CONVENZIS

2nd July 2024 | 15Hatfields, London

Agenda for today:

CONVENZIS

Welcome to the 15th NHS Patient Flow Conference!

2nd July 2024
9am – 5:30pm
15Hatfields, London

Slido

Please scan the QR Code on the screen. This will take you through to Slido, where you can interact with us.

SCAN ME

Chair Opening Address

Kelly Bishop
Assistant Director of Nursing and Urgent Care
Midlands and Lancashire Commissioning Support Unit (MLCSU)

Speaking Now…

Tracy Stocker
Director of Operations for Flow and Integration
Medway NHS Foundation Trust

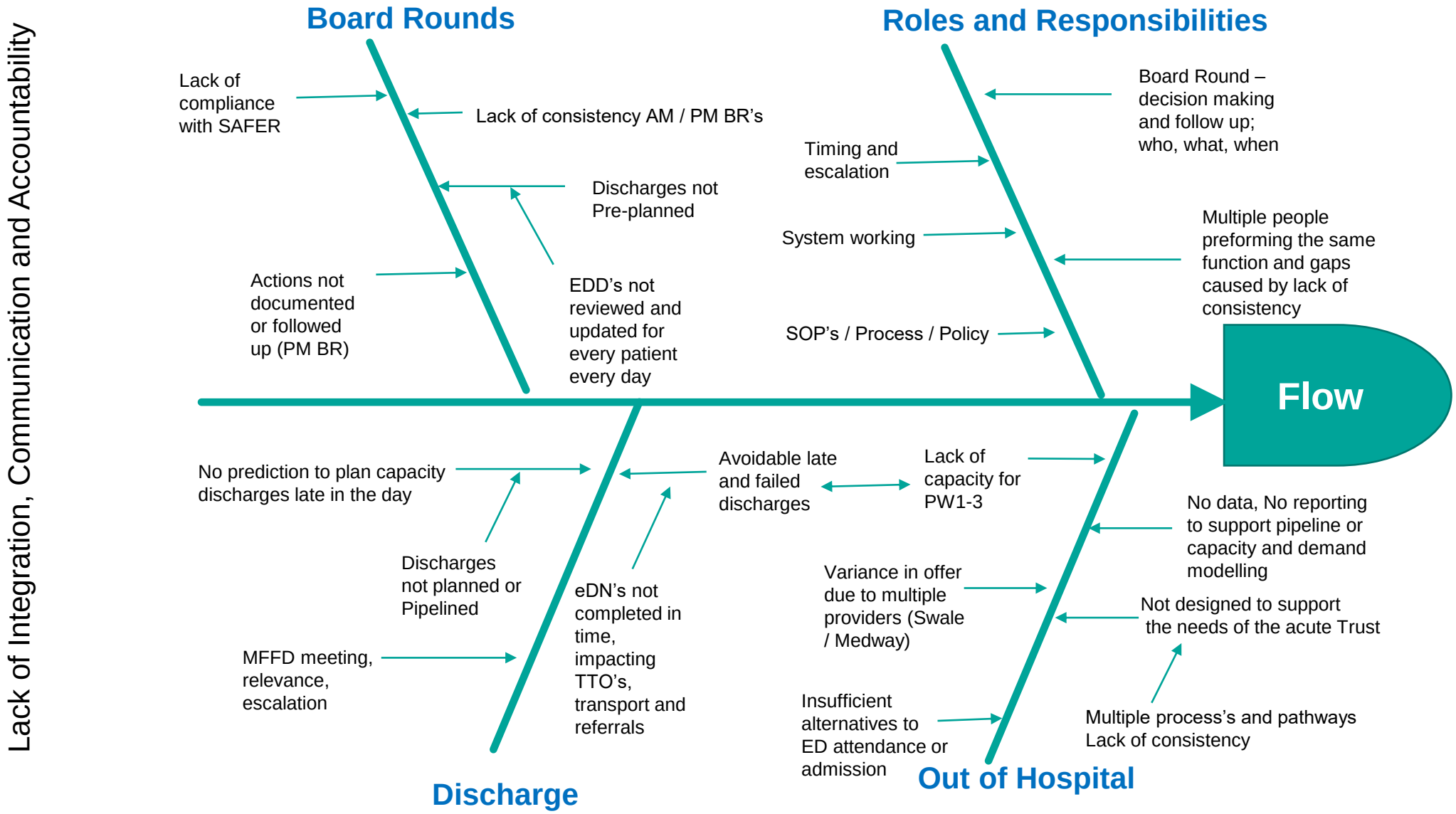
Using Technology to Improve Patient Flow

Tracy Stocker
Director of Operations, Flow and Integration
Medway NHS Foundation Trust

NHS Medway NHS Foundation Trust

Patient FIRST

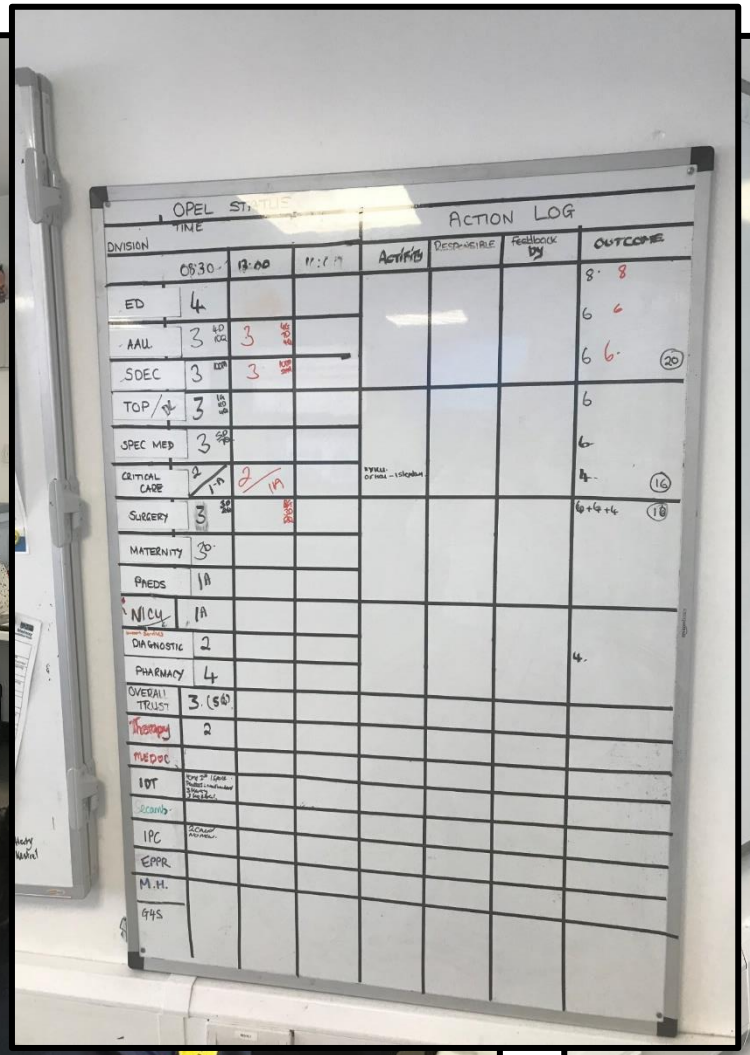
Fishbone


Lack of Integration, Communication and Accountability
Board Rounds
Lack of compliance with SAFER
Lack of consistency AM / PM BR's
Discharges not Pre-planned
Actions not documented or followed up (PM BR)
EDD's not reviewed and updated for every patient every day
Roles and Responsibilities
Board Round – decision making and follow up; who, what, when
Timing and escalation
System working
Multiple people preforming the same function and gaps caused by lack of consistency
SOP's / Process / Policy
Flow
No prediction to plan capacity discharges late in the day
Discharges not planned or Pipelined
MFFD meeting, relevance, escalation
eDN's not completed in time, impacting TTO's, transport and referrals
Discharge
Avoidable late and failed discharges
Lack of capacity for PW1-3
No data, No reporting to support pipeline or capacity and demand modelling
Variance in offer due to multiple providers (Swale / Medway)
Not designed to support the needs of the acute Trust
Insufficient alternatives to ED attendance or admission
Multiple process's and pathways Lack of consistency
Out of Hospital

- SEDIT data shows Medway as having a shortage of 100 acute beds. This and manual paper based processes have resulted in flow through the acute becoming more challenged and it was clear that a significant change needed to happen
- Our bed management system was out dated and clunky. Many staff found it difficult to use and a large amount of the functionality was redundant in supporting modern hospital flow
- A neighboring Trust had implemented a technical solution to effective bed management and were demonstrating great improvements in flow, bed turnaround and earlier discharges
- As with any technical solution we had to ensure processes were in place to ensure full productivity and return on investment.
- Right from the beginning the Site team were positive about the change, as we could see what a difference it would make to the team, the staff on the wards and most importantly our patients. We were aware of the challenges, however this did not stop the enthusiasm!

Traditional site / bed meetings

Medway
Care Coordination
Centre




Medway
Care Coordination
Centre

Our improvement journey

Automated Discharge via Real Time Location System (RTLS)

Automation Method

Patient is assigned RTLS Badge at admission

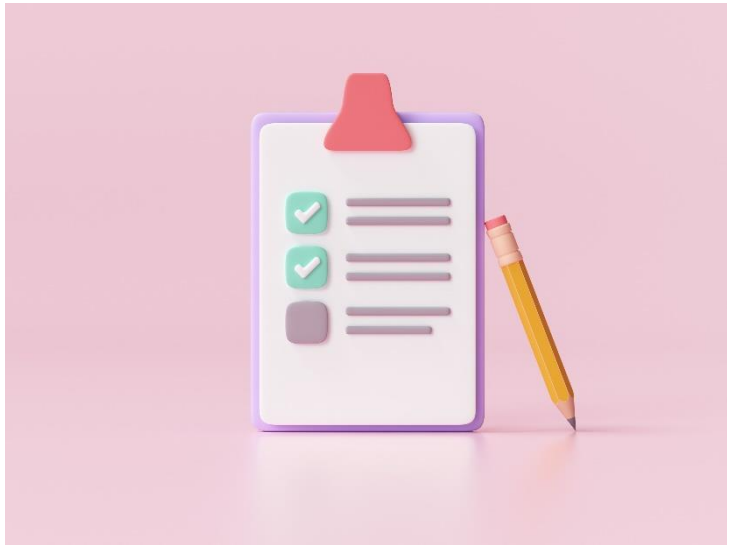
Patient badge is removed at discharge and placed in a specific drop-box as the patient departs

Discharge event is automatically sent to TeleTracking system

Domestic Staff instantly receives new bed clean request – well before nurses report or ADT

Our improvement journey

Before TeleTracking:



- No live data feed
- Manual input takes valuable staff time and energy
- Not best use of staff skillsets (high wastage)
- Inaccuracies (human factors)

Current Day:

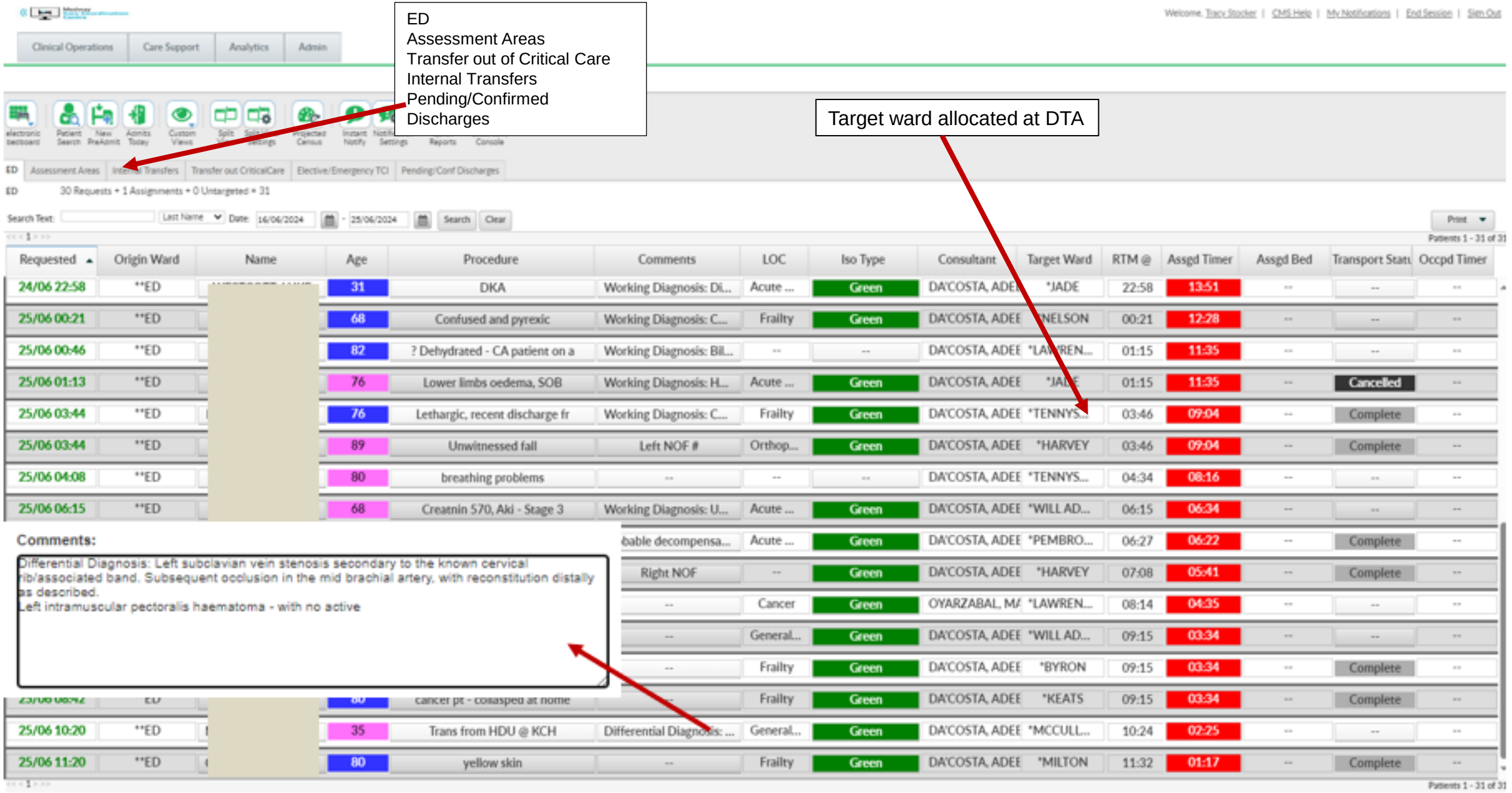
*LISTER	*BRONTE	*BYRON	*CCU	*ESS	*JADE	*KEATS	*KINGFISHER
PB31 SB0 CN30	PB15 SB0 CN15	PB26 SB0 CN27	PB8 SB0 CN6	PB21 SB0 CN21	PB24 SB0 CN24	PB26 SB0 CN27	PB22 SB0 CN21
R5 A0 P18	R6 A0 P1	R9 A0 P4	R0 A0 P0	R6 A1 P5	R6 A0 P4	R1 A0 P1	R0 A0 P6
GPAU BAY2 B08	BRON1 BAY1 B01	*BYRON LODG B1	CCU BAY 1 B03	ESS BAY4 B15	JADE BAY1 B04	KEAT BAY1 B01	KFW BAYC BC04
Blocked	Occupied	Occupied	Clean	A In Progress	Occupied	Occupied	In Progress
	R #	G			G #	G	
GPAU BAY1 B01	BRON1 BAY1 B02	BYRON BAY1 B01	CCU BAY 2 B06	*ESS LODG B1	JADE BAY1 B05	KEAT BAY1 B02	KFW BAYA BA01
D Occupied	Occupied	Occupied	Clean	D Occupied	Occupied	Occupied	Occupied
G #	R #	G #		G	B		G
GPAU BAY1 B02	BRON1 BAY1 B03	BYRON BAY1 B02	CCU BAY 1 B01	ESS BAY1 B02	JADE BAY1 B06	KEAT BAY1 B03	KFW BAYA BA02
d Occupied	Occupied	Occupied	Occupied	c Occupied	T Occupied	Occupied	Occupied
G #		G	G	G	R	G	G
GPAU BAY1 B03	BRON1 BAY1 B04	BYRON BAY1 B03	CCU BAY 1 B02	ESS BAY1 B02A	JADE BAY2 B07	KEAT BAY2 B08	KFW BAYA BA03
Occupied	Occupied	Occupied	Occupied	Occupied	T Occupied	Occupied	T Occupied
G #	R #	A	G	G	G	G	B
GPAU BAY1 B04	BRON1 BAY2 B05	BYRON BAY1 B04	CCU BAY 1 B04	ESS BAY1 B03	JADE BAY2 B08	KEAT BAY2 B09	KFW BAYA BA04
d Occupied	Occupied	Occupied	Occupied	Occupied	T Occupied	Occupied	T Occupied
G #	G	G	G #	G	G	R	G
GPAU BAY1 B05	BRON1 BAY2 B06	BYRON BAY2 B05	CCU BAY 2 B05	ESS BAY1 B04	JADE BAY2 B09	KEAT BAY3 B10	KFW BAYB BB01
C Occupied	Occupied	Occupied	Occupied	Occupied	Occupied	Occupied	Occupied
G	G	A	G #	G	G	G	G

