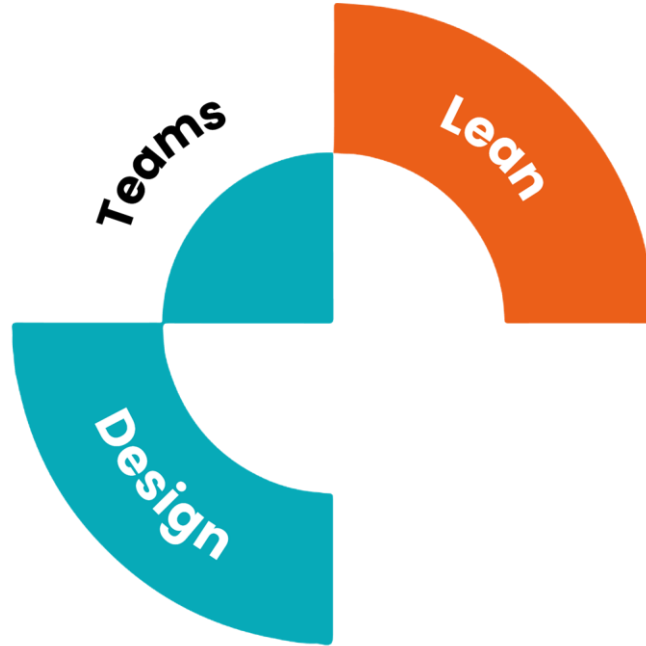**Understanding and addressing the Emergency care challenge:**

the Mater journey

Methodology

100+ Staff interviews

20+ Gembas (Structured observations)

Point prevalence studies
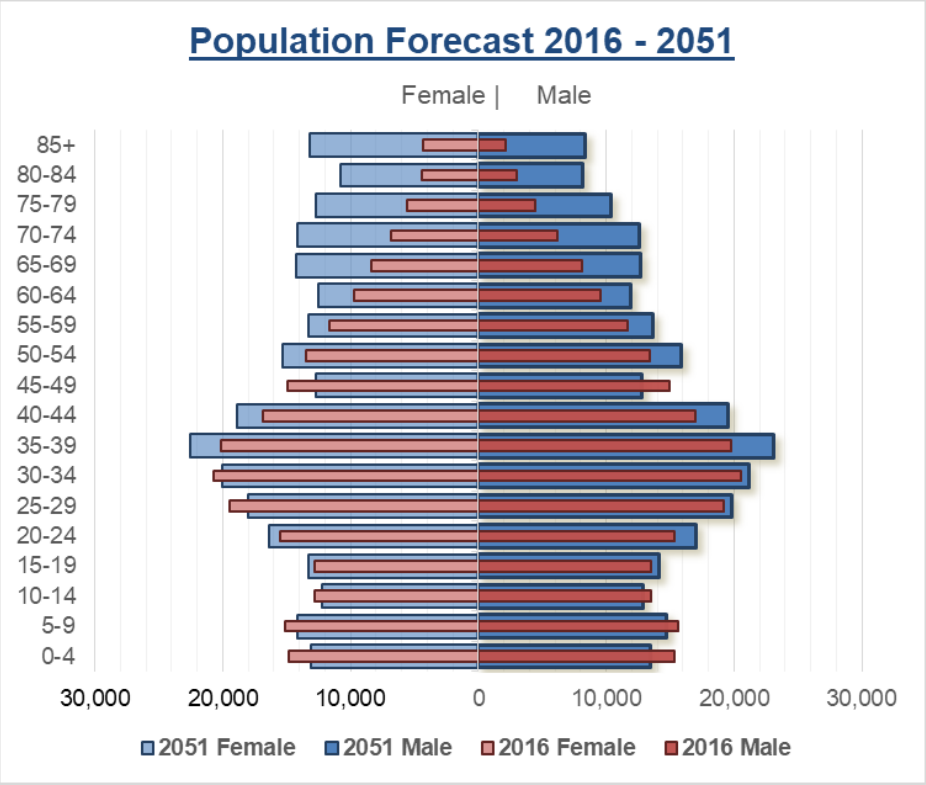
Extensive desktop data analysis

Areas of focus

Bed days

Time of day

Context

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Increasing and aging population

Population Forecast 2016 - 2051

Health indicators

Health			Area (2016)		Area change (since 2011)		Ireland (2016)		Ireland change (since 2011)	
National % ▬▬ Area % (relative proportions)			#	%	#	%	#	%	#	%
Health bad/very bad			5,042	2.0	+477	+10.4	76,435	2.0	+6,774	+9.7
Carers			9,363	3.7	+265	+2.9	195,263	3.7	+8,151	+4.4
Disabled			36,224	14.4	+1,843	+5.4	643,131	14.4	+47,796	+8.0

Health indicators of population served (selected areas in CHO 9 Dublin area only)

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Mater ED Attendances and % attendances admitted (excludes Eye ED and Smithfield)

Year	Mater Attendances	% Attendances Admitted
2010	41.735	20%
2011	41.641	21%
2012	41.560	24%
2013	46.228	26%
2014	50.006	26%
2015	50.597	25%
2016	52.247	24%
2017	54.231	23%
2018	56.817	21%
2019	57.269	21%
2020	49.107	23%
2021	52.777	21%
2022	58.005	19%
2023	60.166	21%

