Our setup





Teaching Objectives

1. discuss the need for buy-in
2. understand importance local setting
3. describe challenges and opportunities



Emergency Radiology

Surveying the ER landscape, differences in:

- hours of day, imaging types reported
- single vs multi-campus / institution
- in-house vs remote / tele-radiology
- ED only? Inpatients? ICU?



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Is it 'how'?

Introducing a new subspecialty *needs* buy-in:

- support from leadership and radiologist group
- starts with 'why'
 - to be best prepared for success
 - to have alignment about goals





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Followed by how...





So 'Why'?

Putting the patient first



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So 'Why'?

Putting the patient first



healthcareers.com

Access/triage

24/7 consistency

Rad in care team

quick final reads

Multi-organ

Match EM &
trauma service



So 'Why'?

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healthcareers.com

Access/triage

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quick final reads

Increased focus QA, QI and research

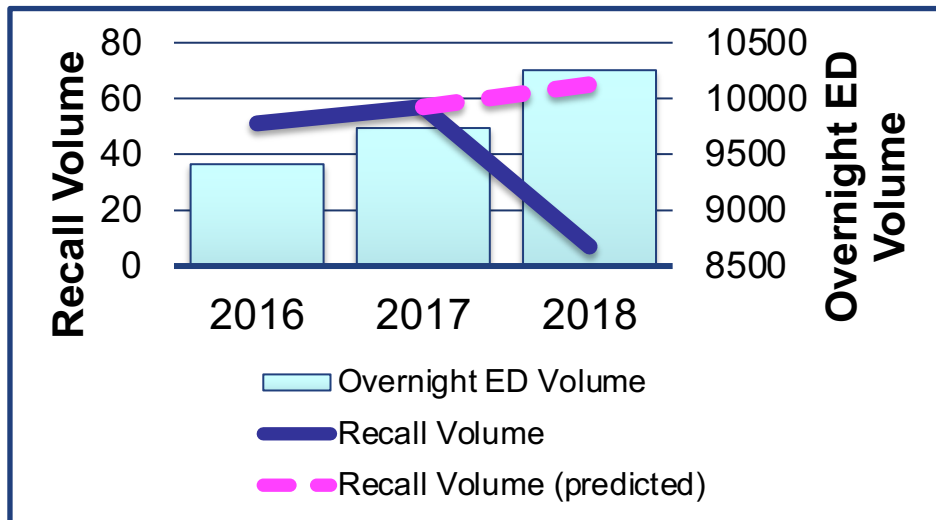
Multi-organ

Match EM &
trauma service

Impact overnight ER on ED recalls

Results

- Statistically significant reduction in number of ED recalls related to discrepant radiology reports ($b = 2.11$, $z = 5.42$, $p < 0.001$).
- Despite a **9% increase in ED visits** with imaging studies performed, imaging related ED **recalls dropped almost 90%**.



CONCLUSION:

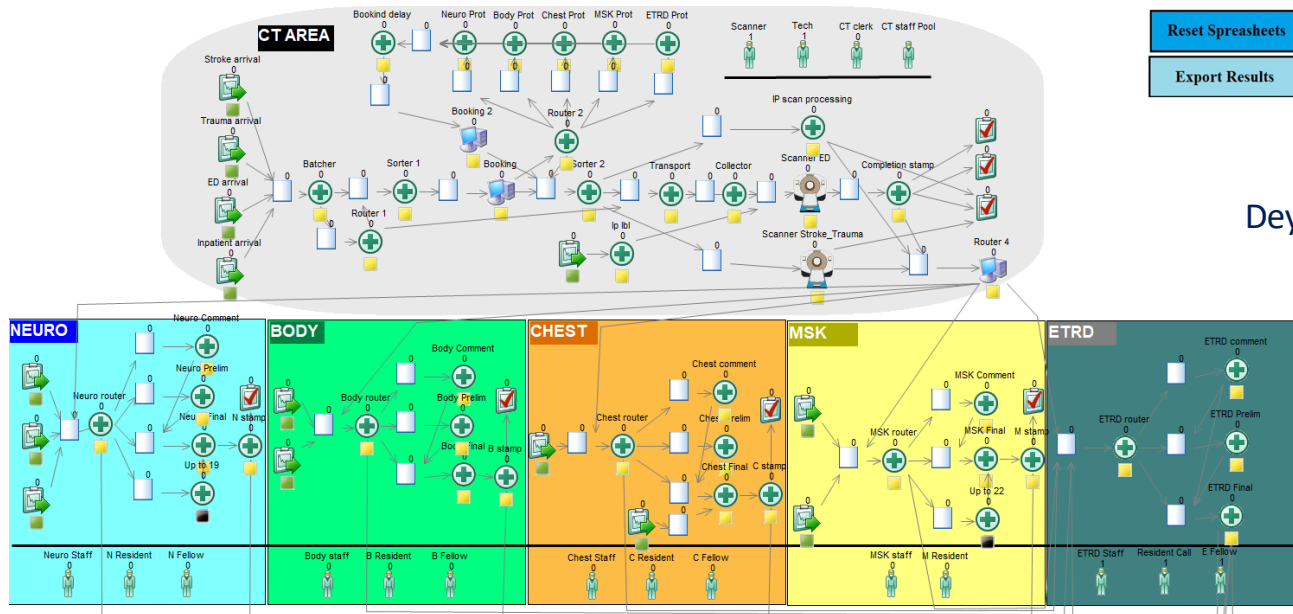
The implementation of overnight in-house radiologists significantly reduced rate of ED recalls related to discrepant radiology reports at our institution, resulting in decreased costs and improved patient flow.