- Live data feed
- Can see current state of all beds throughout the Trust
- Minimal variation in process and content – Lean!
- Automation to portering and bed cleaning – removing waste

Pre-Admit Tracking Board - ED

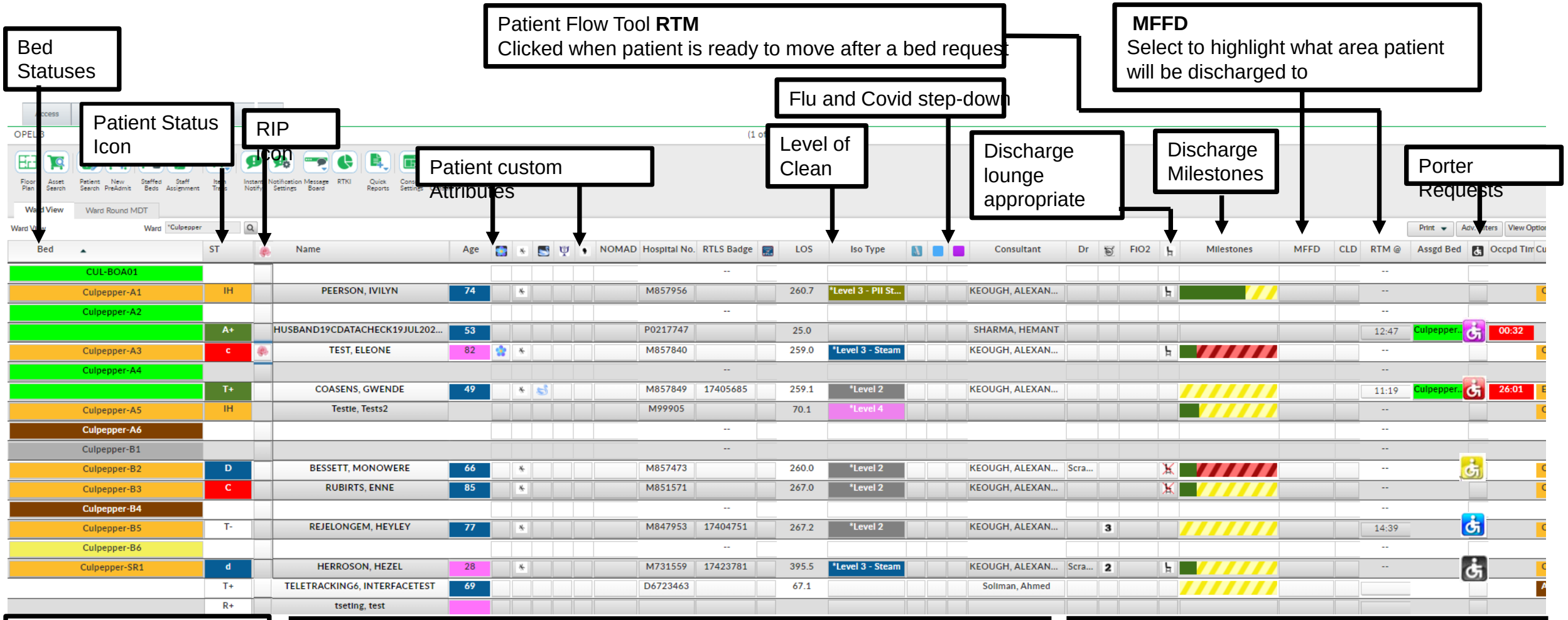
ED
Assessment Areas
Transfer out of Critical Care
Internal Transfers
Pending/Confirmed
Discharges

Target ward allocated at DTA



Requested	Origin Ward	Name	Age	Procedure	Comments	LOC	Iso Type	Consultant	Target Ward	RTM @	Assgd Timer	Assgd Bed	Transport Stat	Occpd Timer
24/06 22:58	**ED		31	DKA	Working Diagnosis: Di...	Acute ...	Green	DA'COSTA, ADE	*JADE	22:58	13:51	--	--	--
25/06 00:21	**ED		68	Confused and pyrexic	Working Diagnosis: C....	Frailty	Green	DA'COSTA, ADEE	*NELSON	00:21	12:28	--	--	--
25/06 00:46	**ED		82	? Dehydrated - CA patient on a	Working Diagnosis: Bil...	--	--	DA'COSTA, ADEE	*LAWREN...	01:15	11:35	--	--	--
25/06 01:13	**ED		76	Lower limbs oedema, SOB	Working Diagnosis: H...	Acute ...	Green	DA'COSTA, ADEE	*JADE	01:15	11:35	--	Cancelled	--
25/06 03:44	**ED		76	Lethargic, recent discharge fr	Working Diagnosis: C....	Frailty	Green	DA'COSTA, ADEE	*TENNYS...	03:46	09:04	--	Complete	--
25/06 03:44	**ED		89	Unwitnessed fall	Left NOF #	Orthop...	Green	DA'COSTA, ADEE	*HARVEY	03:46	09:04	--	Complete	--
25/06 04:08	**ED		80	breathing problems	--	--	--	DA'COSTA, ADEE	*TENNYS...	04:34	08:16	--	--	--
25/06 06:15	**ED		68	Creatnin 570, Aki - Stage 3	Working Diagnosis: U...	Acute ...	Green	DA'COSTA, ADEE	*WILL AD...	06:15	06:34	--	--	--
					bable decompensa...	Acute ...	Green	DA'COSTA, ADEE	*PEMBRO...	06:27	06:22	--	Complete	--
					Right NOF	--	Green	DA'COSTA, ADEE	*HARVEY	07:08	05:41	--	Complete	--
					--	Cancer	Green	OYARZABAL, M/	*LAWREN...	08:14	04:35	--	--	--
					--	General...	Green	DA'COSTA, ADEE	*WILL AD...	09:15	03:34	--	--	--
					--	Frailty	Green	DA'COSTA, ADEE	*BYRON	09:15	03:34	--	Complete	--
				cancer pt - collapsed at home	--	Frailty	Green	DA'COSTA, ADEE	*KEATS	09:15	03:34	--	Complete	--
25/06 10:20	**ED		35	Trans from HDU @ KCH	Differential Diagnosis: ...	General...	Green	DA'COSTA, ADEE	*MCCULL...	10:24	02:25	--	--	--
25/06 11:20	**ED		80	yellow skin	--	Frailty	Green	DA'COSTA, ADEE	*MILTON	11:32	01:17	--	Complete	--

TeleTracking Ward View



- Dirty — **Dirty** (Brown)
- Clean Next — **Clean Next** (Grey)
- In Progress — **In Progress** (Yellow)
- Suspended — **Suspended** (Dark Green)
- Delayed — **Delayed** (Tan)
- Clean — **Clean** (Green)
- Blocked — **Blocked** (Black)
- Occupied — **Occupied** (Orange)

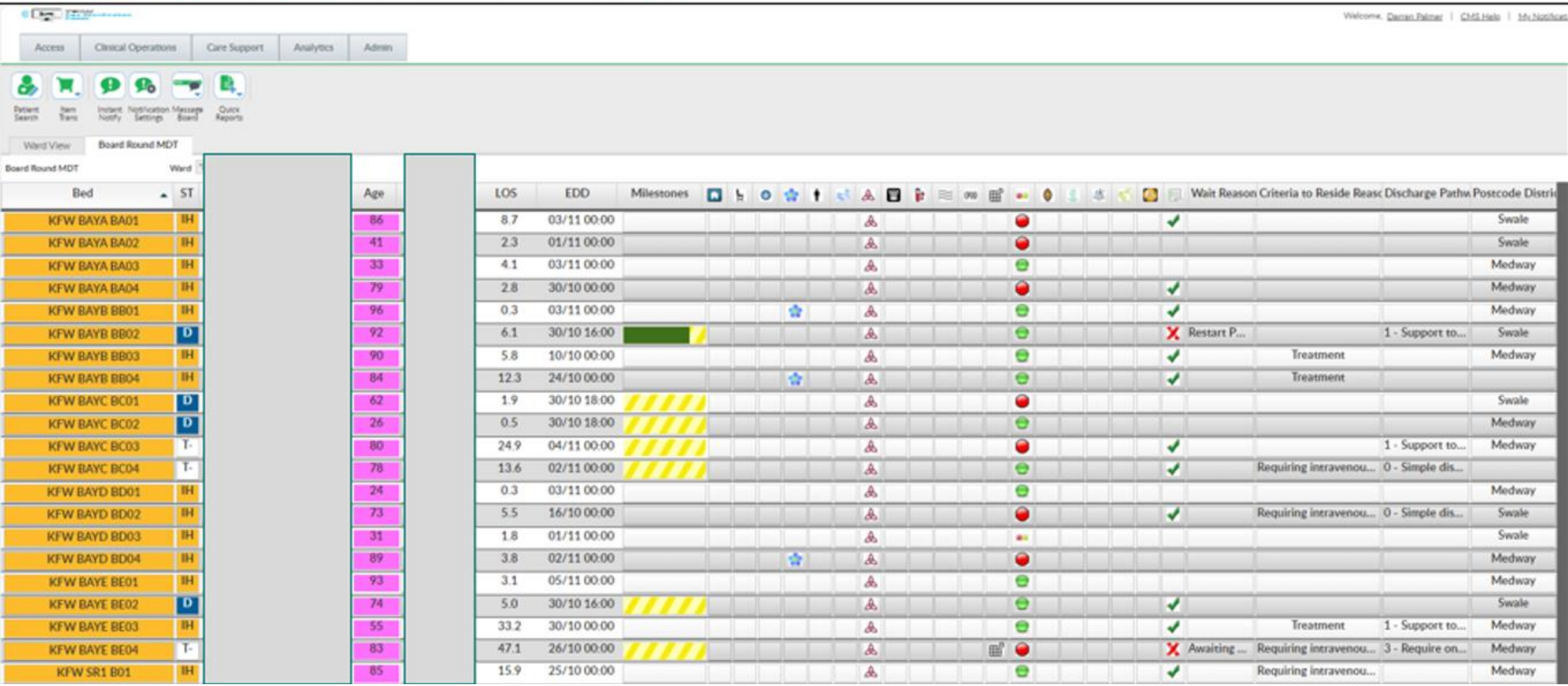
These statuses are related to the clean of the beds.

- R+ Pre-Admit patient that has been targeted a ward
- A+ Pre-Admit patient that has been assigned a bed
- T+ Patient has a bed request coming onto ward
- T+ Patient with bed request and assigned bed
- T- Patient with bed request to another ward
- T- Patient with bed assigned moving to another ward
- IH In Patient
- c Confirmed Discharge tomorrow
- C Confirmed Discharge today
- d Pending Discharge tomorrow
- D Pending Discharge today

Portering Status

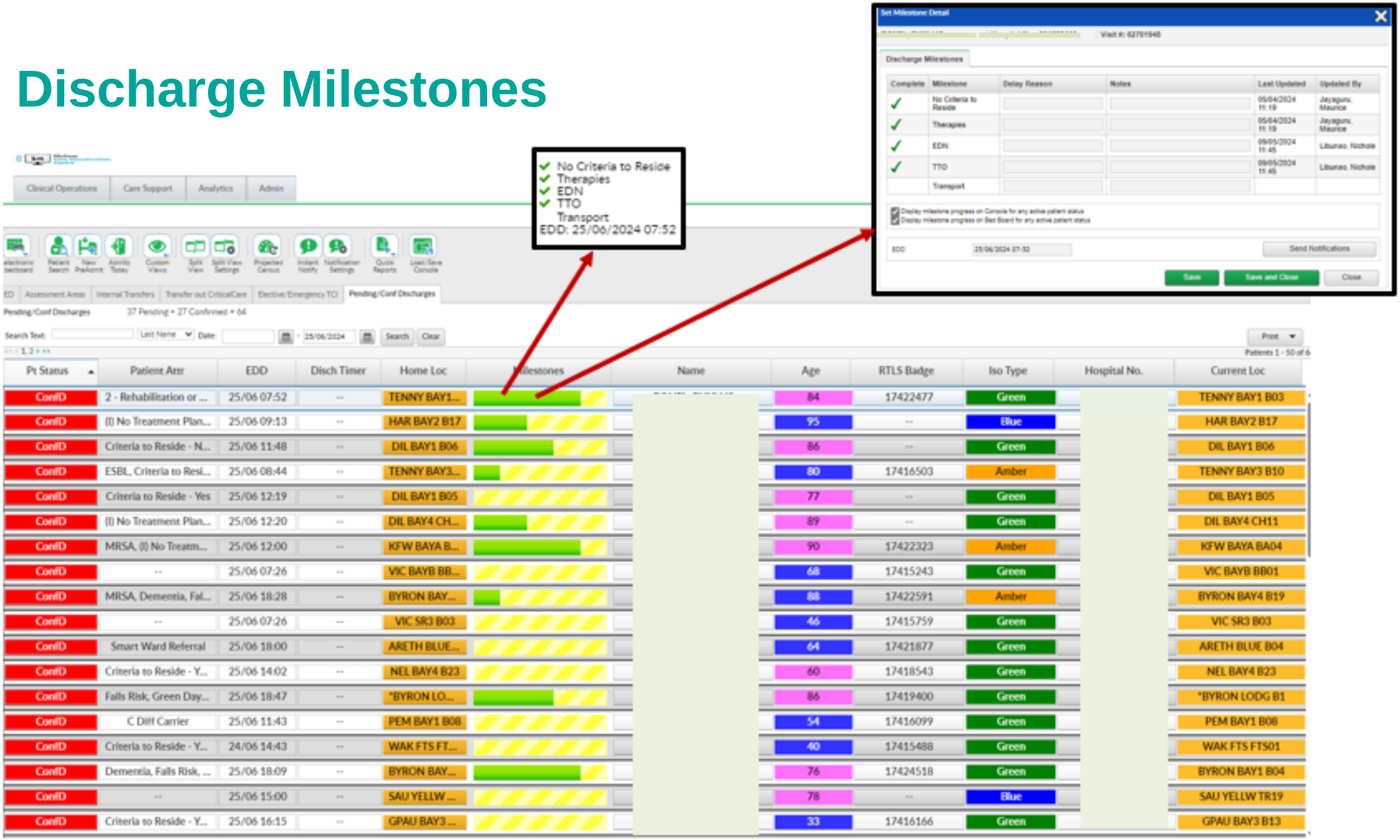
- Pending (Red)
- Dispatched (Pink)
- Delay/Dispatched (Orange)
- In Progress (Yellow)
- Delay/InProgress (Dark Green/Olive)
- Complete (Grey)
- Appointment (Dark Blue)
- Assist (Green)
- Cancelled (Black)