Legend: Mater Attendances — % Attendances Admitted — Linear (Mater Attendances)
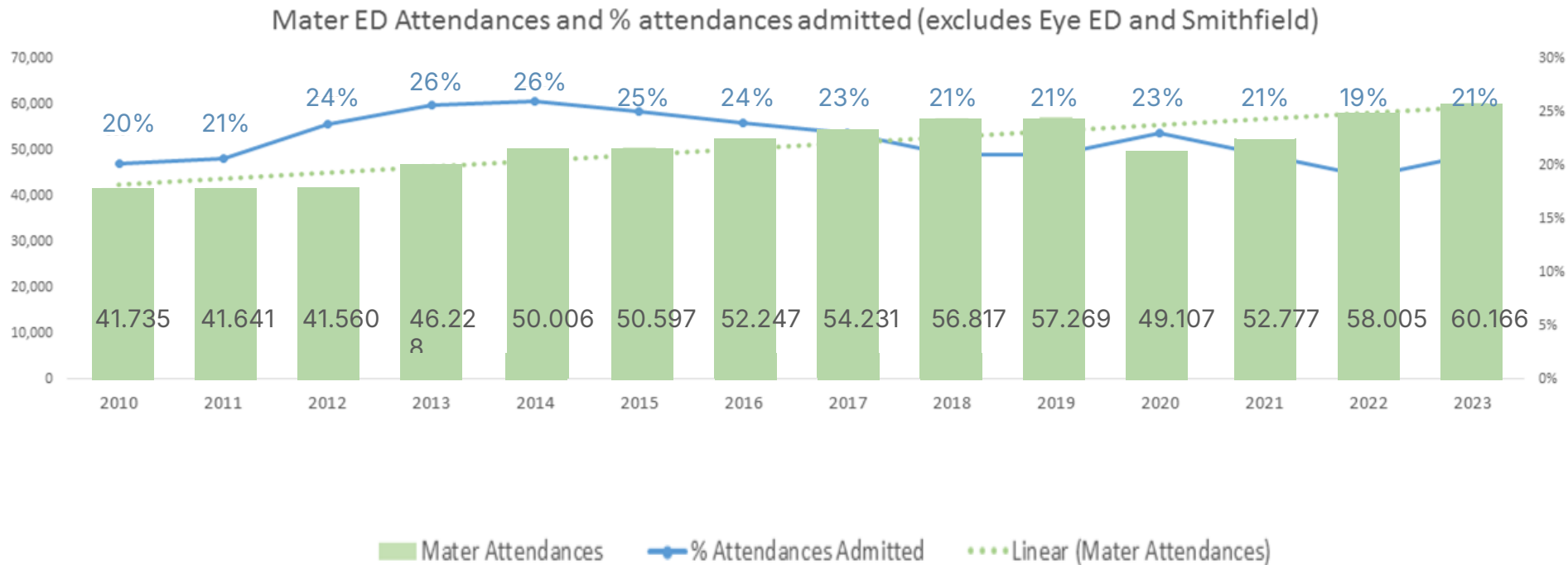
Marginalisation in healthcare
HIPE data on homelessness in 2022

Hospital	Total	ALOS
St. James's Hospital	158	8.98
Mater Misericordiae University Hospital	130	5.44
Beaumont Hospital	88	7.9
Royal Victoria Eye and Ear Hospital	41	2.7
St. Vincents University Hospital	37	18.19
St. Lukes Hospital	7	0
Connolly Hospital Blanchardstown	7	3.29
Naas General Hospital	5	7
Mayo University Hospital	5	2.4
Wexford General Hospital	4	2.5
Total	**501**	**8.61**

← Actual number is at least tenfold higher

Audit of 1 week of ED presentations (n=1257)

11% homeless

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Complexity

52%
increase in the number of referrals to social work from Emergency Department in 2 years

81%
Now deemed 'highly complex' compared with 50% in 2022

11%
of those presenting to the Mater ED are living in homelessness (n=1257, June 2024)

ABF 'complexity' ≠ Social complexity

Complex surgery with ICU stay

Homeless person with COPD and new longterm 02 requirements

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Social Inclusion Hub

Oncology

Bed base:

31

Census year to date average

58

74% stage IV disease

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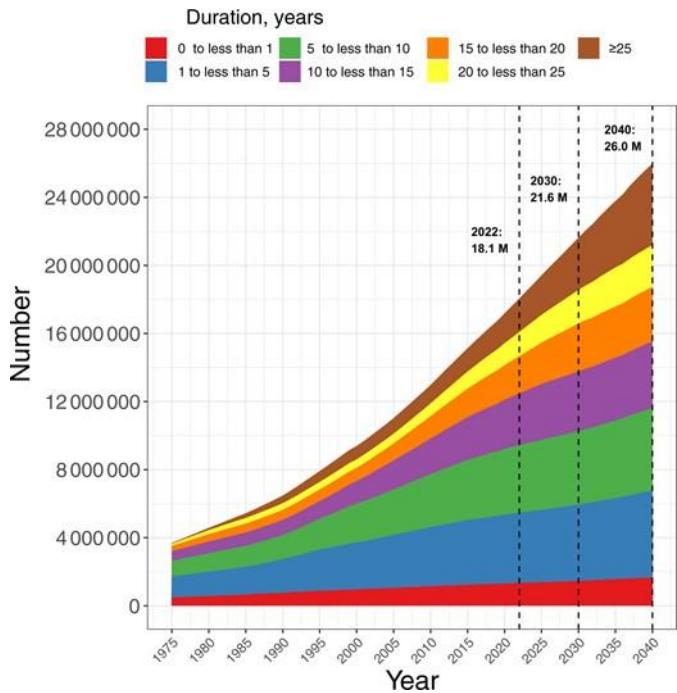
Figure 1. Number of cancer survivors living in the United States by year and time since diagnosis in years (duration).
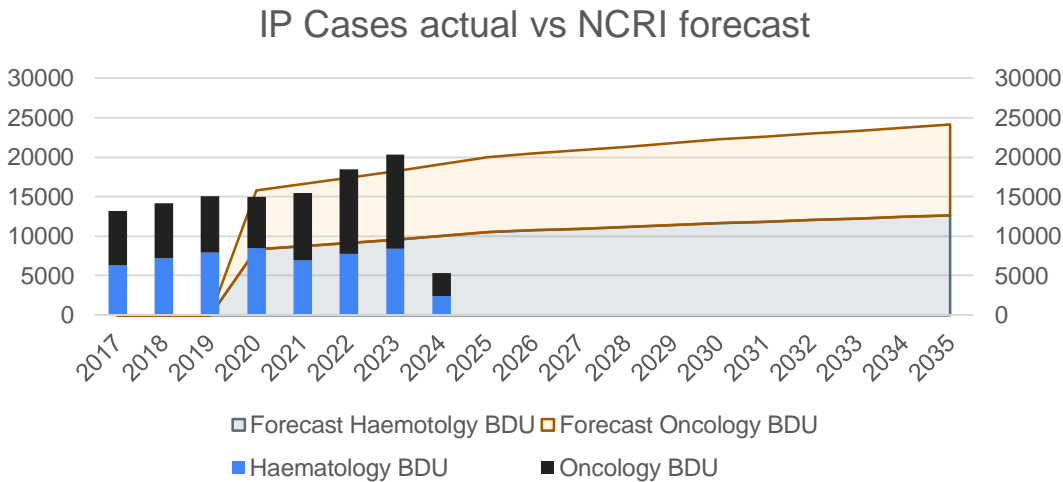
Point Prevalence 28th February 2024

A

Medically active

Patients requiring investigation and ongoing medical management.

