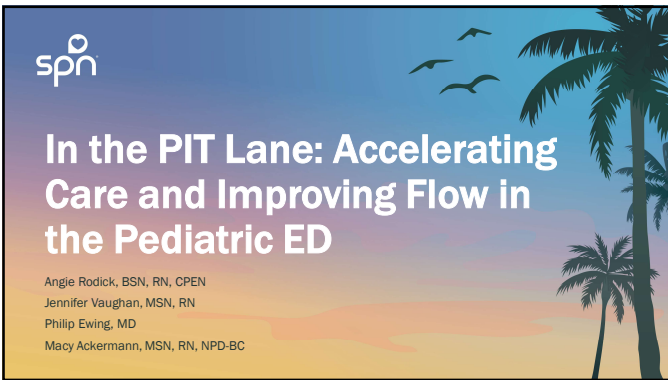
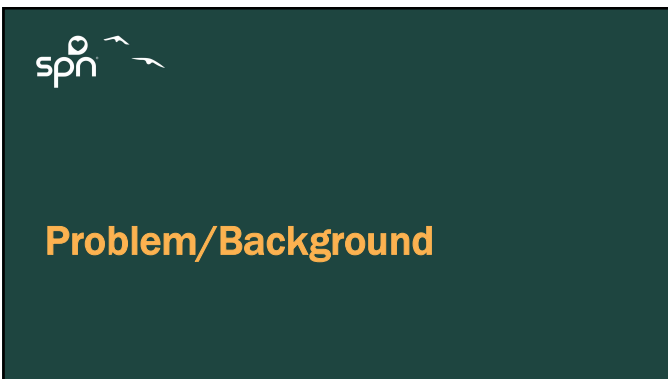




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Case Scenario (Before PIT)

An 8-year-old, with no PMHx, presented to the ED c/o RLQ abd pain x3 days, with worsening this day, and vomiting.

- Triage: VSS, 6/10 RLQ pain, dry mucous membranes, and slightly pale.
- Acuity: ESI 3
- The patient received Tylenol for pain, which led to temporary symptom relief.
- Given the transient improvement in symptoms and the prolonged wait, they made the decision to leave without being seen (LWBS).


Approximately 36 hours later, the patient returned to the ED with:

- Severe, diffuse abdominal pain
- Fever and tachycardia
- Signs of systemic illness concerning for sepsis
- Further evaluation and imaging revealed a ruptured appendix with intra-abdominal infection, requiring urgent surgical intervention and inpatient admission.



4

Intro/Background



Dallas Campus

- 488 Beds (134 ICU beds, including Neonatal and Cardiovascular)
- Urban
- Academic – 50 Pediatric Residents per year; Pediatric ED Rotations for 7 Outside Programs
- Quaternary Care Hospital
- ACS Level 1 Trauma
- We do not provide inpatient Burn Care or Psychiatric Services

Plano Campus

- 212 Beds (16 ICU)
- Suburban
- Community Hospital

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Children's Health – Emergency Department


72 Beds across **two** floors

- 4 Critical Care/Trauma Bays
- Dedicated SANE room

16 Internal Waiting Spaces

Adjacent Urgent Care –

- 12,000 MSE
- 14,000 self-referrals



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LWBS is a Patient Safety Issue

ESI 2-3 patients are High Risk

In 2024 ...

- 38% of ESI 2 patients admitted
- 12% of ESI 3 patients admitted

~ 150 admissions missed annually due to LWBS

LWBS represents:

- Delayed diagnosis of serious illness
- Missed interventions (procedures, treatments)
- Disease progression before return → increased risk of complications and sepsis

These are not lost visits — these are delayed patients.

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Why We Focused on ESI 3 Patients

2024 LWBS by Acuity:

- ESI 2: 2 cases → RARE
- **ESI 3: 1,246 cases**
- ESI 4/5 – 3,507 cases

The Decision: **ESI 3 = The Greatest Opportunity for Impact**

- High volume of LWBS cases
- Still clinically urgent patients
- At risk for decompensation if care is delayed

Existing Safeguards:

- ESI 2 LWBS classified as Safety Events
- Standing Delegation Orders (SDOs)
- Low-acuity diversion (ESI 4/5s → Urgent Care)

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Framework & Change Management Approach

9

How We Drove Change

The Framework

PLAN

- Identify LWBS risk (ESI 2-3)
- Define target population (ESI 3)

DO

- Implement PIT workflow
- Pilot across care spaces

STUDY

- Monitor LWBS, LOS, staff feedback

ACT

- Refine workflow and staffing model

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How Were We Successful?