Electronic Board Round View

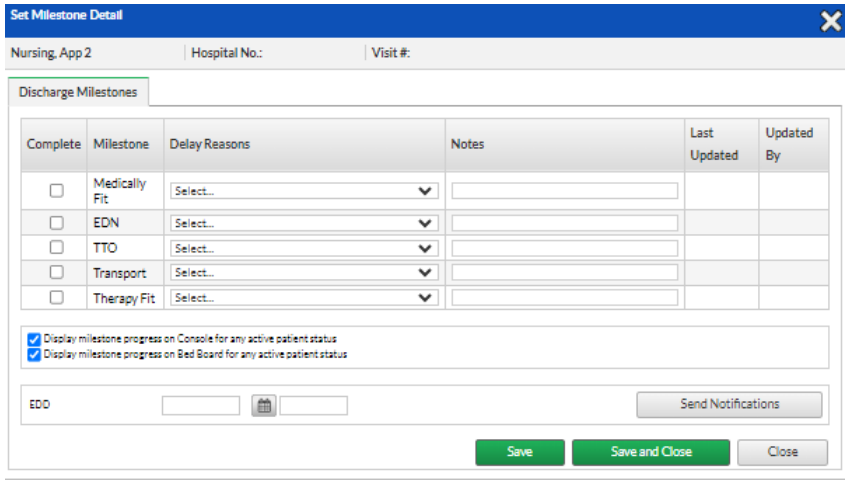


Bed	ST	Age	LOS	EDD	Wait Reason	Criteria to Reside Reasc	Discharge Pathw	Postcode Distric
KFW BAYA BA01	IH	86	8.7	03/11 00:00				Swale
KFW BAYA BA02	IH	41	2.3	01/11 00:00				Swale
KFW BAYA BA03	IH	33	4.1	03/11 00:00				Medway
KFW BAYA BA04	IH	79	2.8	30/10 00:00				Medway
KFW BAYB BB01	IH	96	0.3	03/11 00:00				Medway
KFW BAYB BB02	D	92	6.1	30/10 16:00	Restart P...		1 - Support to...	Swale
KFW BAYB BB03	IH	90	5.8	10/10 00:00		Treatment		Medway
KFW BAYB BB04	IH	84	12.3	24/10 00:00		Treatment		
KFW BAYC BC01	D	62	1.9	30/10 18:00				Swale
KFW BAYC BC02	D	26	0.5	30/10 18:00				Medway
KFW BAYC BC03	T-	80	24.9	04/11 00:00			1 - Support to...	Medway
KFW BAYC BC04	T-	78	13.6	02/11 00:00		Requiring intravenou...	0 - Simple dis...	
KFW BAYD BD01	IH	24	0.3	03/11 00:00				Medway
KFW BAYD BD02	IH	73	5.5	16/10 00:00		Requiring intravenou...	0 - Simple dis...	Swale
KFW BAYD BD03	IH	31	1.8	01/11 00:00				Swale
KFW BAYD BD04	IH	89	3.8	02/11 00:00				Medway
KFW BAYE BE01	IH	93	3.1	05/11 00:00				Medway
KFW BAYE BE02	D	74	5.0	30/10 16:00				Swale
KFW BAYE BE03	IH	55	33.2	30/10 00:00		Treatment	1 - Support to...	Medway
KFW BAYE BE04	T-	83	47.1	26/10 00:00	Awaiting ...	Requiring intravenou...	3 - Require on...	Medway
KFW SR1 B01	IH	85	15.9	25/10 00:00		Requiring intravenou...		Medway

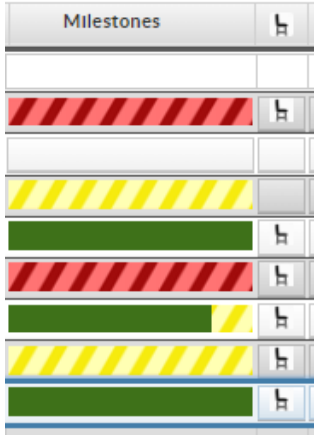
Discharge Milestones



Discharge Milestones



Working towards the patients discharge, the ward will update the Discharge Milestones. Delays can also be updated. This will be visible across both sites.



The overview of the completed milestones will be visible on the ward view as follows:

To be completed

Completed

Delayed

Medway NHS Foundation Trust

Medway Care Coordination Centre

Previous Position

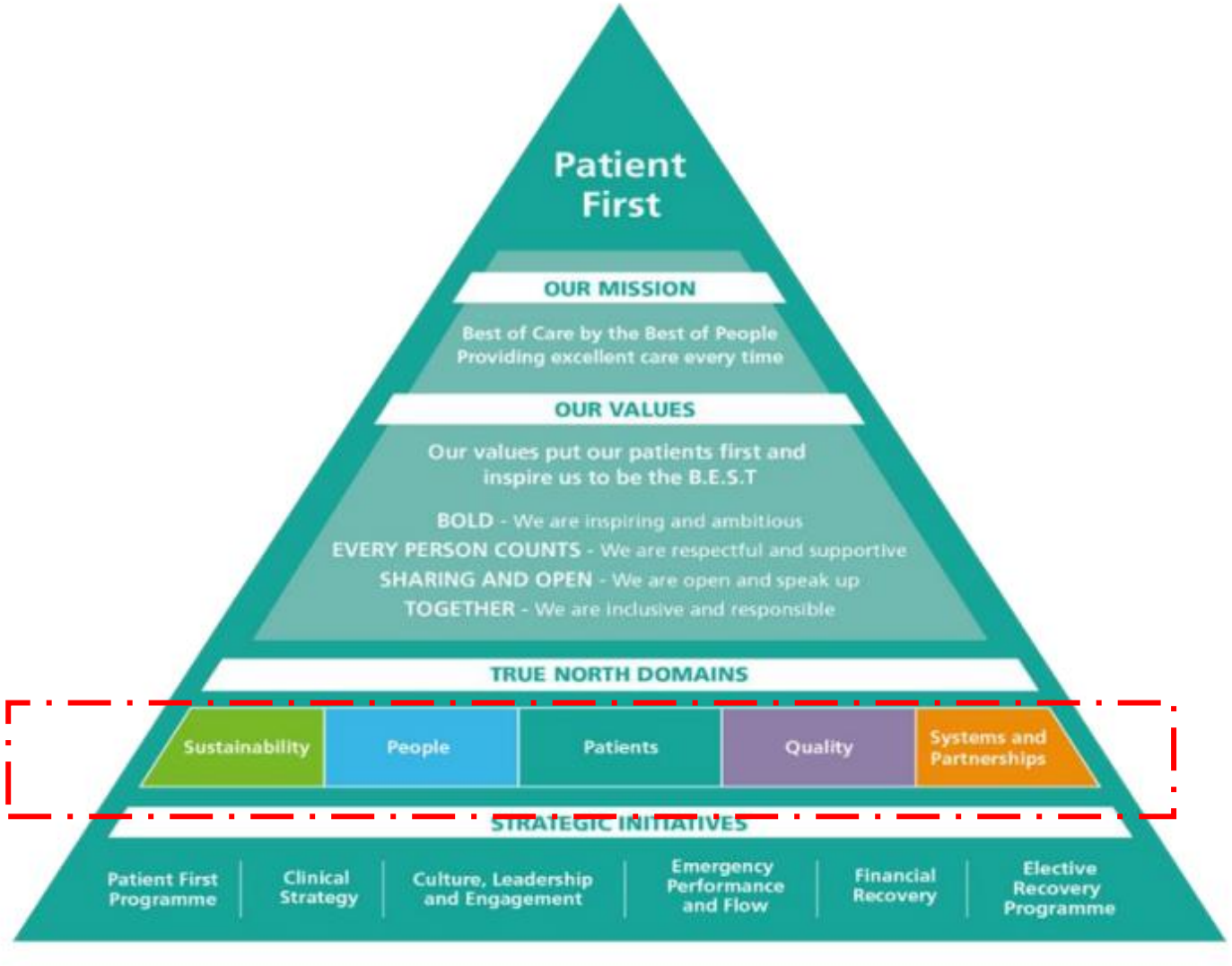
- Meetings three times daily
- 150+ WhatsApp messages daily
- Manual calculation
- Multiple staff running to find information
- Paper and clipboards

Current Position

- Integrated Care Coordination Centre
- Powered by TeleTracking
- Co-location of:
  - Tactical Commander
  - Clinical Site Manager
  - EPRR Advisor
  - Facilities Supervisor
  - Bed Placement Specialists

The Clinical Site Team is made up of Senior Site Managers, Site Managers and Bed Allocation Specialists

Outcomes aligned to our Patient First Stratergy



Medway Care Coordination Centre

A Patients Journey Through the Tracking System

Medway Care Coordination Centre

patient attended ED 28th November - DTA and bed request raised via tracking system via CCC

- Female KEATS bed went dirty 14:36, CCC prioritised bed to clean next 14:44, BTT starts clean 14:50, completes clean and bed declared clean 15:50 (Bed turnaround time 75 mins)
- Patient assigned clean Keats bed 15:56 (6 mins)
- Auto porter request 15:56 (0 mins) Porter dispatched 15:56 within 1 min, in progress started moving patient 16:08, completed job and patient in bed 16:34 (porter total job time 38 mins)
- Average Patient Flow Time from bed going dirty = 1 hour 58 mins
- Accessed her care 50% quicker than pre Tracking*

Idle Bed Time*

THEN

~4+ HOURS

No Automation or Visibility
Manual Processes

NOW

2 HOURS 20 MINS

Automation &
Trust Wide Visibility

IMPROVEMENT

~50%

Quicker Access to Care

*Averages, bed dirty, assignment time, occupied time

Patients

Ambition:

Providing outstanding, compassionate care for our patients and their families, every time.

Vision:

Every time any of us interact with our patients, their families and carers, we should ensure our interactions are prompt and positive.

Patient Flow KPIs

Medway Care Coordination Centre

Effective & Responsive Flow = Quicker Access to Care

THEN

WHITEBOARD & VERBAL UPDATES

WAS 35% 6 WEEKS IN
NOW 60% 6 MONTHS IN
Confirmed Discharges Identified Before Leaving

SINCE GO-LIVE

58 MINS

Time to move a patient out of ED to ready bed

SINCE GO-LIVE

66 DAYS A MONTH

Bed capacity released early via RTLS Dropbox (64%)

SINCE GO-LIVE

74 MINS

Bed Turnaround Time Discharge Bed Dirty to Clean

NOW

30 MINS

Portering Time Patient Moves

Systems and Partnerships

Ambition:

Delivering timely, appropriate access to acute care as part of a wider integrated care system.

Visions:

Timely care in the right place at the right time.

Improved timely access for patients on the Referral To Treatment (RTT) pathway.

Nursing & Clinical Benefits

Medway Care Coordination Centre

30 mins (per clean) x100 (average turnaround beds per day) / 60 (hours) = 50 hours per day

Releasing time back to care for patients

THEN

NURSES CLEANED ALL BEDS

NOW

50 HOURS A DAY

Released back to Clinical

ACCESS TO CARE IMPROVEMENT

50%

Reduction in Idle Bed Time*

*Averages, bed dirty, assignment time, occupied time vs per go-live

Quality

Ambition:

Excellent outcomes ensuring no patient comes to harm and no patient dies who should not have.

Vision:

To have no patients die when it could have been prevented.

Early Return on Investment

Medway Care Coordination Centre

Reduction in escalation space, 1 bay of 6 £400/800k
£1.2 m per year cost out and cost avoidance.

Better utilisation of your bed capacity*

BED UTILISATION WASTE

~4+ HOURS =
£68 A DAY/PER BED

No Automation or Visibility
Manual Processes

NOW

2 HOUR 20 MINS

~50% Reduction in
Idle Bed Time

BED UTILISATION SAVING

£34 A DAY/PER BED
£1.2M P/A

Automation &
Trust Wide Visibility
50% improvement

FUTURE

£ REDUCED
ESCALATION SPACE

FUTURE

£ CANCELLED OPS

FUTURE

£ OUTSOURCED
ACTIVITY

Sustainability

Ambition:

Living within our means providing high quality services through optimising the use of our resources.

Vision:

To reach a sustainable or recurrent break-even position by 2027/8.

*Averages, bed dirty, assignment time, occupied time
~£400 a day per bed, ~£17 an hour per bed

Qualitative benefits

Medway Care Coordination Centre

Automated workflows, reducing the administrative burden

THEN

6+ SYSTEMS, HEAVY ADMIN BURDEN

To manage flow effectively

NOW

DISPATCHER'LESS AUTOMATION

Porters & BTT

NOW

1 SYSTEM

Trust wide visibility of demand and capacity

NOW

TEAM CULTURE

Brining MDT's together in the CCC, ED, wards, facilities

NOW

ENGAGED TEAMS

People are using the system, reflected in KPIs

NOW

DEPARTMENT FEEDBACK

Ambition:

To be the employer of choice and have the most highly engaged staff within the NHS.

Vision:

We will have a highly engaged workforce across the organisation which will make us the employer of choice. We will recruit and keep the best people by having a culture of staff-led improvement and innovation.