B

Potential discharge

Patients could in theory leave the hospital if certain criteria were met. (e.g. diagnostics, rehab/step down care bed, home care package)
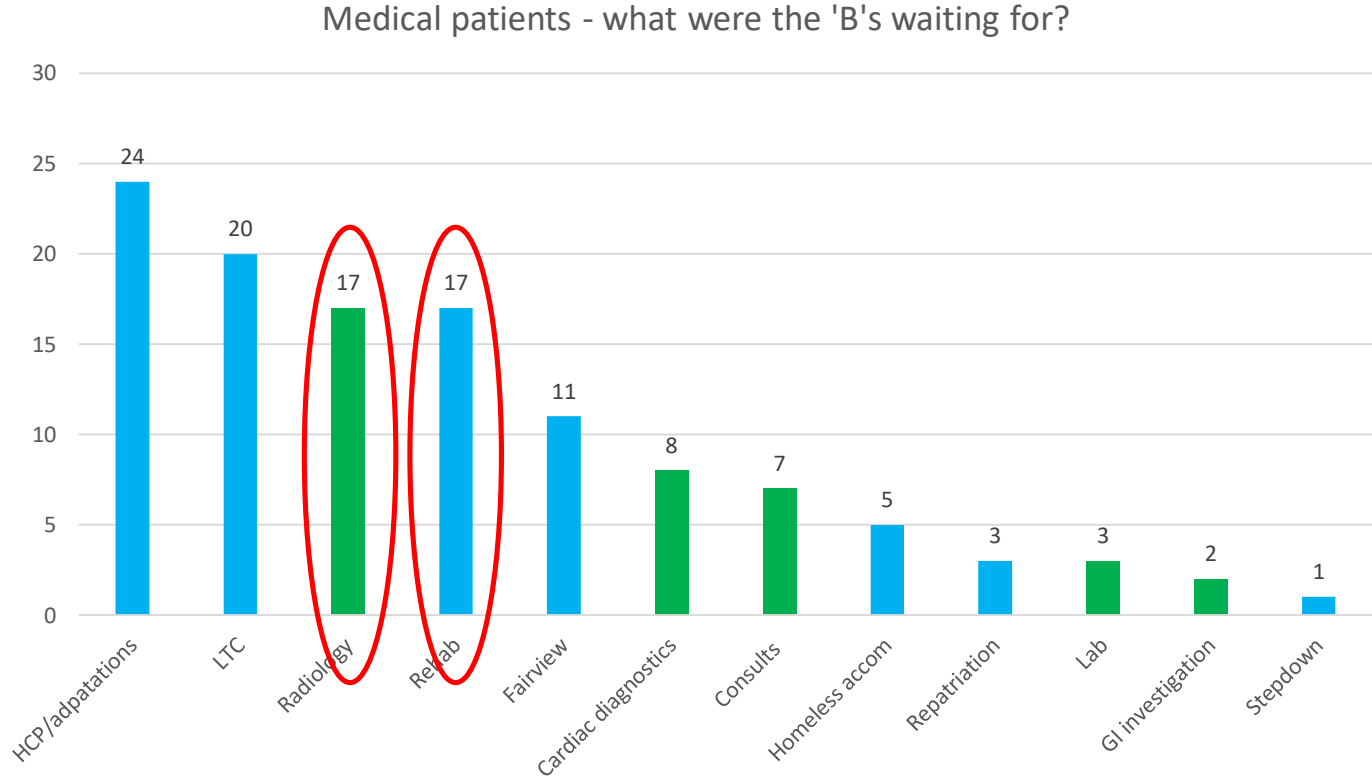
C

