Dashboard Section

Emergency Department
Last year in Connecticut,

44,167 Patients were **treated in ED**
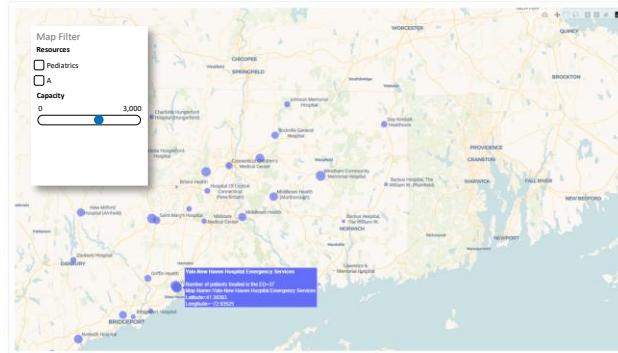
12,451 ED Patients were **admitted to hospital**

Average wait from ED to hospital admission **5.08** hrs

Admitted ED patients waiting 4+ hours for a bed **31.8** %

Map

Map Filter

Resources
- [ ] Pediatrics
- [ ] A

Capacity
0 — 3,000

Yale New Haven Hospital
20 York Street
New Haven, CT 06510

Visit Website   🟢 10 Min

Total ED Patients Treated	Total ED Admissions	Avg. Time to Admission	Transfers >4hrs After Admission Order
1,473	**1,010**	**5.08**	**31.8%**

Yale New Haven Hospital is one of the …

Table

Filter by Hospital Name
Select a Hospital

Filter by Facility Type
Facility Type 8

Filter by Number of Patients Treated in ED

Filter by Number of ED Patients Admitted

Filter by Avg Time to Admission (Min)

Filter by % Delayed Transfer >4hrs

| Hospital Name	Facility Type	Location	Number of Patients Treated in ED	Number of ED Patients Admitted	Avg Time to Admission (Min)	% Delayed Transfer >4hrs
Saint Vincent's Medical Center	8	2800 Main Street, Bridgeport, CT 06606	23	23	23	23
Middlesex Health	8	28 Crescent Street, Middletown, CT 06457	25	25	25	25
Middlesex Health (Shoreline)	8	250 Flat Rock Place, Westbrook, CT 06498	27	27	27	27
Manchester Memorial Hospital	8	71 Haynes Street, Manchester, CT 06040	29	29	29	29
Stamford Health	8	One Hospital Plaza, Stamford, CT 06904	31	31	31	31
Yale-New Haven Hospital Saint Raphael Campus	8	1450 Chapel Street, New Haven, CT 06511	38	38	38	38

Download Data

Emergency Department

1 Last year in Connecticut,

2

44,167 Patients were **treated in ED**   **12,451** ED Patients were **admitted to hospital**

Average wait from ED to hospital admission   **5.08 hrs**   Admitted ED patients waiting 4+ hours for a bed   **31.8 %**

This block presents the four key metrics in a clear and approachable manner.

As mentioned in the email, to balance the website's dual purpose—serving as both a dashboard and a resource for boarding-related information—a concise yet contextually rich (red & yellow-**2**) representation of key metrics seems critical.

- Next year, when 2025 data is added, the yellow box (yellow-**1**) could be enhanced into an interactive dropdown, allowing users to update each metric dynamically (yellow-**2**).

- Additionally, the current text placeholders are open to refinement, with opportunities to improve phrasing and incorporate more impactful keywords.

Current Data Structure: The temporary dataset currently contains minimal basic information, including the **[**_hospital name, address, coordinates, and four key metrics with synthesized counts_**]**.

However, additional details such as _maximum capacity, specialties, faculty/staff volume_, and other relevant attributes (for the interactive features in the following slides) should be discussed to be incorporated.