Additional Systems to Enable Better Patient Care and Improve Flow

- EPR – removing paper notes
- Discharge templates and checklists on EPR, fully auditable and reportable
- Patient Tracker List
- Discharge Dashboard
- AI technology to predict EDD and support discharge planning

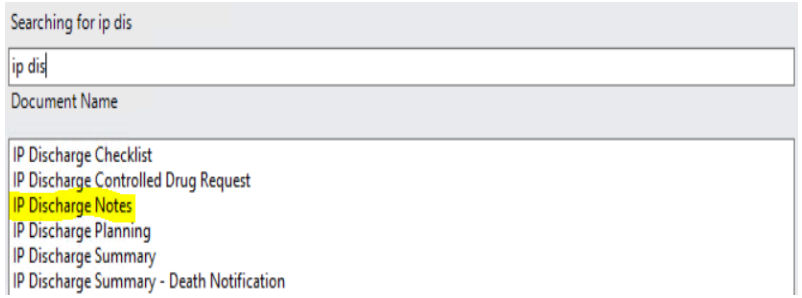
EPR Ward Dashboard

A5 - Byron Ward (Active)

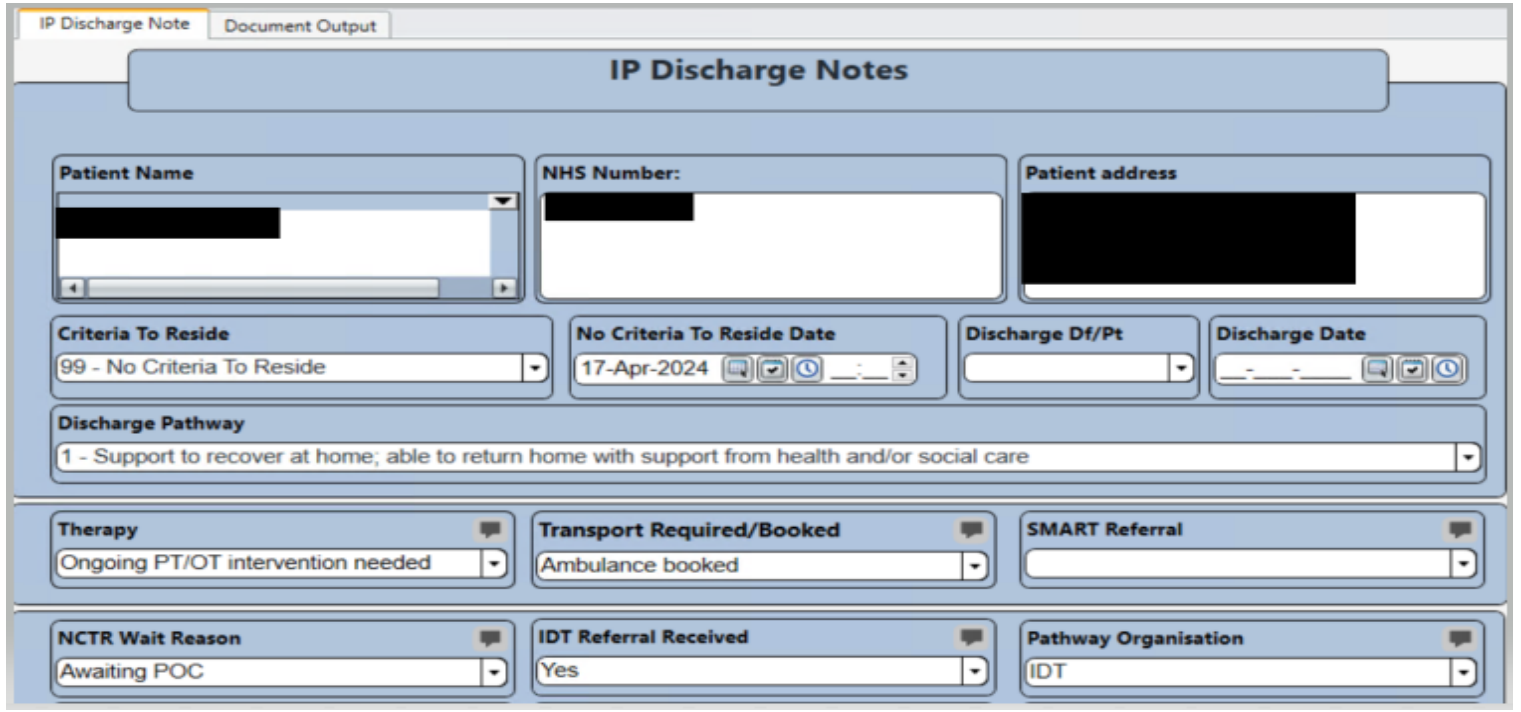
Active Patients: 27

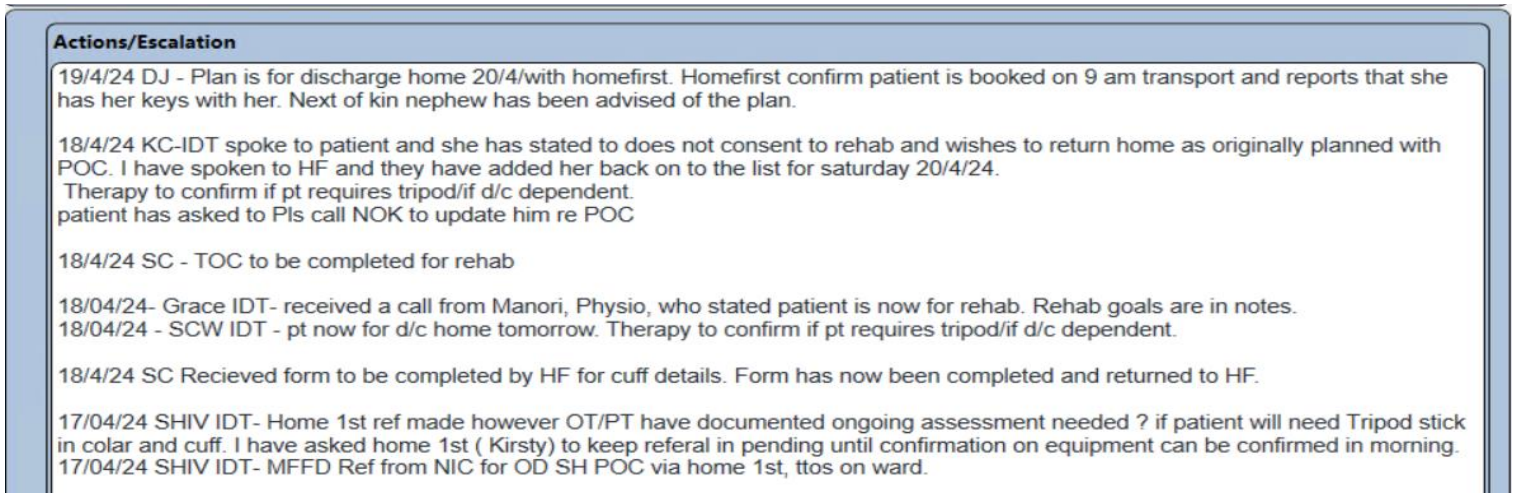
Location	Patient Name	Age / Gender	Consultant	Working Diagnosis	Resus Status	Vital Signs	NEWS2	VTE Status New	Nutrition & Hydration (New)	Clinical Indicators	4AT Known	MUST Score	Waterlow Score	EDD	Discharge Status	LOS	Falls Risk	SAMBA	Covid Screening Date	Covid Swab Result
Bay 1 Bed 1		89y /F		Worsening of Vascular dementia Hyperactive Delirium secondary t Increase care needs Rib fracture secondary to fall	DNACPR	VS	0	On Admission	Normal Fluids Lev	DoLS	8	0	17		TTO EDN	24d 12h	Y	Covid - De		
Bay 1 Bed 2		91y /F		Decompensated HF Hypervolemic Hyponatraemia + m left leg haematoma haematuria (spontaneous) improv LRTI treated with Co-amoxiclav Hypomagnesaemia - on replaceme Pressure sore - ungradable	DNACPR	VS	2	On Admission	Normal Fluid		4	1	22	01-Nov-2023		24d 10h	Y	Covid - No		
Bay 1 Bed 3		91y /F		Right sided pneumonia CURB 65> Comminuted fracture seen involvi Severe OA hip Delirium due to above on bg Alzhe AKI 1 due to sepsis and dehydratic Presure injury over Lt heel CFS 7 ABG T1RF Mass R inferior gluteal region - for Vitamin D deficiency IDA	DNACPR	VS	4	On Admission	Normal Fluid		5	2	25	02-Nov-2023		8d 18h	Y	Covid - No		
Bay 1 Bed 4		78y /F		Fall - secondary to increasing frail L distal clavical fracture (high risk Iron Deficiency Anaemia B12 Deficiency Vit D deficiency Hypoactive delirium secondary to	DNACPR	VS	1	On Admission	Normal Fluid	DoLS 1:1	8	1	18			10d 17h	Y	Covid - No		
Bay 2 Bed 5		91y /M		Delirium secondary to recent infec Moderate to severe frailty Incomplete resolution of chest infe	DNACPR	VS	2	On Admission			2	0	18			2d 12h	Y			
Bay 2 Bed 6		81y /M		Syncope secondary to Orthostatic CAP - CURB 3 T2MI Delirium- resolved Long term normocytic anaemia - R/o urine retention	DNACPR	VS	1	On Admission			1	1	11	03-Nov-2023		2d 12h	Y			
Bay 2 Bed 7		93y /M		Community Acquired Pneumonia CFS 6/7 Ascending Aorta dilatation - vascu Folate + iron deficiency anaemia - Diarrhoea - secondary to medicati Hypokaelamia secondary to above	DNACPR	VS	2	On Admission	Normal Fluids Nor		5	0	17			8d 12h	Y	Covid - No		
Bay 2 Bed 8		87y /M		Post stroke seizures Severe Frailty Thrombocytopenia (resolved) - on Hypoactive deliruim - improving	DNACPR	VS	1	On Admission	Normal Fluids Nor	DoLS	6	0	17	25-Sep-2023	TTO EDN	43d 10h	Y			
Bay 3 Bed 09		91y /M		Multifactoral fall Secondary to frail Haematoma + overlying soft tissue Hypocalcemia secondary to CKD - Normocytic anemia Constipation- resolved; now loose Poor mobility and increased care r High risk of pressure sores- previ Hypoactive delirum - ongoing	DNACPR	VS	1	On Admission	Normal Fluids Nor		6	2	17	30-Oct-2023		29d 20h	Y	Covid - No		
Bay 3 Bed 10		79y /M		HAP (resolved) COVID pneumonitis (resolved) Iron deficency anaemia - ferrinject Vitamin D deficiency Folic acid deficiency Ongoing Maculopapular rash - sus Constipation	DNACPR	VS	2	On Admission	Normal Fluids Nor		0	0	22	13-Oct-2023	TTO RESENT EDN	68d 02h	Y	Covid - No	06-Sep-2023 10:54	Negative
Bay 3 Bed 11		70y /M		Multifactorial fall secondary to PD. LRTI (completed abx) ~ High risk Pelvis mass on CT CAP - Probabl Constipation - resolved Rule out covid/aspiration Hypokalaemia - resolved	DNACPR	VS	4	On Admission	Normal Fluids	P	6	2	30		TTO EDN	15d 12h	Y	Covid - No	02-Nov-2023 15:10	Negative

Discharge documentation on EPR

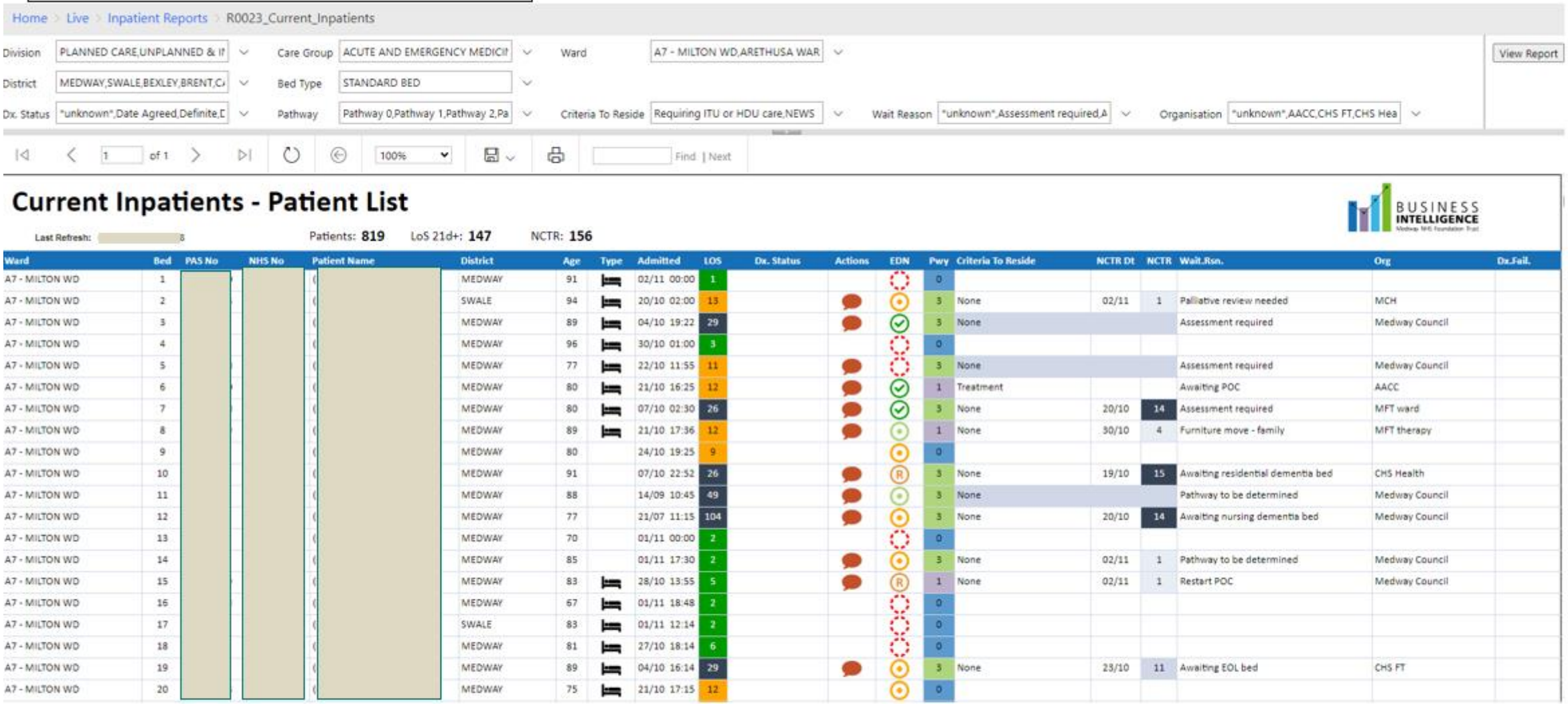


- Accessible by all
- Fully auditable
- National data submission for discharge submitted from this form
- Plan to interop with TeleTracking





In-Patient Tracker List - ward view



Home > Live > Inpatient Reports > R0023_Current_Inpatients

Division: PLANNED CARE,UNPLANNED & I | Care Group: ACUTE AND EMERGENCY MEDICI | Ward: A7 - MILTON WD,ARETHUSA WAR | View Report

District: MEDWAY,SWALE,BEXLEY,BRENT,C | Bed Type: STANDARD BED

Dx. Status: *unknown*,Date Agreed,Definite,D | Pathway: Pathway 0,Pathway 1,Pathway 2,Pa | Criteria To Reside: Requiring ITU or HDU care,NEWS | Wait Reason: *unknown*,Assessment required,A | Organisation: *unknown*,AACC,CHS FT,CHS Hea