Confirmed discharges

Patients leaving the hospital on the day.
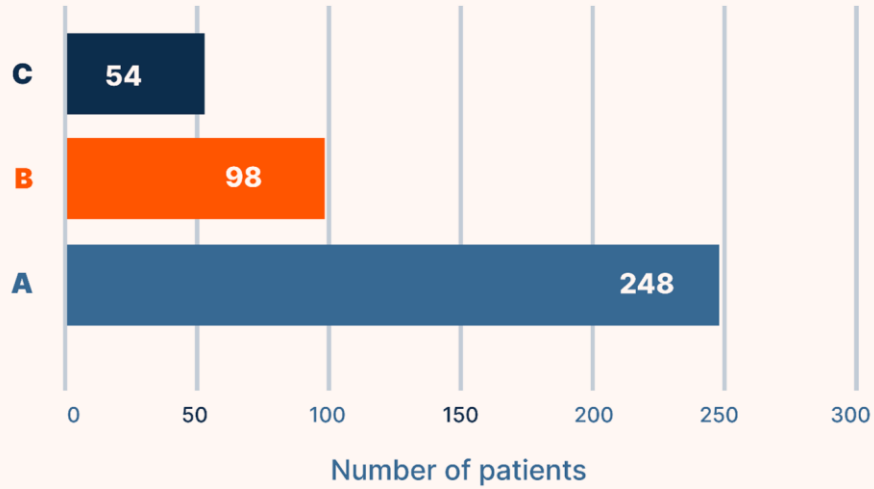
Medical patients - what were the 'B's waiting for?
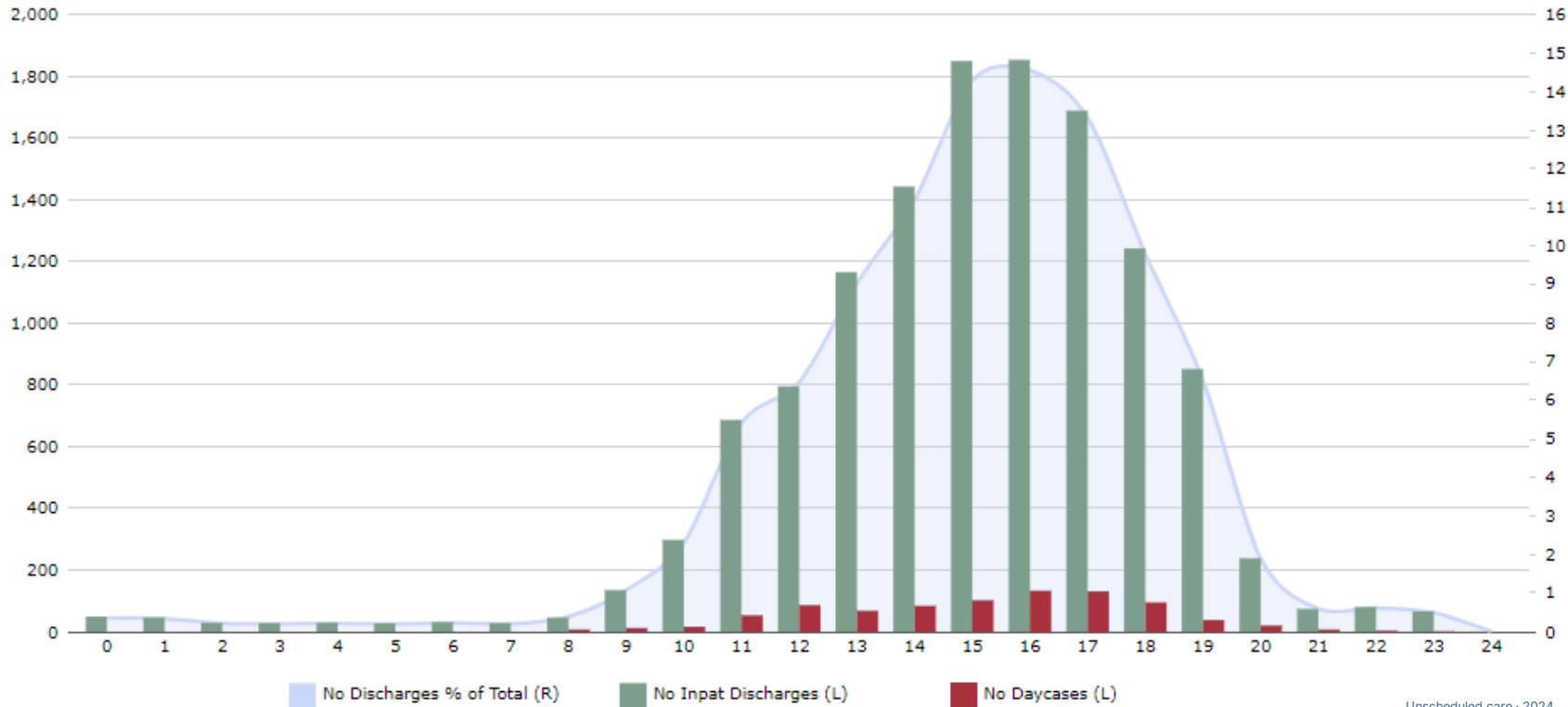
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Areas of focus

Bed days

Time of day

Time of Discharge

GIM Specialities Discharge Times
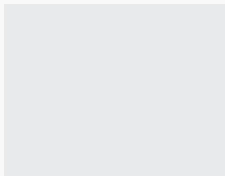### (n = 10,686 discharges, Jan - Sep 2024)

Median = 15:45

Legend: No Discharges % of Total (R) — No Inpat Discharges (L) — No Daycases (L)

ENTRANCE ▶

TRIAGE ▶

AWAITING ASSESS. ▼

HOME ▶

ED

WARDS ▼

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Seeing the whole system

Information flow across the system
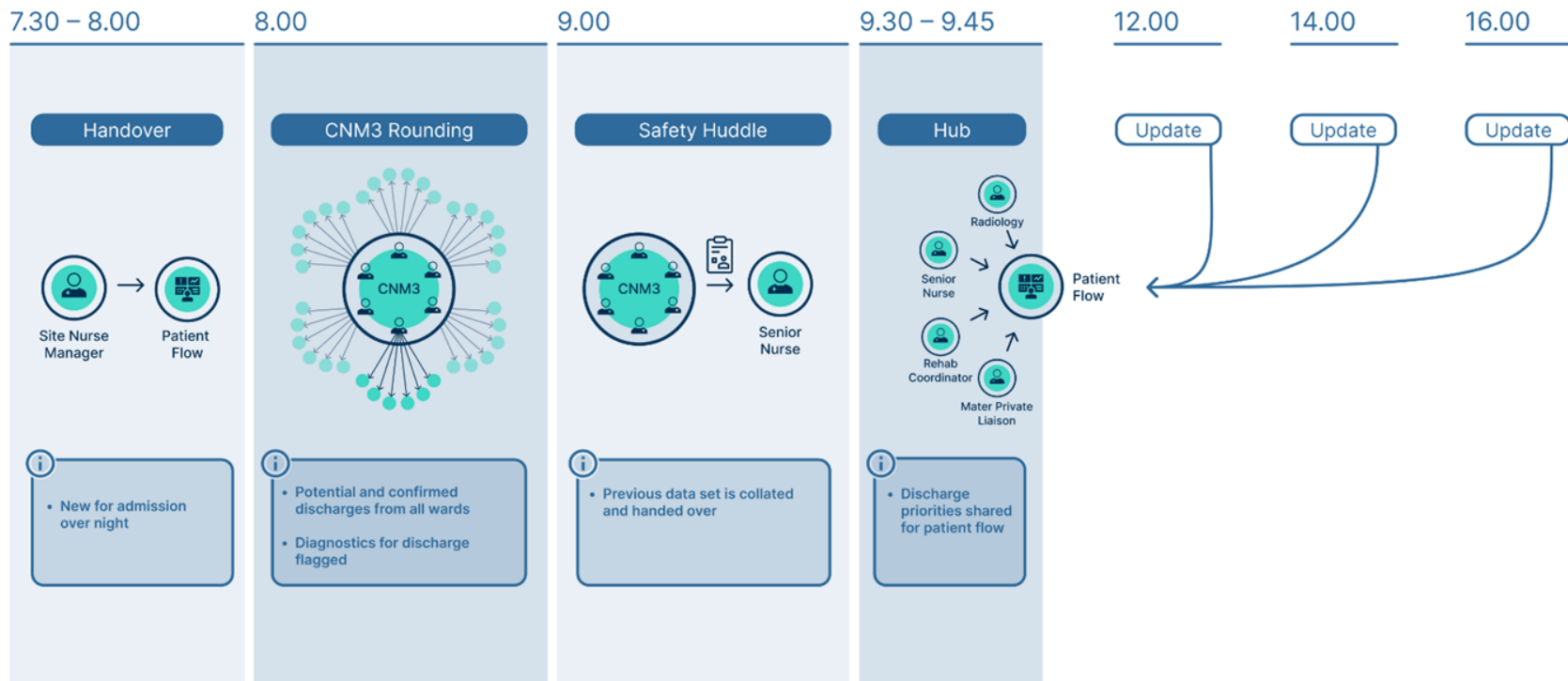
Discharge numbers from wards - week of 29th Jan 2024

