University of New Mexico Internal Medicine Triage Hospitalist Pilot

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Objectives

1. Review patient care delays occurring at time of admission to Internal Medicine.
2. Discuss new Triage Hospitalist position.
3. Reflect on pilot data and next steps.
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Significant patient care delays occur at admission time to Internal Medicine.

~50% of patients are admitted to Internal Medicine at UNMH.

Admission Time Definition:
- Starts with “Consult to Inpt Medicine” order in Cerner.
- Ends with “Admit to Inpt/Observation” order in Cerner.
Baseline Data (1/1/2019 – 9/1/2019)
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Patient Arrival

ED Enters “Consult to Inpt Medicine”
Baseline Data (1/1/2019 – 9/1/2019)

Patient Arrival → ED Evaluation/Stabilization → ED Enters “Consult to Inpt Medicine”
Baseline Data (1/1/2019 – 9/1/2019)

“Patient Arrival” to “Consult to Inpt Medicine” = 6.1/7.1 hours (Median/Average)

ED Evaluation/Stabilization

ED Enters “Consult to Inpt Medicine”

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Patient Arrival  →  ED Enters “Consult to Inpt Medicine”  →  IM Enters “Admit to Inpt/Observation”

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- ED Evaluation/Stabilization
- Admission Time
Baseline Data (1/1/2019 – 9/1/2019)

“Patient Arrival” to “Consult to Inpt Medicine” = 6.1/7.1 hours (Median/Average)

“Consult to Inpt Medicine” to “Admit to Inpt/Observation” = 4.7/5.7 hours (Median/Average)
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IM Enters “Admit to Inpt/Observation”

ED Evaluation/Stabilization + Admission Time = 11.8/12.8 hours (Median/Average)
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ED Evaluation/Stabilization + Admission Time = 11.8/12.8 hours (Median/Average)
Root Cause Analysis of Admission Time Delays:

- Insufficient IM admitting capacity
- High medical complexity resulting in prolonged admission evaluations
- Batched admission requests from ED
- Incorporation of ICU and PALS admissions into admit workflow
- Pending surgical specialty consultations
- Uncertain admitting service agreements
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New Triage Hospitalist Role
SMART Aim Statement:

*Decrease admission time, defined as “Consult to Inpt Medicine” to “Admit to Inpt/Observation”, from baseline average 5.7 hours to an average of 2 hours or less by July 1, 2020.*
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Triage Hospitalist Role Overview:

- ED attending to IM attending bedside handoff
- Makes final clinical decision to admit, indicated by placement of “Bed Request” order in Cerner
- Helps overcome ED discharge barriers that would have otherwise resulted in admission to IM
- Confirms complete ED evaluation/stabilization
Triage Hospitalist Role Overview:

- Confirms ED placing “Consult to Inpt Medicine” order into Cerner
- Confirms patient evaluated for possible transfer to outside facility
- Distributes patients pending complete admission to IM teams
- Responsible for clinical care of patients pending complete admission
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Triage Hospitalist Pilot

- November 1st to December 31st, 2019

- Prospective Data Collection
  - Patient arrival timestamp
  - “Consult to Inpt Medicine” order timestamp
  - Start and end time of attending handoff (mins)
  - Bedside handoff (yes/no)
  - Final admission decision (admit vs other)
  - “Bed Request” order timestamp
    - Surrogate for “Admit to Inpt/Observation”
Retrospective Data Collection
- Transfer to ICU within 24 hours
- Transfer to alternate service
- Discharge next day
- Recidivism

Prospective REDCap Surveys
- Collected data on pilot strengths and weaknesses from ED and IM clinicians
8 pilot shifts

- 75 patients evaluated by the Triage Hospitalist position over the course of 8 weeks
Outcome Measures:

- Average time from ED “Consult to Inpt Medicine” to IM “Bed Request”
  = 40 minutes

- Average time from IM “Bed Request” to IM “Admit to Inpt/Observation”
  = 2 hours and 22 minutes

- Average ”Admit Time”
  = ~ 3 hours
Pilot Results

Process Measures:

- ED placed “Consult to Inpt Medicine” order 28.6% of the time.
- 7 minutes on average elapsed between “Consult to Inpt Medicine” order and start of attending handoff.
- Attending handoff required 3.41 minutes on average.
- Attending handoffs occurred at patient bedside 60.7% of the time.
Balancing Measures:

For those patients evaluated by Triage Hospitalist…

- 56 (75.7%) were admitted to IM
- 16 (24.3%) were dispositioned elsewhere
- 5 patients (6.7%) were discharged from IM the following day
- 1 patient was transferred to another service following admission to IM
- 1 patient was re-admitted within 72 hours of discharge from IM
- 0 patients transferred to ICU
Feedback was overwhelming positive!

“I love this, it allows me to see more patients and keep the department flowing.” – ED Resident

“Honestly, this is the best thing since sliced bread or the advent of ice.” – ED Resident

“Admissions are happening faster. There is less confrontation. EM is freed up to see new patients. Patients are boarding less.” – ED Resident

“Quick triage and admission. Cordial and collegiate discussions. – IM Attending

“Great for patient care. Smooth.” – EM Attending
Triage Hospitalist Pilot resulted in a ~50% reduction in Admission Time.

![Diagram showing patient arrival, ED consult, IM admit, and time intervals.](image-url)
Due to pilot success, Triage Hospitalist role implemented between 7am and 10pm on 1/1/2020.
Average "Consult to Inpt Medicine" Order to "Bed Request" Order in Minutes

Black - Non Pilot Days, Red - Pilot Days

Triage Hospitalist
7am - 10pm
Conclusions
• “Admission Time” decreased from ~5.7 hours average to ~3 hours average.

• “Admission Time” remains greater than 2 hour goal.
Next Steps
• Anticipated Late March 2020
  • Implement TigerConnect feature to…
    • Improve ease of communication between ED and IM
    • Increase adherence of ED “Consult to Inpt Medicine” to 100%.

• May 1st 2020
  • Complete post-intervention survey of ED and IM clinicians to determine whether interpersonal aspects of admission (collaboration, respect, communication, etc.) have improved with Triage Hospitalist role implementation.

• July 1 2020
  • 24/7 Triage Hospitalist services
Questions