1 of 1 | 100% | Find | Next

Current Inpatients - Patient List

BUSINESS INTELLIGENCE

Last Refresh: 8 | Patients: **819** | LoS 21d+: **147** | NCTR: **156**

Ward	Bed	PAS No	NHS No	Patient Name	District	Age	Type	Admitted	LOS	Dx. Status	Actions	EDN	Pwy	Criteria To Reside	NCTR Dt	NCTR	Wait.Rsn.	Org	Dx.Fail.
A7 - MILTON WD	1				MEDWAY	91		02/11 00:00	1				0						
A7 - MILTON WD	2				SWALE	94		20/10 02:00	13				3	None	02/11	1	Palliative review needed	MCH	
A7 - MILTON WD	3				MEDWAY	89		04/10 19:22	29				3	None			Assessment required	Medway Council	
A7 - MILTON WD	4				MEDWAY	96		30/10 01:00	3				0						
A7 - MILTON WD	5				MEDWAY	77		22/10 11:55	11				3	None			Assessment required	Medway Council	
A7 - MILTON WD	6				MEDWAY	80		21/10 16:25	12				1	Treatment			Awaiting POC	AACC	
A7 - MILTON WD	7				MEDWAY	80		07/10 02:30	26				3	None	20/10	14	Assessment required	MFT ward	
A7 - MILTON WD	8				MEDWAY	89		21/10 17:36	12				1	None	30/10	4	Furniture move - family	MFT therapy	
A7 - MILTON WD	9				MEDWAY	80		24/10 19:25	9				0						
A7 - MILTON WD	10				MEDWAY	91		07/10 22:52	26			R	3	None	19/10	15	Awaiting residential dementia bed	CHS Health	
A7 - MILTON WD	11				MEDWAY	88		14/09 10:45	49				3	None			Pathway to be determined	Medway Council	
A7 - MILTON WD	12				MEDWAY	77		21/07 11:15	104				3	None	20/10	14	Awaiting nursing dementia bed	Medway Council	
A7 - MILTON WD	13				MEDWAY	70		01/11 00:00	2				0						
A7 - MILTON WD	14				MEDWAY	85		01/11 17:30	2				3	None	02/11	1	Pathway to be determined	Medway Council	
A7 - MILTON WD	15				MEDWAY	83		28/10 13:55	5			R	1	None	02/11	1	Restart POC	Medway Council	
A7 - MILTON WD	16				MEDWAY	67		01/11 18:48	2				0						
A7 - MILTON WD	17				SWALE	83		01/11 12:14	2				0						
A7 - MILTON WD	18				MEDWAY	81		27/10 18:14	6				0						
A7 - MILTON WD	19				MEDWAY	89		04/10 16:14	29				3	None	23/10	11	Awaiting EOL bed	CHS FT	
A7 - MILTON WD	20				MEDWAY	75		21/10 17:15	12				0						

Real time reporting from EPR

fig.1 - Snip demonstrating the discharge, EDD, eDN and MFFD data from the operational pressures report. This data is pulled directly from the PTL and is updated every 10 minutes. This enables us to review our discharge position and predictions to manage discharges across the Trust. EDD and eDN compliance has improved and this visibility enable site and the divisions to review and plan.

Actual Discharges	Expected Discharges	Exp. Disch. Breakdown		By Care Group					By EDN Status		
				SpecMd	TOPs	Emerg.	Surg	Other	Comp.	Disp.	NotRdy
6	45	DEF	12	0	5	1	5	1	0	6	6
		POT	33	2	6	6	17	2	0	4	29
		EDD Today	*104*	*21*	*25*	*9*	*20*	*29*	*0*	*14*	*90*
		EDD Tomor.	*54*	*5*	*9*	*8*	*15*	*17*	*0*	*4*	*50*

MFFD Patients					MFFD LoS		By Care Group					By EDN Status		
							SpecMd	TOPs	Emerg.	Surg	Other	Comp.	Disp.	NotRdy
	93				>1d	64	10	34	5	13	0	0	37	27
7	35	16	22	13	>7d	13	3	8	0	2	0	0	11	2
p0	p1	p2	p3	unk.										

Fig.1

Fig.2 - Snip from the delayed discharge report. This report pulls from the PTL and again is in real time. The report shows all discharges per discharge pathway with the top delay reasons. When in the live report we can click on the pathway and this will open the PTL for those patients enabling us to review and manage the delay. We can also click on the delay reason and again this opens the PTL for these patients

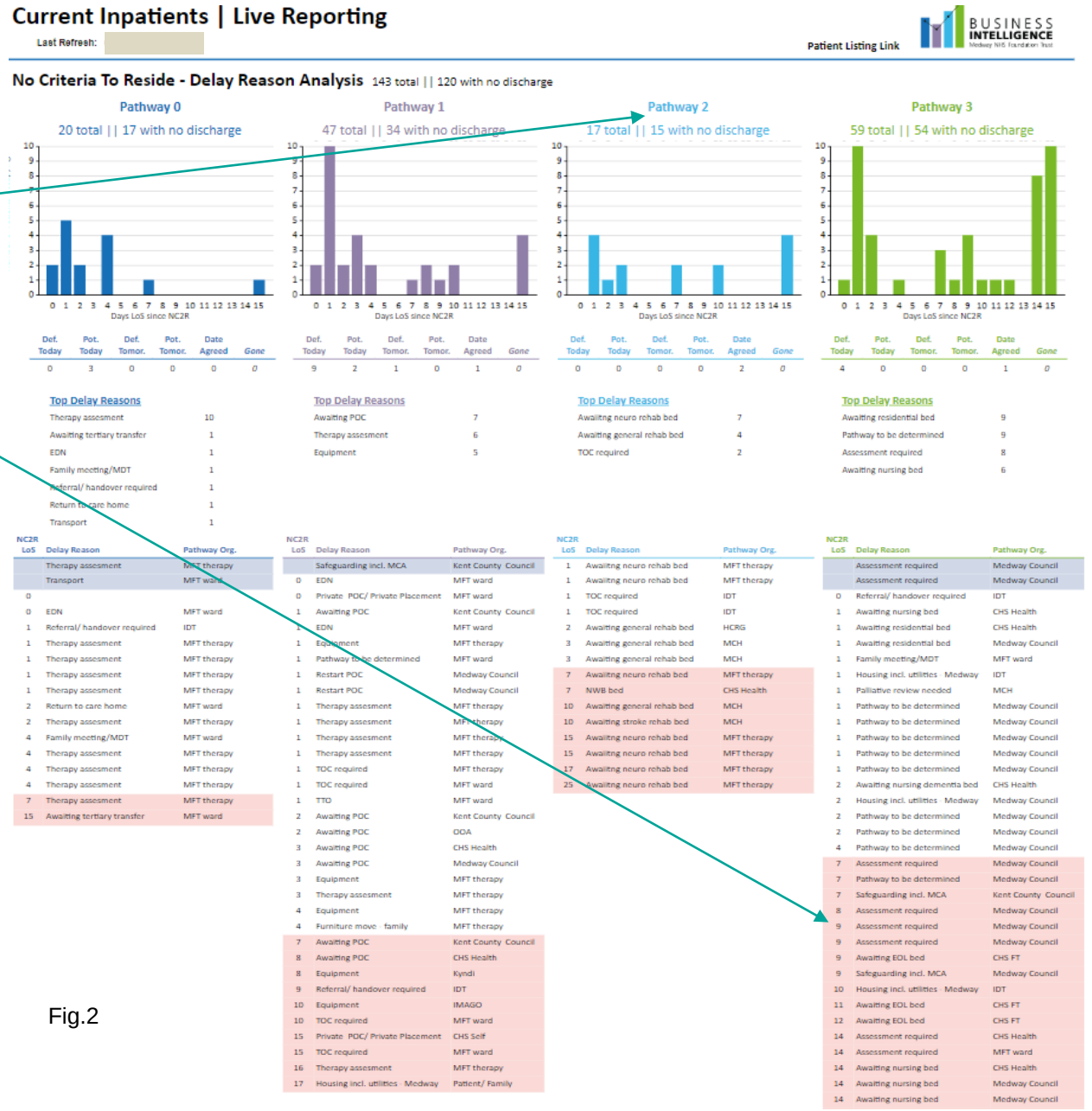


Fig.2

In-Patient Tracker List ward view

Current Inpatients - Patient List

Last Refresh:

Patients: **145** LoS 21d+: **56** NCTR: **145**

BUSINESS INTELLIGENCE

Ward	Bed	PAS No	NHS No	Patient Name	District	Age	Type	Admitted	LOS	Dx. Status	Actions	EDN	Pwy	Criteria To Reside	NCTR Dt	NCTR	Wait.Rsn.	Org	Dx.Fail.
A7 - MILTON WD	2				SWALE	94		20/10 02:00	13				3	None	02/11	1	Palliative review needed	MCH	
A7 - MILTON WD	3				MEDWAY	89		04/10 19:22	29				3	None			Assessment required	Medway Council	
A7 - MILTON WD	5				MEDWAY	77		22/10 11:55	11				3	None			Assessment required	Medway Council	
A7 - MILTON WD	7				MEDWAY	80		07/10 02:30	26				3	None	20/10	14	Assessment required	MFT ward	
A7 - MILTON WD	8				MEDWAY	89		21/10 17:36	12				1	None					
A7 - MILTON WD	15				MEDWAY	83		28/10 13:55	5				1	None					
A7 - MILTON WD	19				MEDWAY	89		04/10 16:14	29				3	None					
A7 - MILTON WD	23				MEDWAY	93		27/09 18:30	36	Potential			3	None					EDN
A7 - MILTON WD	28				MEDWAY	91		29/10 00:37	4				3	None					
ARETHUSA WARD					MEDWAY	45		30/10 17:05	4	Definite			0	None					
BRONTE WD	8				MEDWAY	83		20/10 00:00	13	Potential - Today			0	None	02/11	1	EDN	MFT ward	
BYRON WARD	1				MEDWAY	89		09/10 23:55	24				3	None	25/10	9	Awaiting EOL bed	CHS FT	
BYRON WARD	4				MEDWAY	78		23/10 18:30	10				3	None	26/10	8	Assessment required	Medway Council	
BYRON WARD	8				MEDWAY	87		21/09 01:50	42				3	None	20/10	14	Awaiting residential bed	Medway Council	
BYRON WARD	10				MEDWAY	79		27/08 10:12	67				3	None	20/10	14	Awaiting residential bed	Medway Council	
BYRON WARD	11				MEDWAY	70		19/10 00:00	14	Definite			3	None	25/10	9	Awaiting nursing bed	MCH	
BYRON WARD	12				MEDWAY	72		14/09 17:54	49				3	None	22/10	12	Awaiting EOL bed	CHS FT	
BYRON WARD	13				TONBRIDGE AND	90		06/10 23:37	27				1	None	30/10	4	Equipment	MFT therapy	
BYRON WARD	14				SWALE	92		10/08 18:55	84				2	None	09/10	25	Awaitng neuro rehab bed	MFT therapy	
BYRON WARD	18				MEDWAY	90		19/10 00:00	14				1	None	25/10	9	Therapy assesment	MFT therapy	
BYRON WARD	23				MEDWAY	91		18/10 00:00	15				0	None					
BYRON WARD	24				MEDWAY	83		11/10 14:30	23	Definite - Today			1	None					
DISCHARGE LOUNGE	01				MEDWAY	91		12/10 10:41	22	Potential			2	None					TTO
DISCHARGE LOUNGE	02				MEDWAY	84		20/10 06:11	13	Definite - Today			1	None					
DISCHARGE LOUNGE	03				GRAVESHAM	94		14/10 00:00	20	Definite - Today			3	None					
DISCHARGE LOUNGE	04				SWALE	94		19/10 10:50	15				1	None					
DISCHARGE LOUNGE	05				GRAVESHAM	71		15/10 13:40	18	Definite			1	None					
EMERALD SHORT STAY WARD	3				SWALE	75		27/10 15:06	6				1	None					
EMERALD SHORT STAY WARD	5				MEDWAY	80		21/10 06:35	12				2	None					
EMERALD SHORT STAY WARD	6				MEDWAY	94		23/10 10:28	10				1	None	26/10	8	Equipment	Kyndi	
EMERALD SHORT STAY WARD	13				SWALE	87		16/10 11:26	17				0	None			Therapy assesment	MFT therapy	
EMERALD SHORT STAY WARD	15				MEDWAY	82		29/10 23:00	4				1	None	02/11	1	EDN	MFT ward	
EMERALD SHORT STAY WARD	2A				MEDWAY	83		18/10 00:00	15				3	None	25/10	9	Assessment required	Medway Council	
EMERALD SHORT STAY WARD	4A				MEDWAY	94		27/10 17:23	6				1	None	02/11	1	TTO	MFT ward	
EMERALD SHORT STAY WARD	6A				MEDWAY	85		30/10 09:17	3				1	None	31/10	3	Awaiting POC	Medway Council	

Standard Bed

Side Room

eDN status
- Not started
- eDN started but medications not complete
- Complete and pharmacy to supply TTO – authorised
- Complete and pharmacy to supply TTO – rejected
- Complete

20/10/23 – TOC Completed sent to LA
23/10/23 – AX Coper Beaches NH
24/10/23 – Copper Beaches declined
25/10/23 – AX Charing House
25/10/23 – CT Scan revealed NAD, can be DC to Charring House
27/10/23 – Family concerns re capacity and safety requesting Amhurst Court
01/11/23 - Medway Council have advised there is a family disagreement regarding placement and discharge plans

- Maximise ‘dropbox’ opportunities to continue to remove idle bed time
- Further improve ‘occupied timer’ to move patients even quicker to clean beds
- Synapse Dashboards (live and interactive data for continuous improvement)
- Interfacing between TeleTracking / EPR to show Electronic Discharge Notification and To Take Out (TTO) status to remove delays
- Community Placement – visibility of community bed capacity / discharges
- Implement improvement huddle board in team area to monitor successes and smaller scale issues

NHS
Medway
NHS Foundation Trust

Thank You

Tracy.stocker1@nhs.net

Patient
FIRST

Patient experience panel discussion

Andrew Stradling
Chief Medical Officer | NHS LPP Medical Director - NHS LPP and M&S H&CP

Mr Andy Swinburn
Executive Director of Paramedicine - Welsh Ambulance Services NHS Trust

Chris Johnson
Head of Patient Experience & Engagement - Northampton General Hospital

Case Study

Slido

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SCAN ME

Speaking Now…

Julian Mount
Business Development Manager
RLDatix

RLDATIX

Case Study - Improving Patient Flow by Digitising the Procurement of Non-Emergency Transport