Day	Number of correct potential discharge	Number of discharges
Mon	4	52
Tue	15	57
Wed	16	58
Thur	16	60
Fri	25	83

Number of patients

Number of correct potential discharge

Number of discharges

Medical Team Gembas

10
Gembas

8
Specialities

6
Weeks
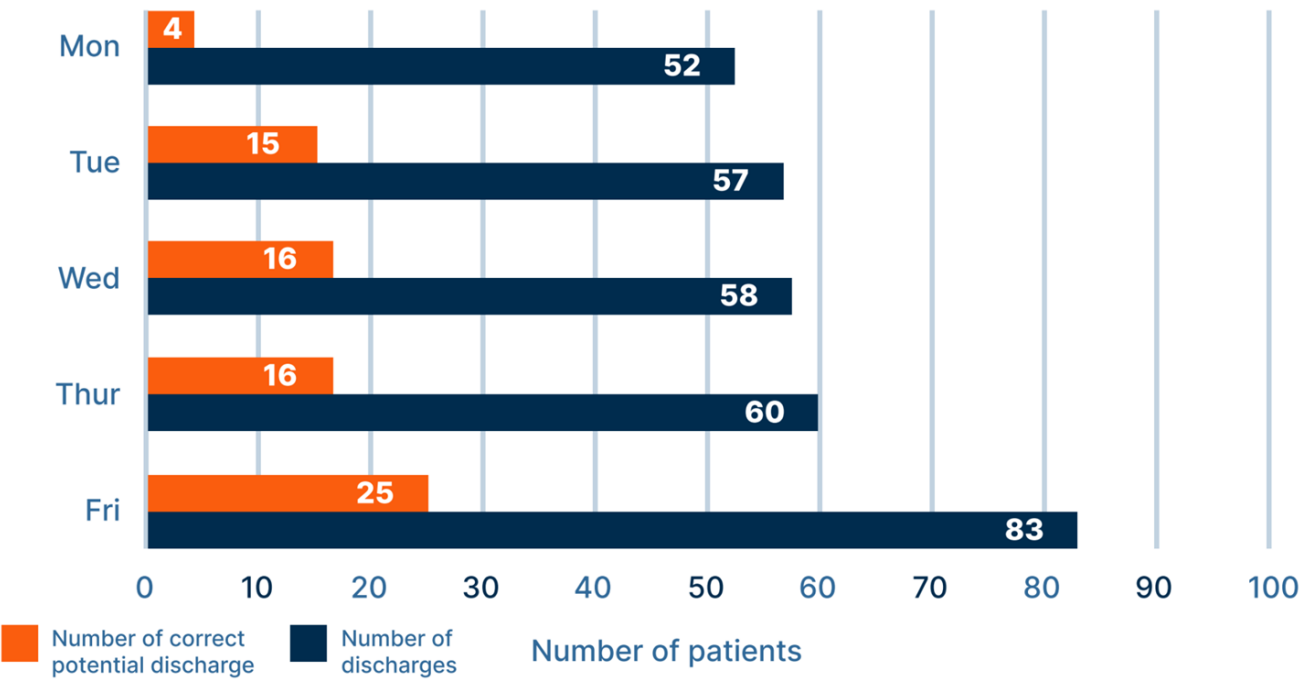
● Infectious diseases
24/01/2024, 31/01/24

● Cardiology
14/02/2024

● Acute Medicine
18/01/2024

● Med El
16/02/2024

● Stroke
12/02/2024

● Rheumatology
19/02/2024

● Respiratory
13/02/2024

● Endocrine
13/02/2024, 06/03/2024
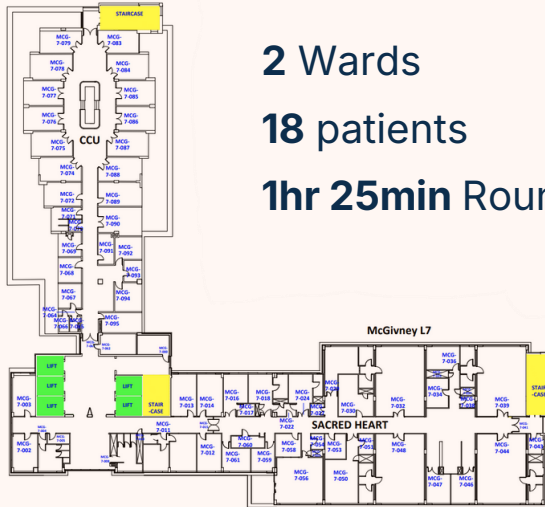
Medical Team
Ward rounds