- Identified key stakeholders
- Developed a standardized patient flow
- Defined PIT inclusion/exclusion criteria
- Piloted process across designated spaces
- Transitioned from an Attending-led to a Fellow-led PIT
- Established staffing models and orientation to PIT processes
- Optimized patient flow between waiting areas and treatment spaces
- Held regular multidisciplinary meetings and huddles for continuous feedback
- Utilized a core PIT team to ensure consistency in the execution of the process


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Methods: Designing and Implementing PIT

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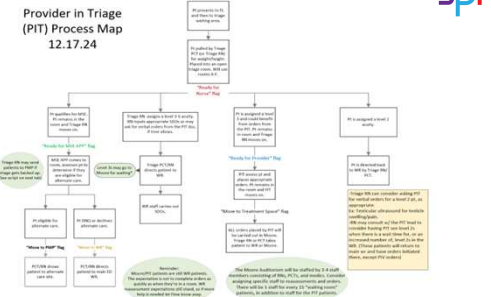
Previous Triage Model

- 1. ESI (Emergency Severity Index) Model**
 - Five-Level System: Ranging from Level 1 (most urgent) to Level 5 (least urgent).
 - Optimizes Patient Flow: Facilitates efficient prioritization of care based on acuity.
- 2. Stationary Triage**
 - Nurses occupy one defined triage booth
 - Triage efficiency determined by number of triage RNS
- 3. Overcrowding Challenges**
 - Extended Wait Times: Increased patient volume leads to longer wait times.
 - Heightened Patient Risk: Prolonged delays contribute to adverse health outcomes.



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PIT Process Outlined
Provider in Triage (PIT) Process Map 12.17.24




Two floor ED
↓
Challenge!

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Implementing PIT


- Rolled out staff education via email, Friday communications, shift to shift and staff huddles
- Created Flag System for patient sorting
- Designated a "PIT Lead"
- Defined inclusion criteria
- Core group instrumental for success
- Separated "Pitted" patients based on orders




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PIT in High Census




- Utilized designated treatment space
- Focused on ESI 3 patients
- PIT Hours 1500-2300




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PIT in Low Census




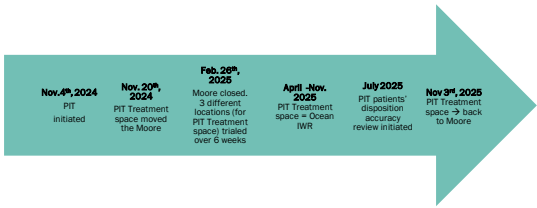
- Trialed multiple treatment spaces
- Trialed multiple staffing models
- Utilized core group of volunteers to keep feedback consistent
- PIT hours 1500-2300 with call off system implemented



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PIT Year One Overview





Nov. 4th, 2024 PIT initiated	Nov. 20th, 2024 PIT Treatment space moved to Moore	Feb. 28th, 2025 Moore closed. 3 different locations (for PIT Treatment space) trialed over 6 weeks	April -Nov. 2025 PIT Treatment space = Ocean IWR	July 2025 PIT patients' globalization accuracy review initiated	Nov 9th, 2025 PIT Treatment space → back to Moore
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Lessons Learned



- Strong **physician and nursing engagement** is essential for successful implementation,
- The PIT model **improved throughput AND patient safety** by reducing not only ESI 3 LWBS but also ESI 2 LWBS rates.
- **Earlier frontline staff involvement** in workflow design may have accelerated adoption.
- Limited physical space and staffing constraints occasionally created barriers to carrying out PIT orders.
- Dedicated PIT training for both nursing and physician workflows can support smoother transition and implementation.