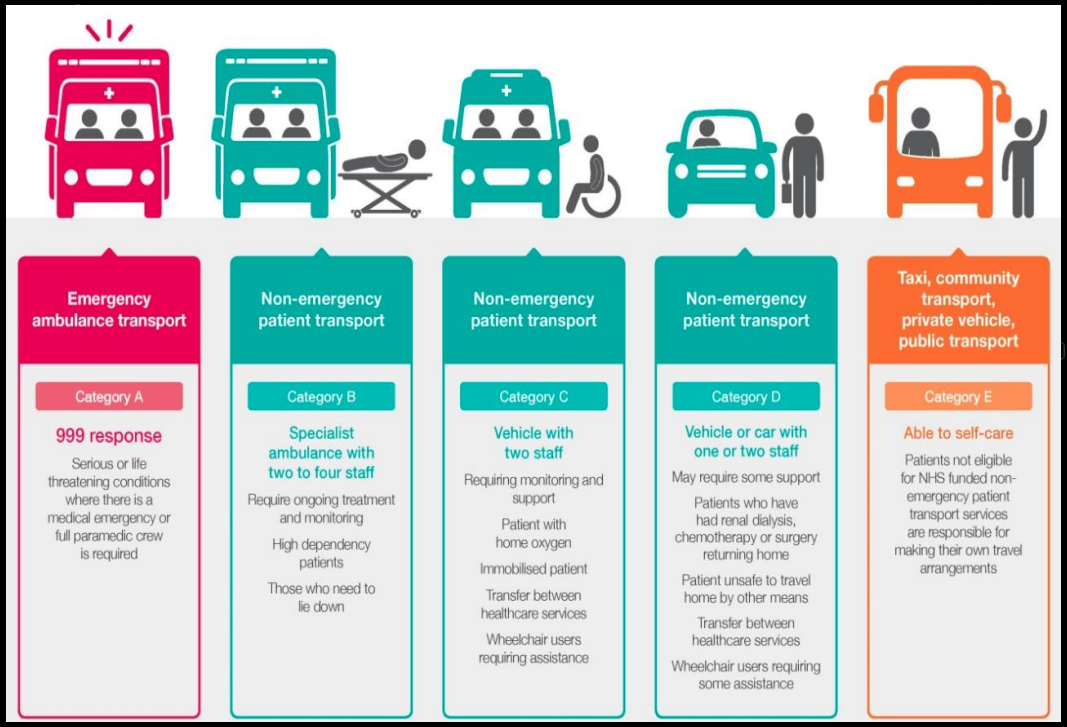
Allocate Transport Marketplace

Version 1 July 2024

Patient Flow & Transport

- Patient experience doesn't begin and end at the door
- Multiple studies looking at system-wide review and addressing “bottlenecks” *
- Delays in discharge occur:**
  - obtaining assessments of post-acute care needs
  - organising and coordinating any care and support needed, or in organising a discharge to assess pathway
  - **organising discharge itself – transport**
- Transfer delays cause poorer health outcomes and increase costs
  - 10% Journeys unfilled

https://hgs.uhb.nhs.uk/wp-content/uploads/nept1.jpg



RLDATIX

- * https://www.sciencedirect.com/science/article/pii/S016885102100292X
- * *https://www.health.org.uk/publications/long-reads/why-are-delayed-discharges-from-hospital-increasing-seeing-the-bigger

Patient Flow, Transport & NEPTS

NEPTS 2021 Review
- Fragmented procurement
- Lobbying from patient groups

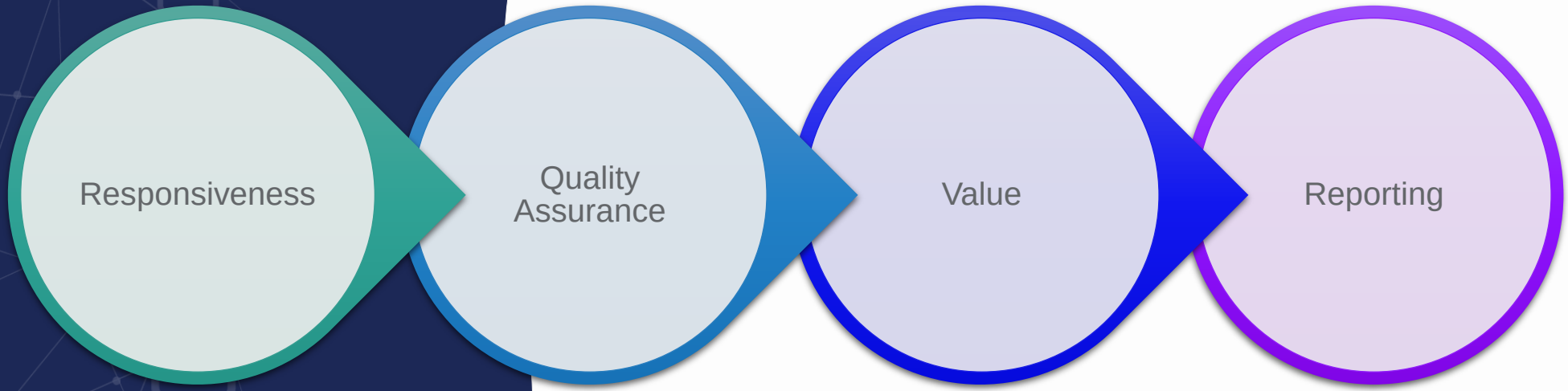
12 Million NEPTS journeys (£500 Million spend)
- 10-11% Discharge (1.2 Million)
- National Priority **
- 63% Unplanned ***

Opportunity to integrate transport into pathway
- 60 min quicker discharge
- **50,000 bed days** ****

- **NHS England » Improving hospital discharge
- *** NHS England » NHS Non-Emergency Patient Transport Services (NEPTS) review
- **** Matt Norman (NEPTS lead NHS) ALF 2023 2nd Oct 2023

RLDATIX

Challenges with Patient Transport



Responsiveness	Quality Assurance	Value	Reporting
Unplanned Needs Seasonal Pressure Scale Up & Down Procurement Process **Primary Supplier unfilled / out of scope**	Compliance Safe Quality Reliable	Value for money Race to the “bottom” price Comparable pricing Buoyant Marketplace	Data in – data out. Granular reporting improves accountability and management Productivity Green agenda – Miles

RLDATIX

What is DPS? (Transport Marketplace)

- Free for the NHS to use with minimal setup required
- Easy set up - can be mobilized within 24 hours
- No fixed contract, use it when you need it
- Full control in running competitions for shifts/journeys
- Suppliers will meet the relevant NHS frameworks (LPP)
- Supports the NHS's sustainability goals
- Only suppliers who meet your criteria will be allowed to bid
- On-boarding and post-mobilization support available
- Created a fair and competitive environment for buyers and providers
- Rigorous vetting and compliance process conducted on providers
- Audit trail and reporting capabilities which assist with invoicing
- You'll be helping local businesses within the area

RLDATIX

Sheffield Teaching Hospital & DPS (Transport Marketplace)

The Challenges

- Sheffield Teaching Hospital
  - 5 sites, Small Geography, Specialist Centre (AE at one site)
- 12-hour Trolley Breaches (AE)
  - Moving patients to correct speciality
  - Unnecessary overnight stays
- Major Incident
  - General resilience (2/3 suppliers)
  - Managing providers
- Understanding need
  - Standard process slow (6 Months)
  - Volume of people
    - Finance, procurement, operations

The Solution

- The implementation of a DPS
- Responsive access to needed resource
  - 12 Hour breaches reduced
  - Reduction in overnight stays
- Increased resilience
  - Bigger pool of providers
  - Efficiency savings in contract management
- Scale up and scale down when needed
  - Demand-based provision
  - More patients moved
- Getting the right provision to the right place at the right time

RLDATIX

Sheffield Teaching Hospitals NHS
NHS Foundation Trust

Headline numbers

Results after 10 months

£198,000 savings in additional bed stay

1,129 Patients avoiding 12-hour trolley breach

1,567 Patients being transferred to appropriate speciality – better outcomes, shorter stay

Resource reallocation 2 full-time members of staff

RLDATIX

Sheffield Teaching Hospitals NHS
NHS Foundation Trust

Summary

Non-emergency patient transport plays a vital role in patient flow

A dynamic purchasing system (Transport Marketplace) is a vital tool for responding to transport demand

New concept – Improve patient flow, access compliant providers, collect data and reduce costs

RLDATIX

Questions

RLDatix

Refreshments & Networking

Chair Opening Address

Kelly Bishop
Assistant Director of Nursing and Urgent Care
Midlands and Lancashire Commissioning Support Unit (MLCSU)

Case Study…

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SCAN ME

Speaking Now…

Johan Folkunger
CEO - DNV Imatis

Michael Fjeldstad
Solutions Consultant
DNV Imatis

DNV Imatis

Boosting Productivity: The Impact of Sustainable Care and Electronic Bed & Capacity Management

Christopher Betts, Business development and sales leader
Michael Fjeldstad, Solutions Consultant

Improving productivity in healthcare operations by 20%

Working tools

Time-consuming process

The impact of lack of overview

The impact of clarity and overview

Care synchronised

DNV Imatis

Bed Management at Østfold Hospital, Norway

Learn more about our eBCMS solution

DNV Imatis

Thank you.

Case Study…

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Speaking Now…

Mr Andy Swinburn
Executive Director of Paramedicine
Welsh Ambulance Services NHS Trust

Welsh Ambulance Services University NHS Trust

The Role of the Ambulance Service in a Community Based Setting

Ymddiriedolaeth Brifysgol GIG
Gwasanaethau Ambiwlans Cymru
Welsh Ambulance Services
University NHS Trust

Patient Flow Conference
2 July 2024

by Andy Swinburn
Executive Director of Paramedicine

How do we perceive the role of the ambulance service?

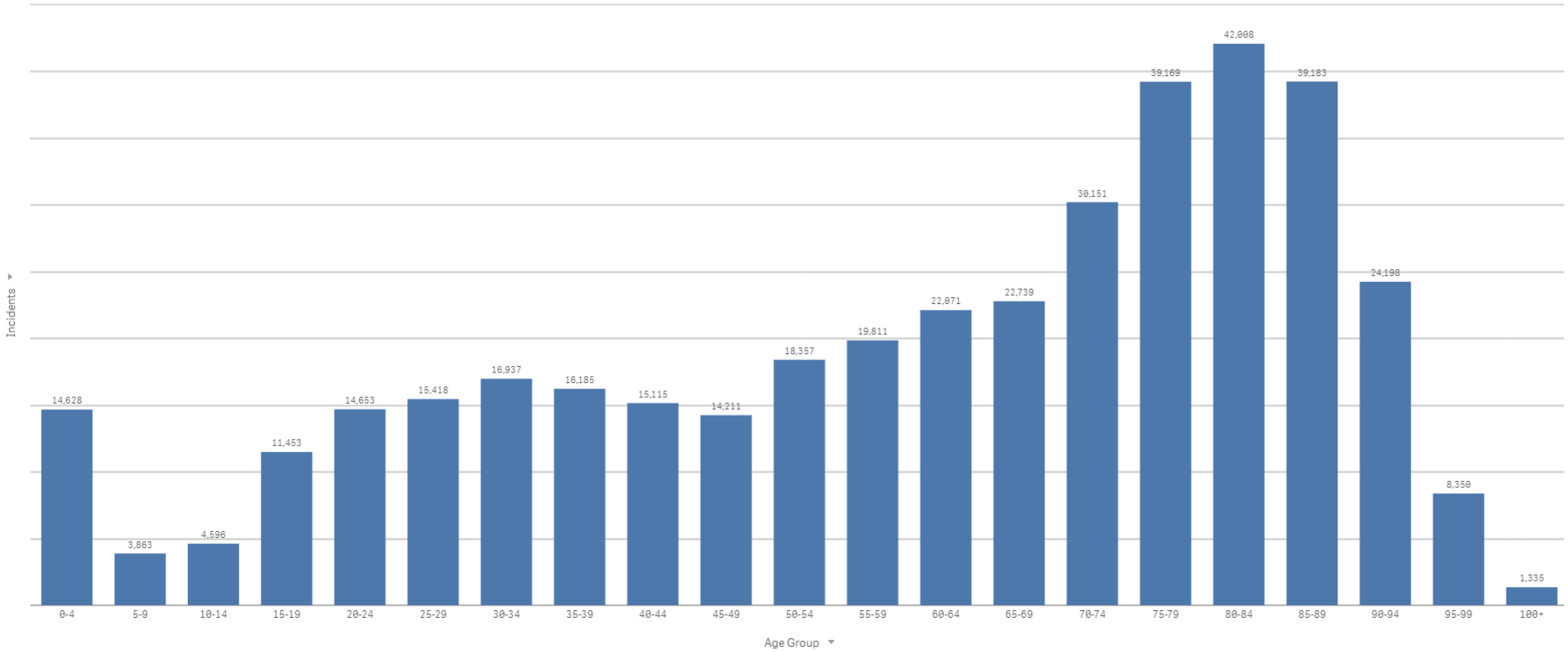
Traditional Service Model

The current service model is no longer fit for purpose

- Fails to distinguish emergency (now) and urgent (soon) care
- ‘One size fits all approach’
- System overwhelmed with urgent but not emergency presentations
- Need to be more judicious in using our resources
- Dependence on ‘pathways’ too unreliable and inefficient
- Greater use of clinical data & front-end clinical triage
- Role for the ambulance service in delivering this

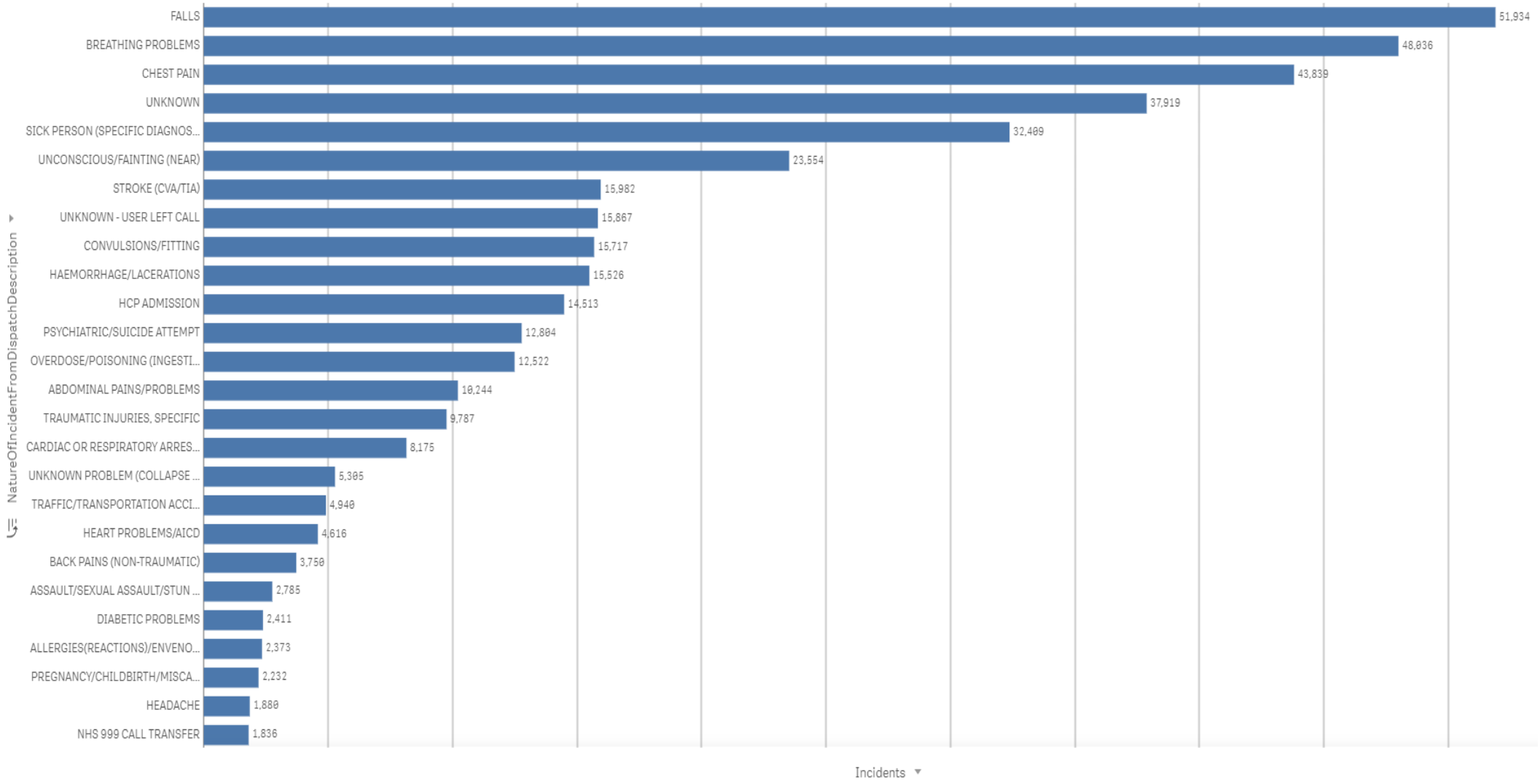
999 Activity – who Calls?