START & FINISH TIMES
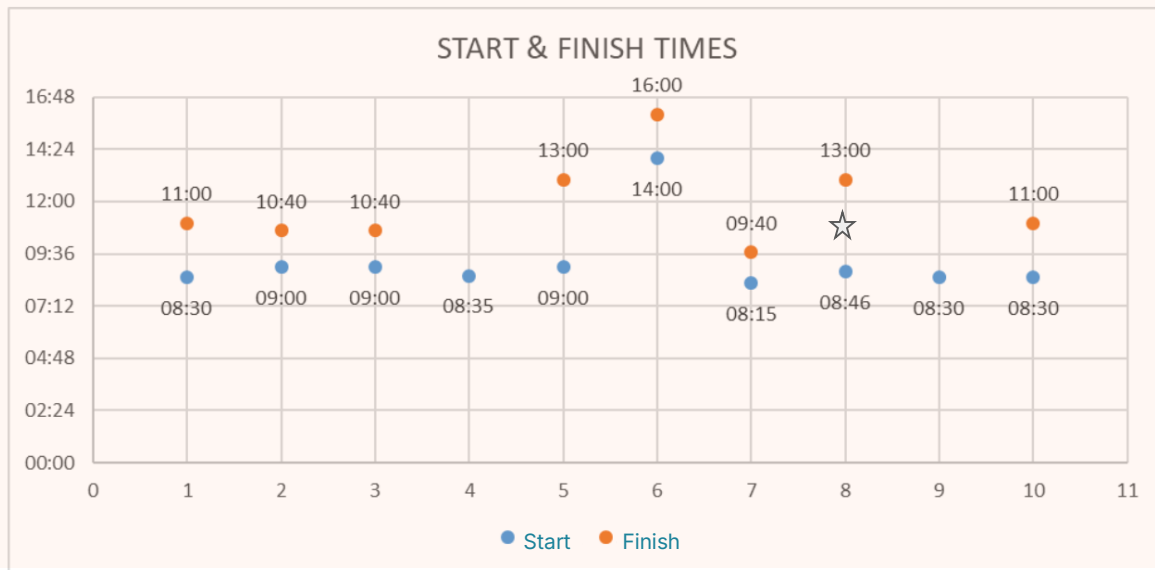
-> Median duration: **2hrs 15min**

->Finish time varies between 9.40 to 16.00

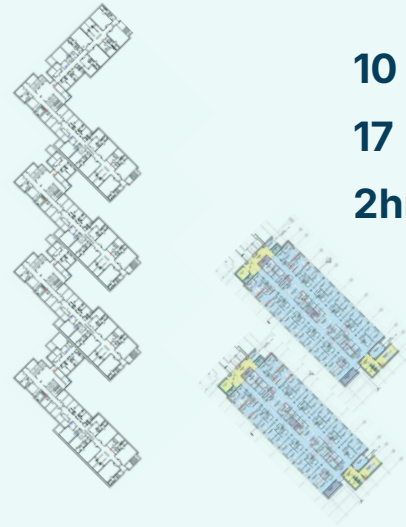->Median finish time: **11:00**

☆ Family meeting mid round

Medical Team Ward Rounds
Conditions vary

Cardiology

2 Wards

18 patients

1hr 25min Round

- Well cohorted speciality
- More predictable pt journey

Endocrinology

10 Wards

17 patients

2hr 30min Round

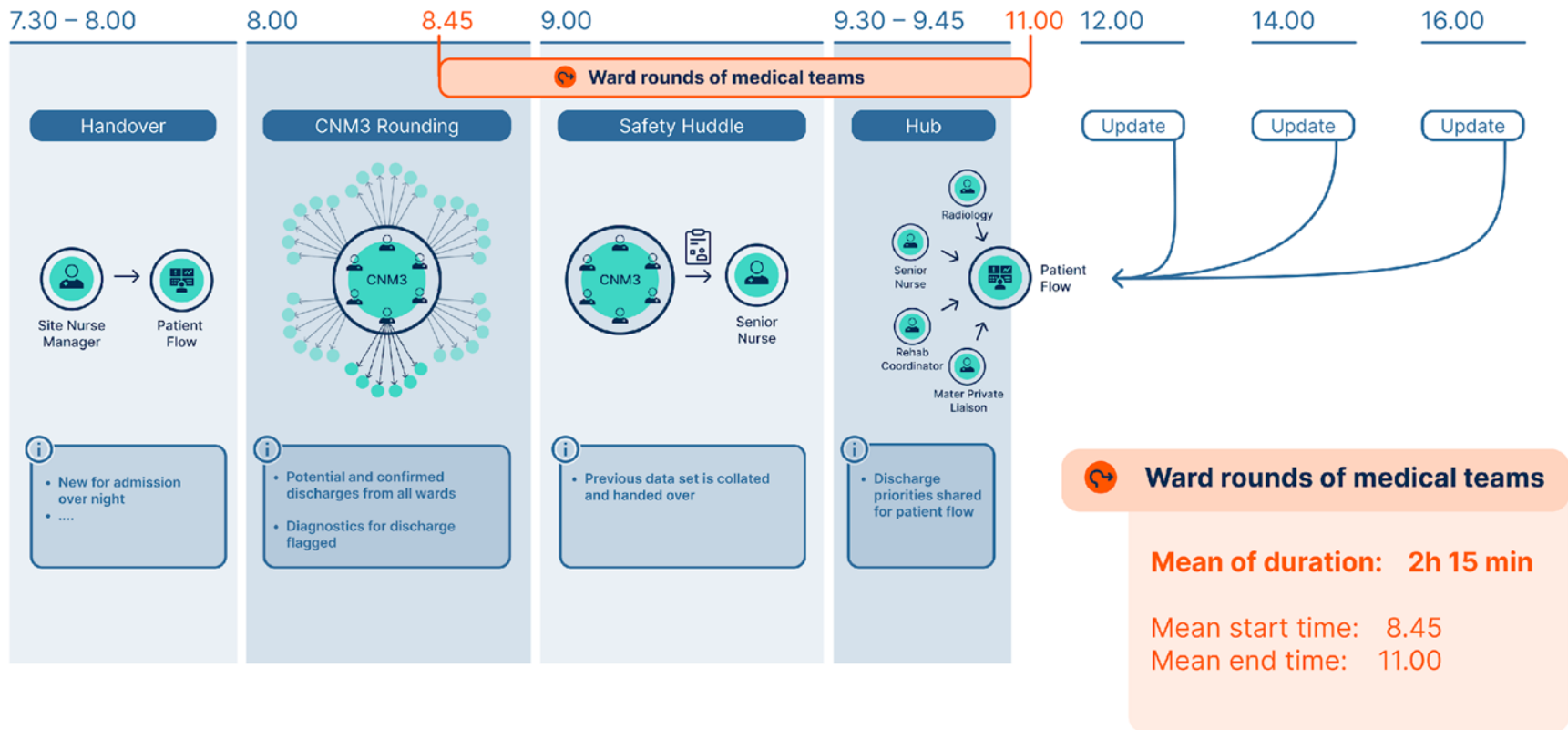- Patient dispersed across hospital
- More complex social discharges

Information flow to the hub

7.30 – 8.00	8.00	8.45	9.00	9.30 – 9.45	11.00	12.00	14.00	16.00

Ward rounds of medical teams

Handover

CNM3 Rounding

Safety Huddle

Hub

Update Update Update

Site Nurse Manager → Patient Flow

CNM3

CNM3 → Senior Nurse

Radiology
Senior Nurse
Rehab Coordinator
Mater Private Liaison
→ Patient Flow

ⓘ
- New for admission over night
- ....