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Results & System Level Impact

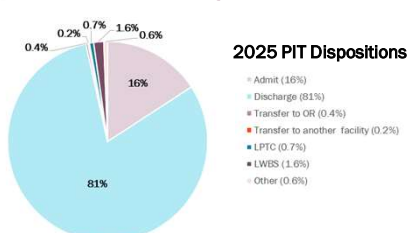
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Improved patient throughput & operational efficiency



• **5,627 patients** processed through PIT in 2025
 • **97% completed their ED visit without delay**
 • Discharged, admitted, transferred, or taken to the OR



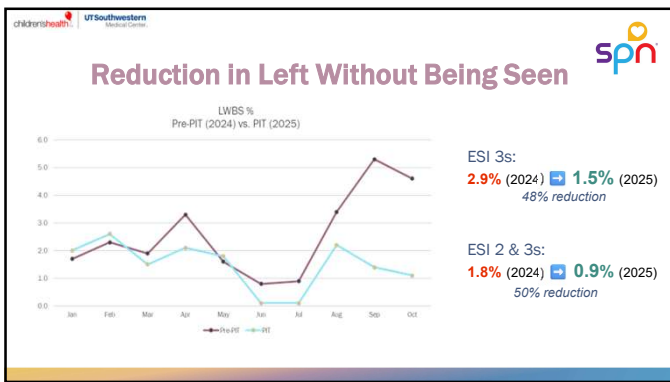
2025 PIT Dispositions

- Admit (16%)
- Discharge (81%)
- Transfer to OR (0.4%)
- Transfer to another facility (0.2%)
- LPTC (0.7%)
- LWBS (1.6%)
- Other (0.6%)

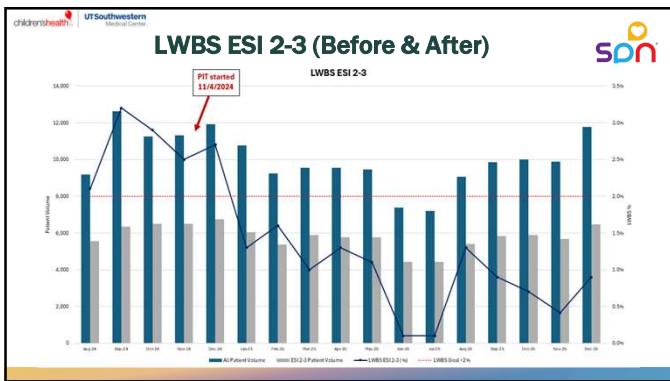
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Case Scenario (After PIT Implementation)

At 17:00: a 7yo presents to the ED with intermittent abdominal pain, fever, and vomiting x1 day.
 Triage: VSS, 5/10 RLQ pain, slightly dry MM, and pink Acuity: ESI 3
 Current wait time = 2.5hrs

PIT Orders:

- Urinalysis
- Viral panel
- Ultrasound appendix
- PIV + labs
- Normal saline bolus

PIT orders carried out in PIT treatment space


Results while waiting for room:
Ultrasound: + apy
 Urine: - UTI
 Neg. RVP

Surgery consult placed
 Patient posted for the OR from the PIT treatment space
 Rocephin and Zosyn ordered by the PIT and administered
 At 20:00: Patient transferred to the OR


Clinical Outcome -
Surgical team was consulted directly from PIT

Total ED length of stay: < 180 mins

Earlier intervention matters!



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Next Steps & Take Aways

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Where We're Going Next

1. Smarter staffing
 - Align staffing with seasonal trends + volume surges
 - Develop trigger-based staffing adjustments
2. Earlier disposition
 - Identify patients for discharge from PIT
 - Reduce unnecessary rooming
 - Improve overall ED flow
3. Expanding the Model
 - Shift focus to ESI 4/5 patients
 - Extend PIT efficiency across broader populations



We're moving from throughput improvement → system optimization



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What Made This Work

- ✓ Multidisciplinary collaboration
- ✓ Frontline staff engagement + feedback
- ✓ Addressing resistance through visibility
- ✓ Continuous, iterative refinement


Patient safety—not metrics—drove every decision.

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Contact Info – “The PIT Crew”



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