999 activity by Age - 2023



999 Activity – how do they present?

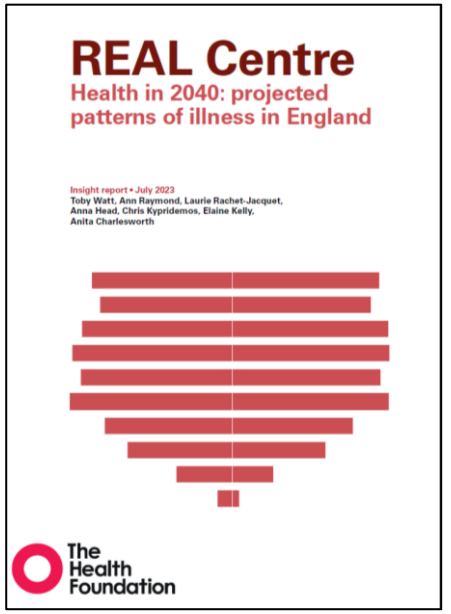
999 activity by presenting condition - 2023

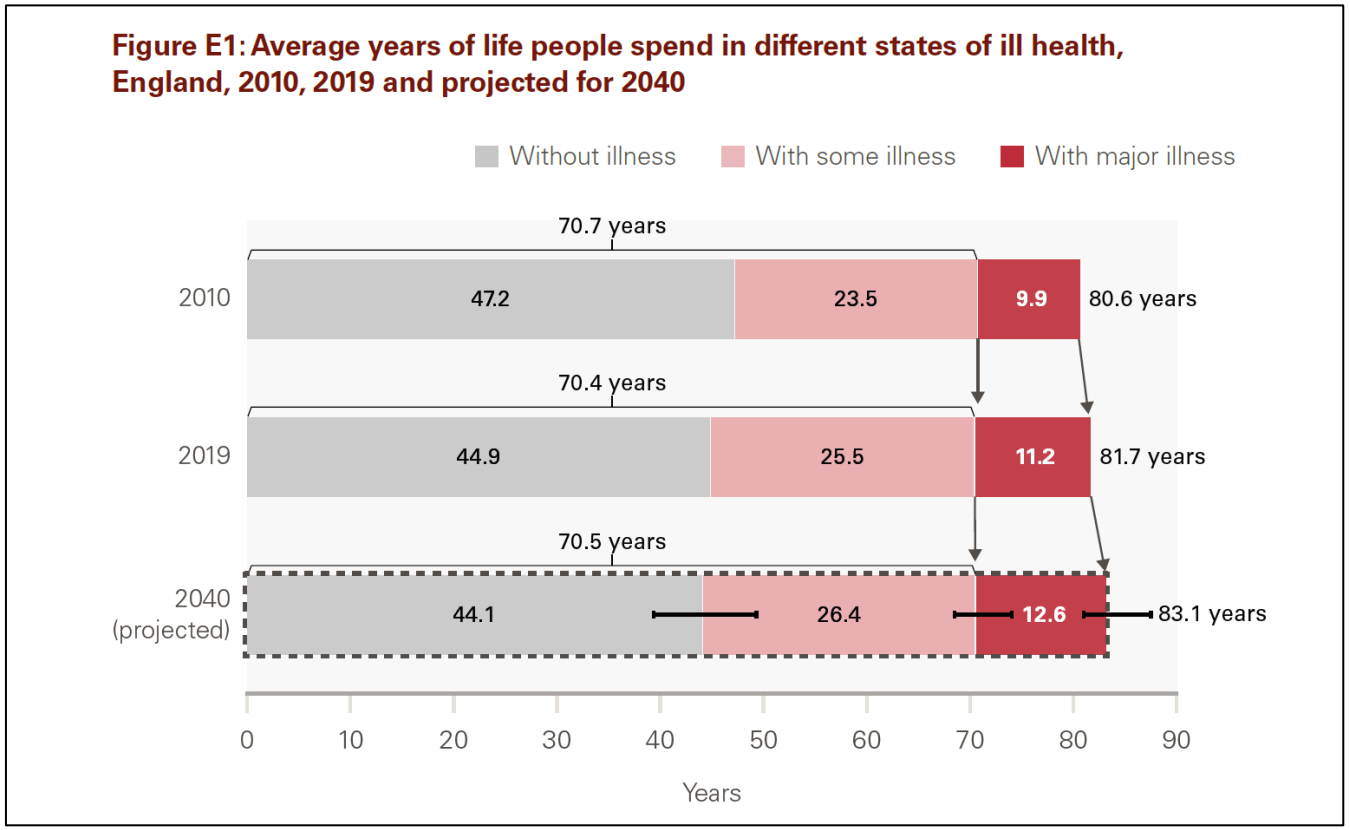


Our Future Challenge as EMS Providers

Our Changing Population - 2040 projections

- Life expectancy will increase
- Living with major illness remains at 70 years
- Number of people living with a major illness will increase by 2.5m (more than a third)

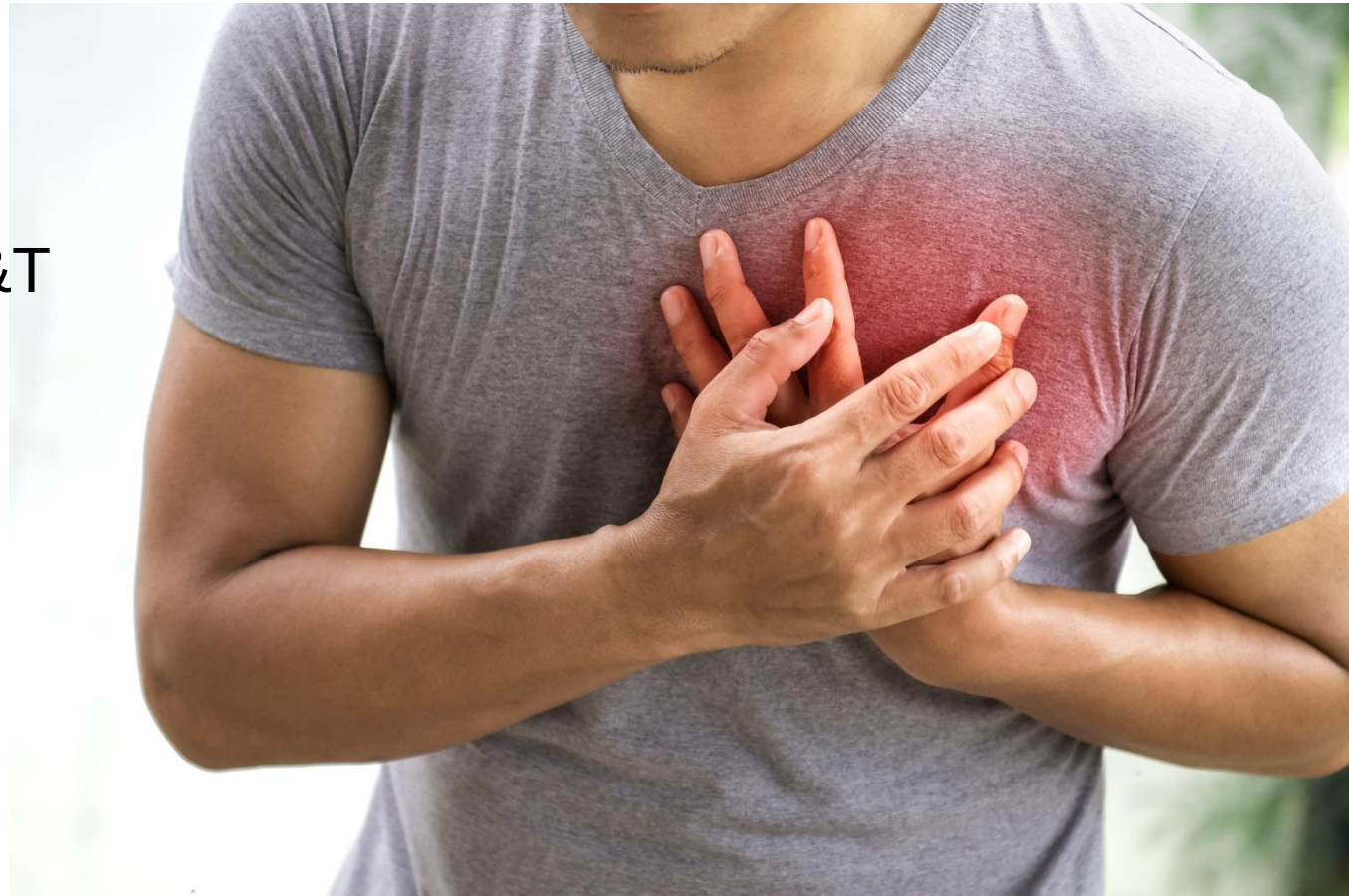




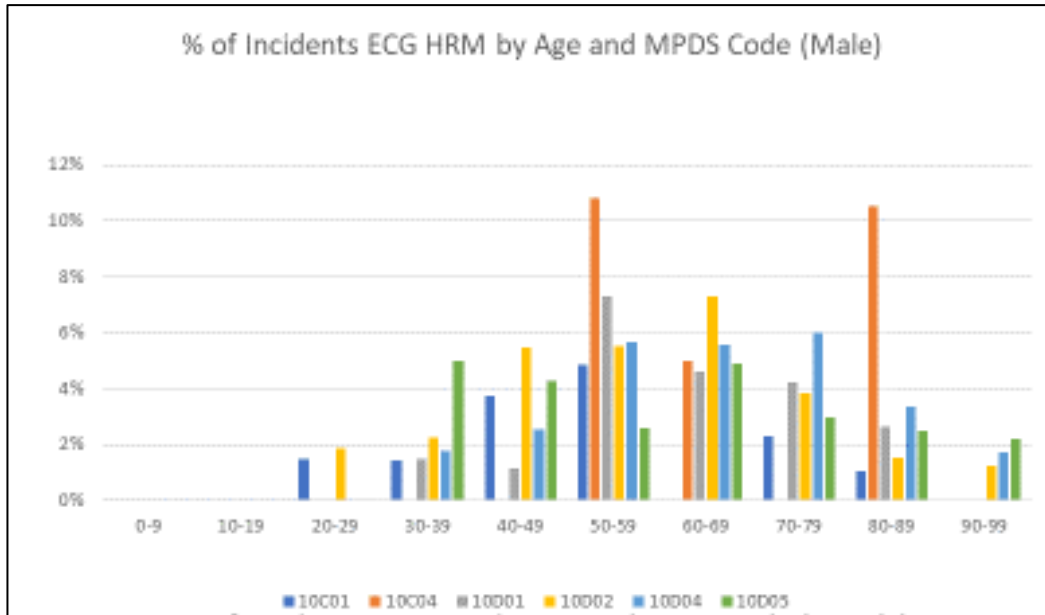
An Illustration

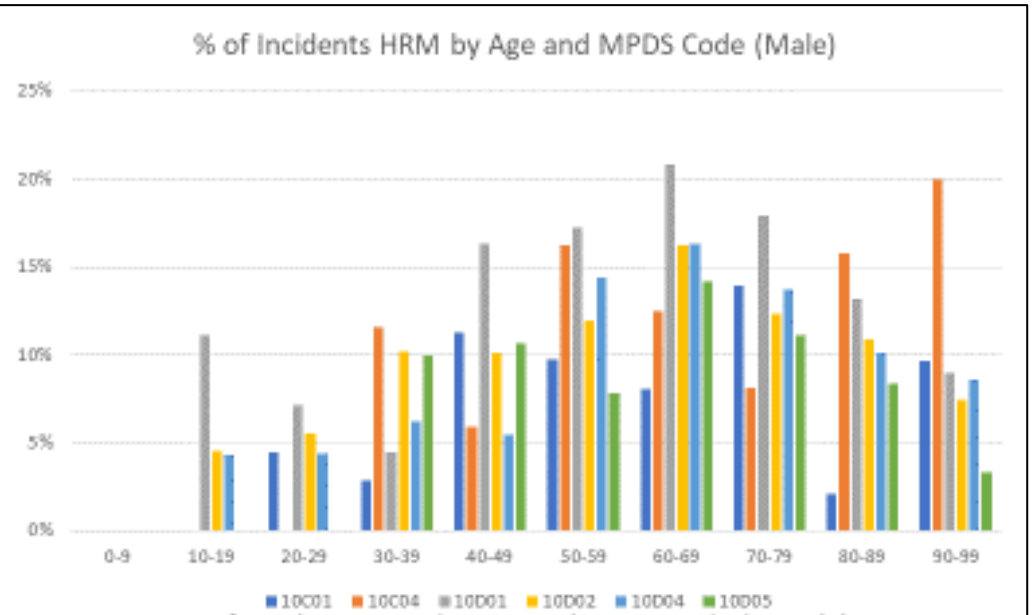
Chest Pain

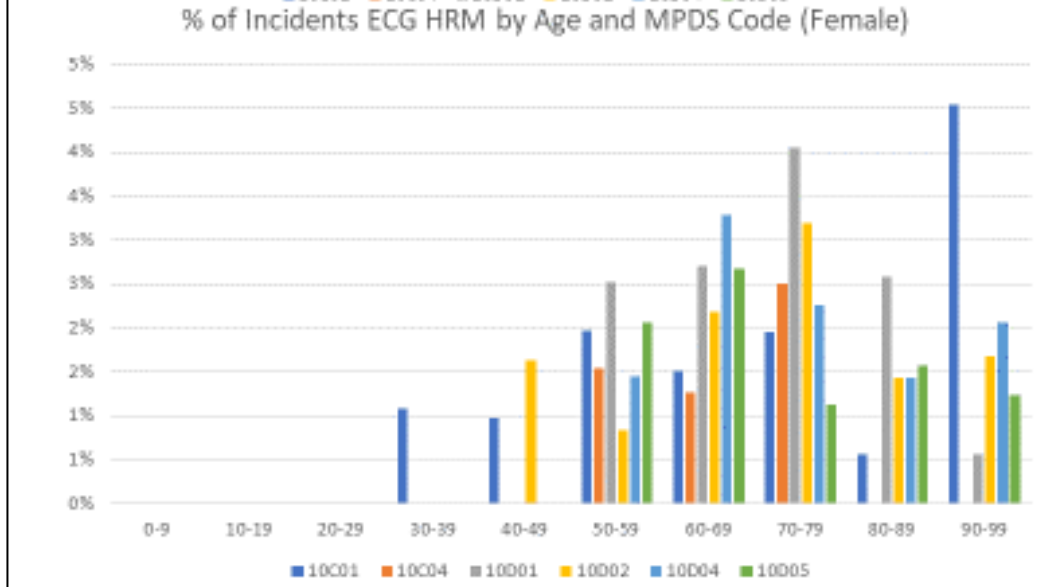
- Call taking outcome = high priority
- Primary care redirect to 999
- Low or limited options within the community
- High volume call
- High % conveyance
- Limited opportunity to H&T