ⓘ
- Potential and confirmed discharges from all wards
- Diagnostics for discharge flagged

ⓘ
- Previous data set is collated and handed over

ⓘ
- Discharge priorities shared for patient flow

Ward rounds of medical teams

Mean of duration: 2h 15 min

Mean start time: 8.45
Mean end time: 11.00

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Cohorted beds per ward

St. Agnes's · Ortho/Spinal · 30 beds — 87%

Coronary Care Unit · Cardiology · 12 beds — 91%

St. Martha's · Infectious Disease · 20 beds — 60%

St. Teresa's · Neuro · 36 beds — 80%

AMAU · Acute Medicine · 12 beds — 75%

Cecilia's · Cardio Thoracics · 33 beds — 84%

St. Monica's · GI/Hepatabillary/Colorectal · 31 beds — 90%

Scheduled Care Ward · Scheduled Care · 28 beds — 100%

AMSSU · Acute Medicine · 28 beds — 46%

Our Lady's · Gastro/MedHepat · 31 beds — 30%

Sacred Heart Ward · Cardiology · 31 beds — 77%

St. Anne's · Gerriatrics · 31 beds — 90%

St. Gabriel's · Vascular & Urology · 31 beds — 97%

St. Patrick's · Endocrine · 22 beds — 54%

St. Bernard's · Infectious Diseases · 21 beds — 65%

St. John's · Nephrology · 31 beds — 81%

St. Peters · Trauma · 21 beds — 33%

Sullivan's · Respiratory · 20 beds — 55%

St. Brigid's · Neuro-Stroke/Gerri · 20 beds — 79%

St. Joseph's · ENT/Breast/Plastics/GenSurg · 23 beds — 52%

St. Raphael's · Respiratory · 24 beds — 68%

St. Vincent's · Haematology/Oncology · 32 beds — 100%

St. Brigid's ASU · Acute Stroke · 12 beds

CTHDU · Cardio Thoracics · 11 beds

Hyper Acute Stroke · Stroke · 6 beds

Spinal HDU · Ortho Spinal · 11 beds

HLTW 6 · Transplant · 8 beds

Special Care Unit · Special Care · 4 beds

HLTW 7 · Transplant · 8 beds

Gemma's · Rehab · 9 beds

Legend:
- % — Percentage of cohorted beds
- Cohorted beds
- Bed not occupied
- Outliers

Number of specialities rounding
(including speciality ward round)

St. Agnes's — Ortho/Spinal · 30 beds — **5**

Coronary Care Unit — Cardiology · 12 beds — **2**

St. Martha's — Infectious Disease · 20 beds — **5**

St. Teresa's — Neuro · 36 beds — **7**

AMAU — Acute Medicine · 12 beds — **3**

Cecilia's — Cardio Thoracics · 33 beds — **5**

St. Monica's — GI/Hepatabillary/Colorectal · 31 beds — **5**

Scheduled Care Ward — Scheduled Care · 28 beds — **7**

AMSSU — Acute Medicine · 28 beds — **7**

Our Lady's — Gastro/Med/Hepat · 31 beds — **9**

Sacred Heart Ward — Cardiology · 31 beds — **6**

St. Anne's — Geriatrics · 31 beds — **3**

St. Gabriel's — Vascular & Urology · 31 beds — **2**

St. Patrick's — Endocrine · 22 beds — **7**

St. Bernard's — Infectious Diseases · 21 beds — **7**

St. John's — Nephrology · 31 beds — **5**

St. Peters — Trauma · 21 beds — **7**

Sullivan's — Respiratory · 20 beds — **7**

St. Brigid's — Neuro-Stroke/Gerri · 20 beds — **4**

St. Joseph's — ENT/Breast/Plastics/GenSurg · 23 beds — **10**

St. Raphael's — Respiratory · 24 beds — **4**

St. Vincent's — Haematology/Oncology · 32 beds — **2**

St. Brigid's ASU — Acute Stroke · 12 beds

CTHDU — Cardio Thoracics · 11 beds

Hyper Acute Stroke — Stroke · 6 beds

Spinal HDU — Ortho Spinal · 11 beds

HLTW 6 — Transplant · 8 beds

Special Care Unit — Special Care · 4 beds

HLTW 7 — Transplant · 8 beds

Gemma's — Rehab · 9 beds

1 Number of specialities rounding per ward

Cohorted beds

Bed not occupied

Outliers

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Ward round - Interaction with nursing

In 7 out of 10 Gembas the **CNM was involved with the ward round** on **base ward.**

In 1 out of 10 Gembas the C**onsultant sought out CNMs** on outlier wards.