*The current list of ED facilities exceeds 31 rows, requiring validation.
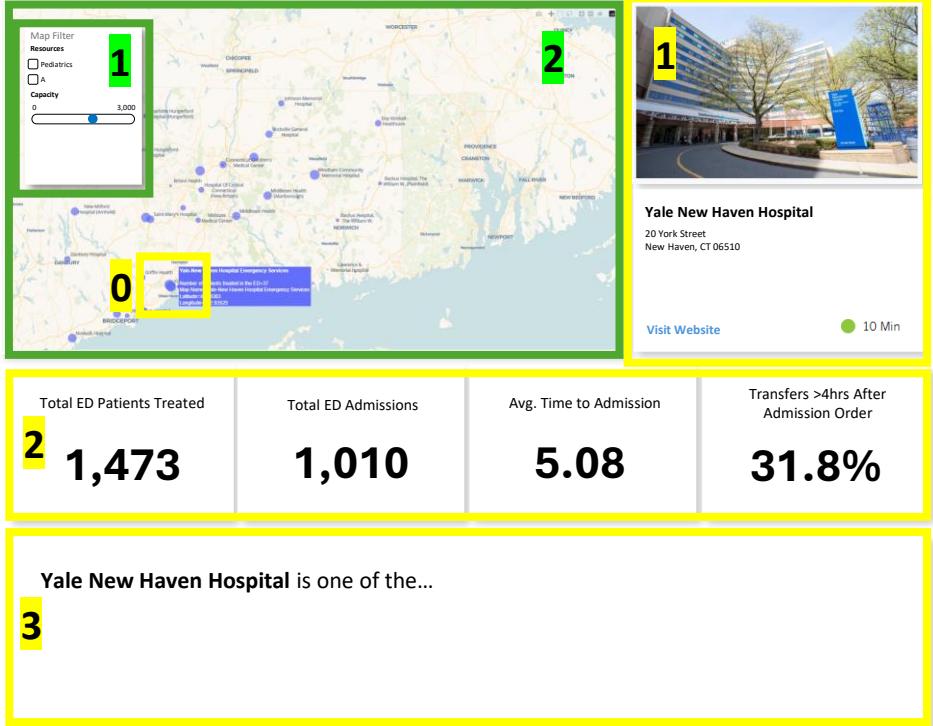
Emergency Department

Last year in Connecticut,

Map

Map Filter
Resources
☐ Pediatrics
☐ A
Capacity
0   3,000

1

2

0

1

Yale New Haven Hospital
20 York Street
New Haven, CT 06510

Visit Website   ● 10 Min

Total ED Patients Treated	Total ED Admissions	Avg. Time to Admission	Transfers >4hrs After Admission Order
2 1,473	1,010	5.08	31.8%

Yale New Haven Hospital is one of the…

3

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*This block represents the first half of the ED dashboard, focusing on **map-based** visualization.*

- **Map Controls:** The interactive **controls** (green-1) on the **map** (green-2) will function as filters based on features included in the main dataset (further detailed on the next slide along with table-feature).

- **Facility Data Card:** When a **facility** (yellow-0) is selected on the **map** (green-2), a **brief profile card** (yellow-1) will appear on the right-hand side, displaying an image, full name, address, and a link to the hospital's website. The "*10 Min.*" at the bottom refers to a potentially useful feature available on the YNHH main website .

- **Detailed Hospital Information:** Additional **hospital details** (yellow-3) could be displayed beneath the **four primary metric data cards** (yellow-2), reducing the need for separate tabs/pages for all 31 hospitals. The specific content is open for discussion.

*As for the "**rating system**",* the Overall Hospital Quality Star Rating from CMS could be included. Among the five main categories (Mortality, Safety, *Readmission*, Patient Experience, and *Timely & Effective Care*), the most relevant ED-related metrics are:

- *Readmission*
  - *Rate of emergency department visits for patients receiving outpatient chemotherapy*

- *Timely and Effective Care*
  - *Percentage of patients who left the emergency department before being seen*
  - *Percentage of patients who came to the emergency department with stroke symptoms who received brain scan results within 45 minutes of arrival*
  - *Average (median) time patients spent in the emergency department before leaving from the visit*

Emergency Department

Last year in Connecticut,
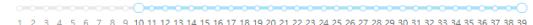
Table

1

Filter by Hospital Name

Select a Hospital ▼

Filter by Facility Type

× Facility Type B ✕ ▼

Filter by Number of Patients Treated in ED

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39

Filter by Number of ED Patients Admitted

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39

Filter by Avg Time to Admission (Min)

10   20   30

Filter by % Delayed Transfer >4hrs

10   20   30

2

Hospital Name	Facility Type	Location	Number of Patients Treated in ED	Number of ED Patients Admitted	Avg Time to Admission (Min)	% Delayed Transfer >4hrs
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3 Download Data

This block represents the second half of the ED dashboard, focusing on **tabular data representation**.

Table Filters & Functionality:
- Similar to the map control, the **table's filtering system** (yellow-1) will be updated based on the finalized dataset features.
- While not all features may require interactive filters, introducing a differentiation between the map controls and **table controls** (yellow-1) could enhance usability.
  - Map filters could focus on broader attributes like _hospital type_ and _location_.
  - **Table filters** (yellow-1) could allow for more granular selections, such as filtering by _numeric ranges (e.g., patient volume or capacity)_.