RSNA 2019

Optimization of patient flow

A discrete event simulation model to shorten emergency CT turnaround times

RSNA 2019



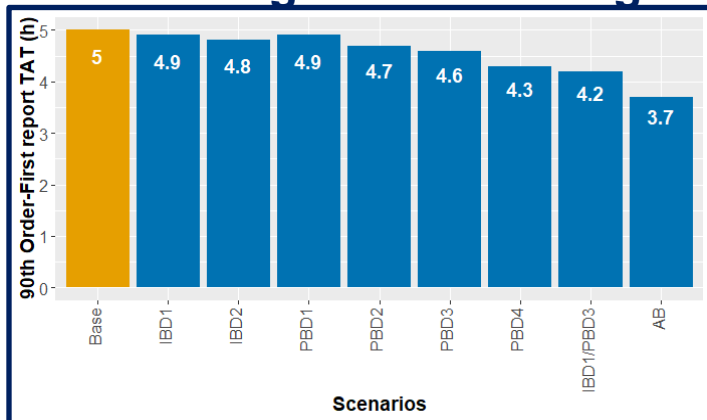
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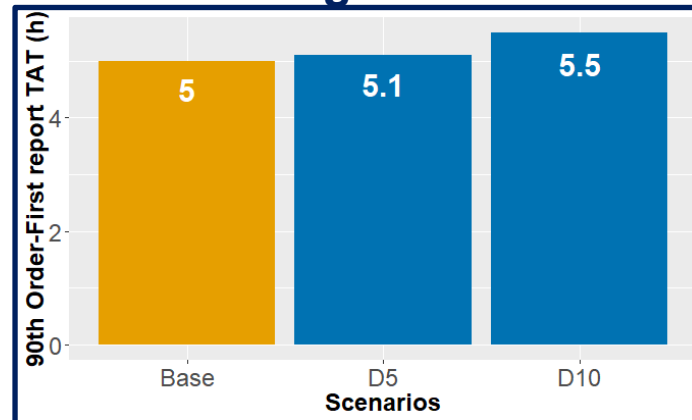
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Optimization of patient flow

Reducing CT scheduling



Increasing CT volume



Outcome tested scenarios:

- Scheduling delay:** Reducing scheduling delays by 50% (i.e., IBD1/PBD3) could lead to a 16% TAT reduction. Delays occur when CTs that are protocolled need to be manually scheduled.
- CT volume increase:** Increasing CT demand by 5% will provoke a 2% TAT increase, and increasing CT demand by 10% will lead to a 10% TAT increase.



Key question

Is enhancing care for the acutely ill and traumatized
an essential institutional need?

Does it:

- transcend who is Chief of Department?
- fit a strategic priority for the institution?



Results asking 'Why?'

Answers to why bring into focus:

- Vision
- Goals
- Strategic Plan

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Specific to your institution!



How – foundation

- Endorsement of vision leadership stakeholders
- Work out financial impact
- Negotiate with hospital/group:
 - Support hospital
 - 5-year hiring plan
- Communicate regularly with leaders in department



How – People

Recruit ER division leader who can deal with challenges and convince others of benefits / opportunities (recruitment package?)

If in academic setting, create academic plan with Chair

Commitment to number of team depending on model ***at the start***, sustainability paramount

ER leader to help recruit their team



Challenges & Opportunities

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- Intensify collaboration:
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- Input/development training:
 - medical school
 - ER rotation residency program
 - Fellowship program
 - allied specialties



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 - allied specialties
- Strong focus QA/QI and research



Summary

Introducing Emergency Radiology:

- putting the patient first
- model highly depending on local setting
- buy-in essential before start
- lots of planning and communication
- recruiting the right leader
- Some challenges, many opportunities
- Long and ever changing process