Ward round – Interaction with HSCPs

Very occasional, by **chance**

Huddles pre round only

Discharge first documented N=36
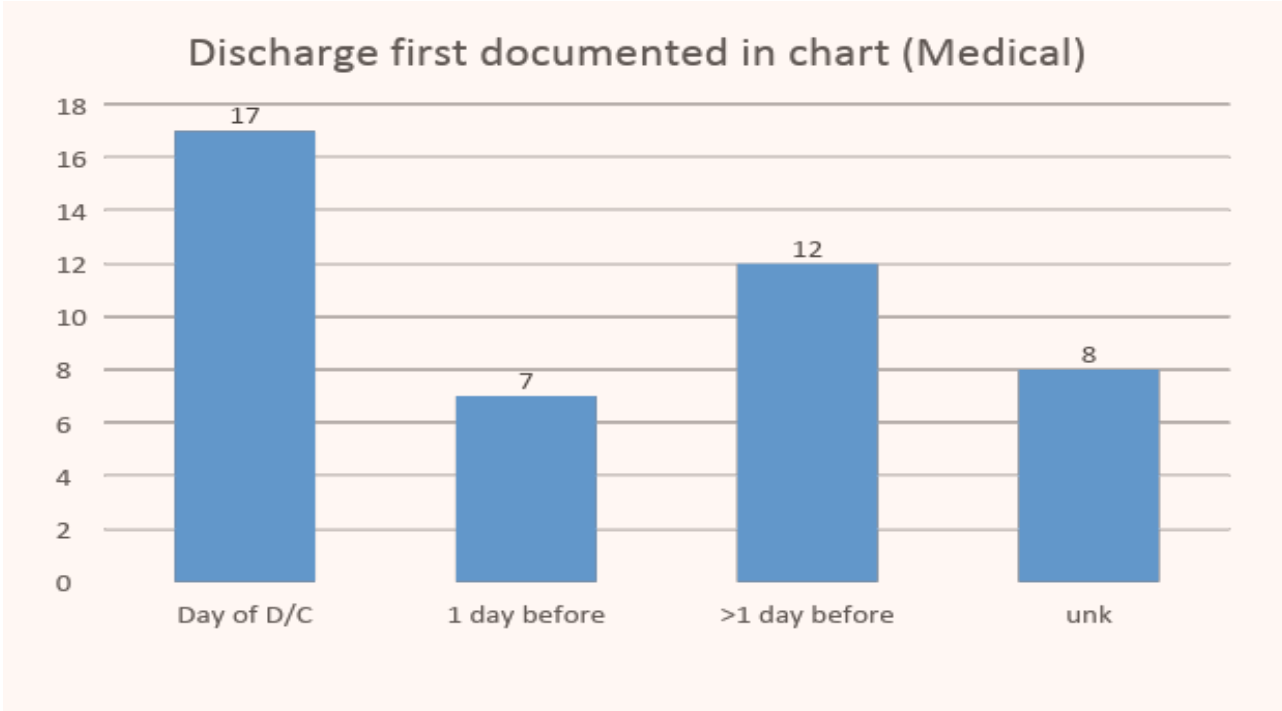
Discharge Predictability

Capacity assessment awaiting Fairview

Physio sign-off

Ortho review

CT

Change to Oral antibiotic
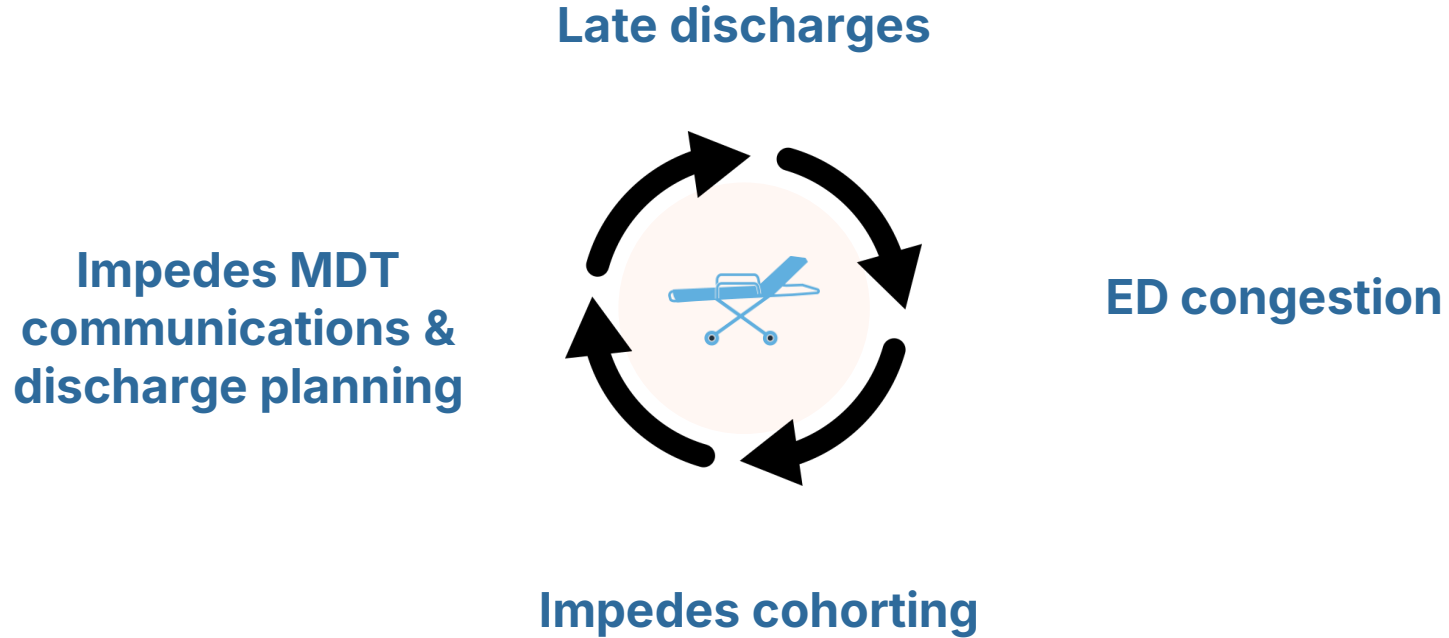
Late discharges

Impedes MDT communications & discharge planning

ED congestion

Impedes cohorting

Areas of Intervention

● **Re-design MDT communications-** one daily interaction is no longer fit for purpose

Re-design MDT communications- one daily interaction is no longer fit for purpose

Supporting patient flow to improve cohorting

Supports to cohorting

Areas of Intervention

Re-design MDT communications- one daily interaction is no longer fit for purpose

Supporting patient flow to improve cohorting

Addressing the a-synchrony at system level

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ED- Alternative Pathways

Inform design of the Social Inclusion Hub services

Could existing alternative pathways have been utilised?

What new pathways would have biggest impact?

N= 1257 over 1 week in June

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Thank you

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