Output & Download Options:
- Once filters are applied, the **table** (yellow-2) will dynamically update to reflect the selected criteria.
- A **download button** (yellow-3) will be available, enabling users to export the filtered dataset as needed.
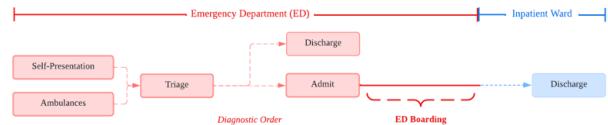
Educational/Information Section

Dashboard
Boarding
Definition
Significance
Cause
Solution
CT SB-181

Emergency Department
Boarding

What is **ED Boarding**?

Emergency department (ED) boarding refers to the waiting time for admitted patients in the ED until an inpatient bed is ready, acting as the primary cause of the overcrowding

Visit ACEP Website

What is its **significance**?

- Delayed Treatment
- Substandard Care Locations
- Increased Morbidity/Mortality
- Strain on ED Personnel
- Increased Violence Against Staff
- Higher Costs/Lost Revenue
- Decreased Patient Satisfaction

### What causes **ED Boarding**?
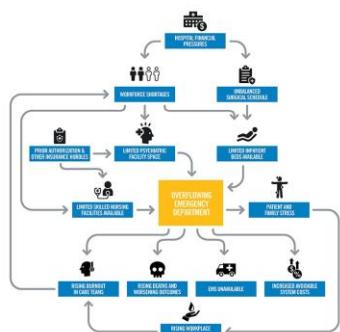
Input
Presentations with more urgent and complex care needs
Increase in presentations by the elderly
High volume of low-acuity presentations
Access to primary care
Limited access to diagnostic services in community

Throughput
ED nursing staff shortages
Presence of junior medical staff in ED
Delays in receiving test results and delayed disposition decisions

Output
Hospital occupancy
Inpatient bed shortages
Inefficient patient discharge planning

Dashboard

Boarding

Definition

Significance

Cause

Solution

CT SB-181

Emergency Department
Boarding

What is being done?

Input *Decrease Demand*
Extended GP opening hours
Decreasing ED use (increasing health literacy, access to cares)
Education campaigns, financial disincentives, redirection

Throughput / Output *Increase Capacity*
Increased ED staff
Increased ED bed
Acceleration of diagnostic pathways
Simplified admission process

Management / Operations
Early and weekend discharge
Real-time flow dashboard

American College of
Emergency Physicians®

ACEP is fighting…

"Whether part of **ACEP's** day-to-day work on behalf of its members or a more public event, ACEP leaders are constantly having meetings, conversations, emails and exchanges with all decision makers and stakeholders to help find solutions to this growing boarding crisis that impacts emergency physicians so greatly."

Research & Publications

- Boarding Patients in Emergency Departments Nearly Doubles Daily Cost of Care, Study Finds (October, 2024)
- Survival Tactics for Emergency Department Boarding (ACEP Now, March 2024)
- An Actionable, Visual Dashboard Approach to Boarding (ACEP Now, December 2023)
- Can an ED Psych Unit Decrease Hospital Admission And Boarding Time? (ACEP Now, May 2022)
- Hospital-Wide Strategies for Reducing Inpatient Discharge Delays and Boarding (ACEP Now, July 2021)
- Patient flow through the emergency department (R³ Report | Requirement, Rationale, Reference, The Joint Commission, Issue 4, December 19, 2012)
- Association between boarding in the emergency department and in-hospital mortality: a systematic review (PLOS One, April 15, 2020 https://doi.org/10.1371/journal.pone.0231253)
- Emergency Department Crowding: The Canary in the Health Care System (NEJM Catalyst, September 28, 2021)
- Boarding Critically Ill Patients in the ED (Journal of the American College of Emergency Physicians Open, July 17, 2020 | DOI: https://doi.org/10.1002/emp2.12107)
- Evolving Models in Caring for ICU Boarders (Annals of Emergency Medicine, July 08, 2020, DOI: https://doi.org/10.1016/j.annemergmed.2020.05.007)
- US Performance on ED Throughput (2006-2016) (Annals of Emergency Medicine, April 14, 2021 DOI: https://doi.org/10.1016/j.annemergmed.2021.01.009)
- Critical Care Delivery Solutions in the Emergency Department: Evolving Models in Caring for ICU Boarders (Annals of Emergency Medicine, July 08, 2020 DOI: https://doi.org/10.1016/j.annemergmed.2020.05.007)
- The Inpatient Discharge Lounge as a Potential Mechanism to Mitigate Boarding and And Crowding (Annals of Emergency Medicine, January 23, 2020 DOI: https://doi.org/10.1016/j.annemergmed.2019.12.002)
- High Impact Solutions Report (American College of Emergency Physicians, Emergency Medicine Practice Committee, May 2016)