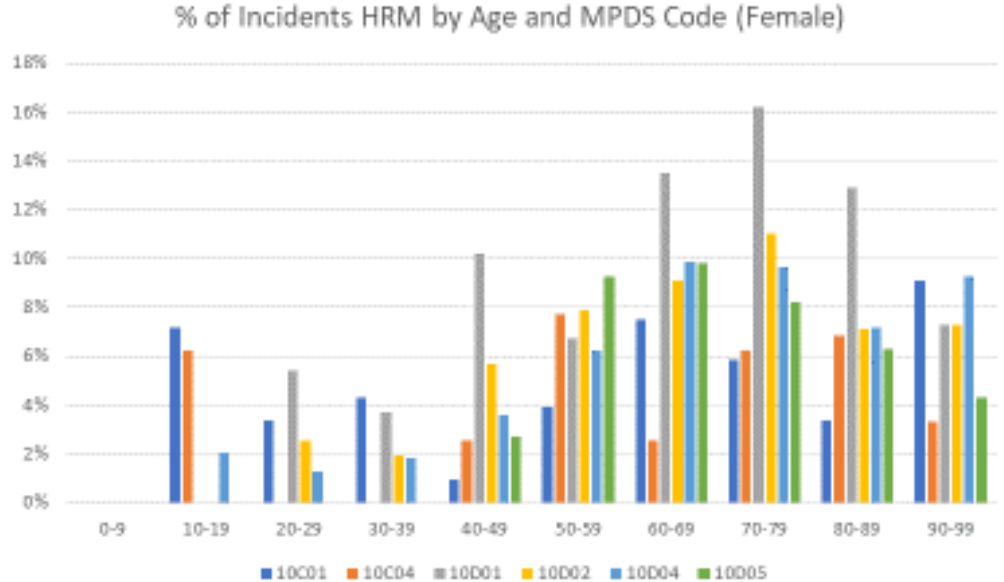


How do our patients present?

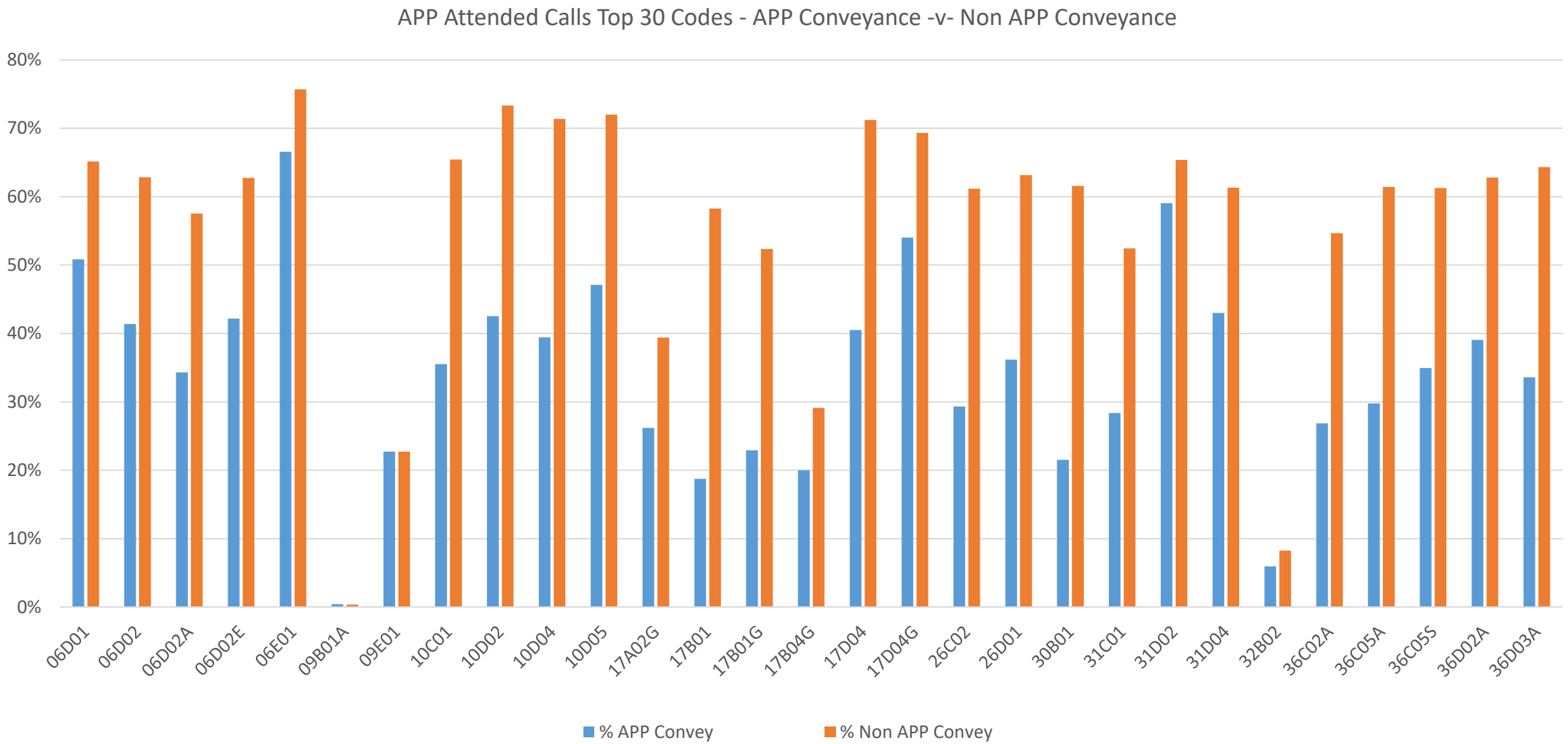








The Impact of Advanced Paramedic Practice



Urgent Care

Urgent Care – Why the Ambulance Service?

- Our trusted brand
- Our USP as regional/nationwide providers
- Paucity of alternatives
  - Not 24/7
  - Too risk averse
  - Require F2F assessment
  - Lack of consistency
  - Variable by time of day and day of week
  - Workforce variability
- They’re coming our way already, it’s the majority of our activity

Closing Thoughts

Addressing patient flow

- The 1970s model of ambulance service provision no longer meets the needs of our community
- Opportunity to refocus the ambulance service to play a major role in managing flow by being a community provider
- Ensuring ambulance availability for those incidents where emergency response and transport is the only option
- Paramedicine, as the majority clinical profession, can serve this need extremely well

Thank you for listening

E: andy.swinburn@wales.nhs.uk

@AndySwinburnQAM

Ymddiriedolaeth Brifysgol GIG
Gwasanaethau Ambiwlans Cymru
Welsh Ambulance Services
University NHS Trust

Patient Flow Conference

Case Study…

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Lunch & Networking

Case Study…

HealthPathways Community

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Speaking Now…

Dr David Hambleton
Managing Director
Pathways Alliance Limited

HealthPathways Community

Can standardised pathways reduce waiting time for patients?

TUESDAY 2ND JULY 2024

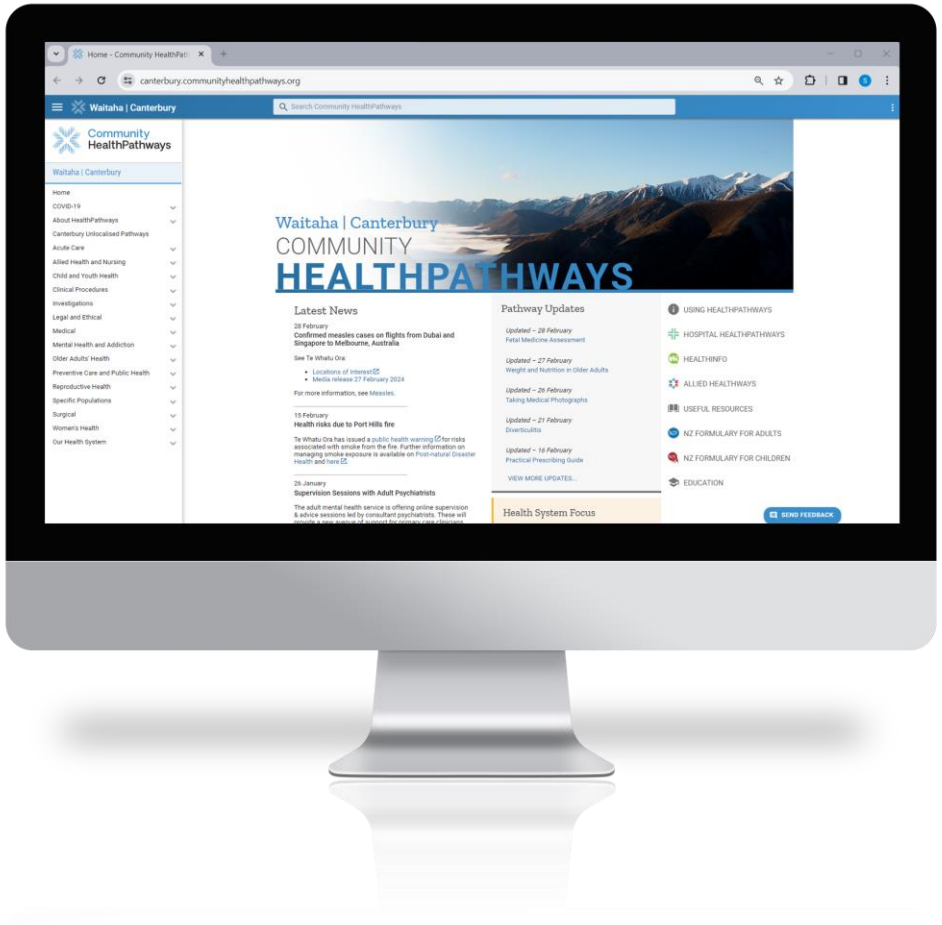
The problem

HealthPathways Community

So, what is it?

HealthPathways Community

- Methodology for getting agreement on how we do things around here today
- An international community of collaborators
- Pathways are developed as a collaboration between generalists and specialists
- Online clinical guidance used at the point of care



What is it for?

HealthPathways Community

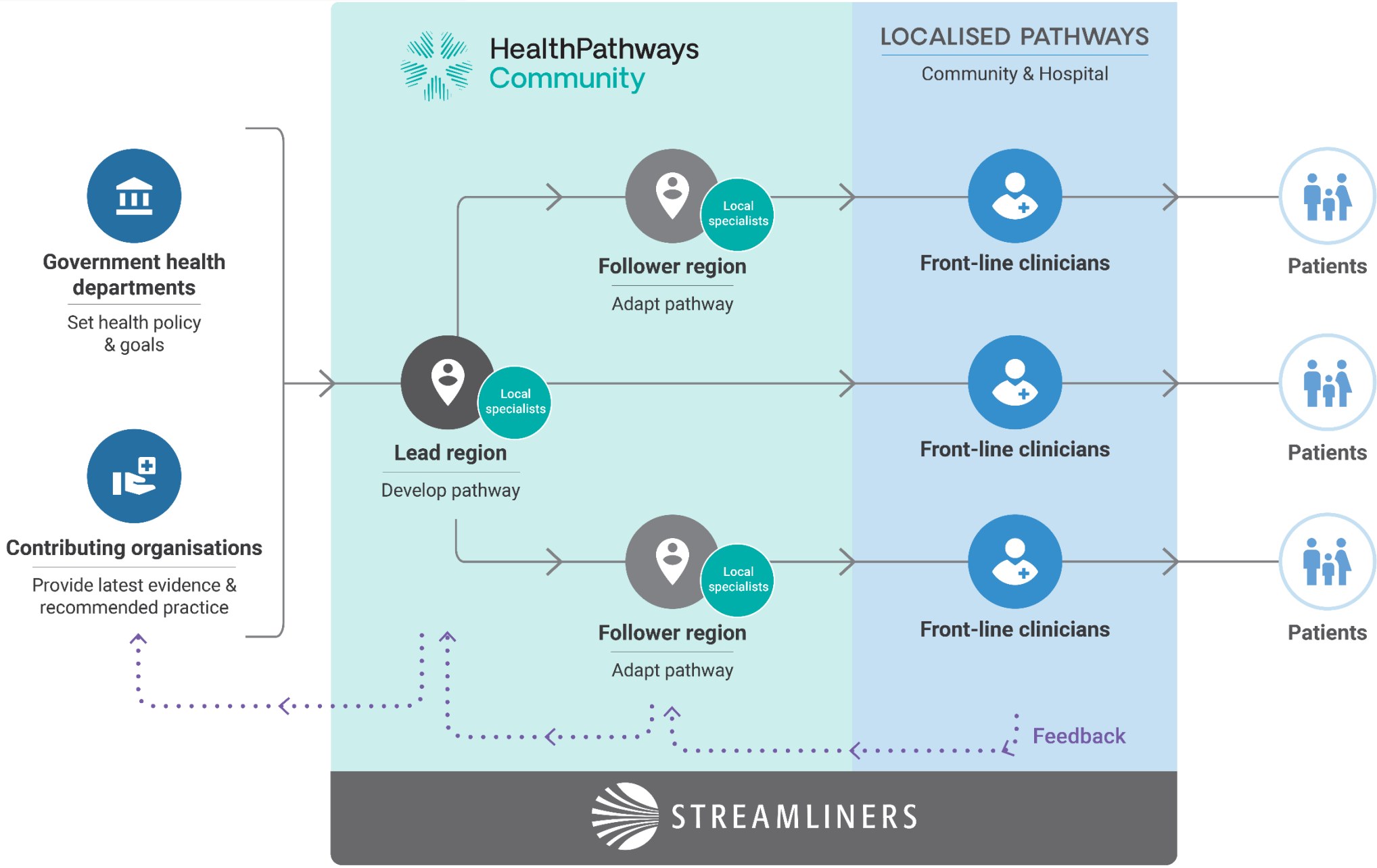
HealthPathways promotes:

- Clinical engagement, collaboration, and agreement
- Standardisation
- Better informed decisions at the point of care
- Rapid translation of national policy and guidance into local practice
- Service development and improvement, using feedback loops to improve pathways

HealthPathways reduces:

- Unwarranted variation in care
- Wasted patient and clinical time
- Uncertainty between clinicians about how a patient should be managed

Getting policy into practice at scale



One pathway, two views

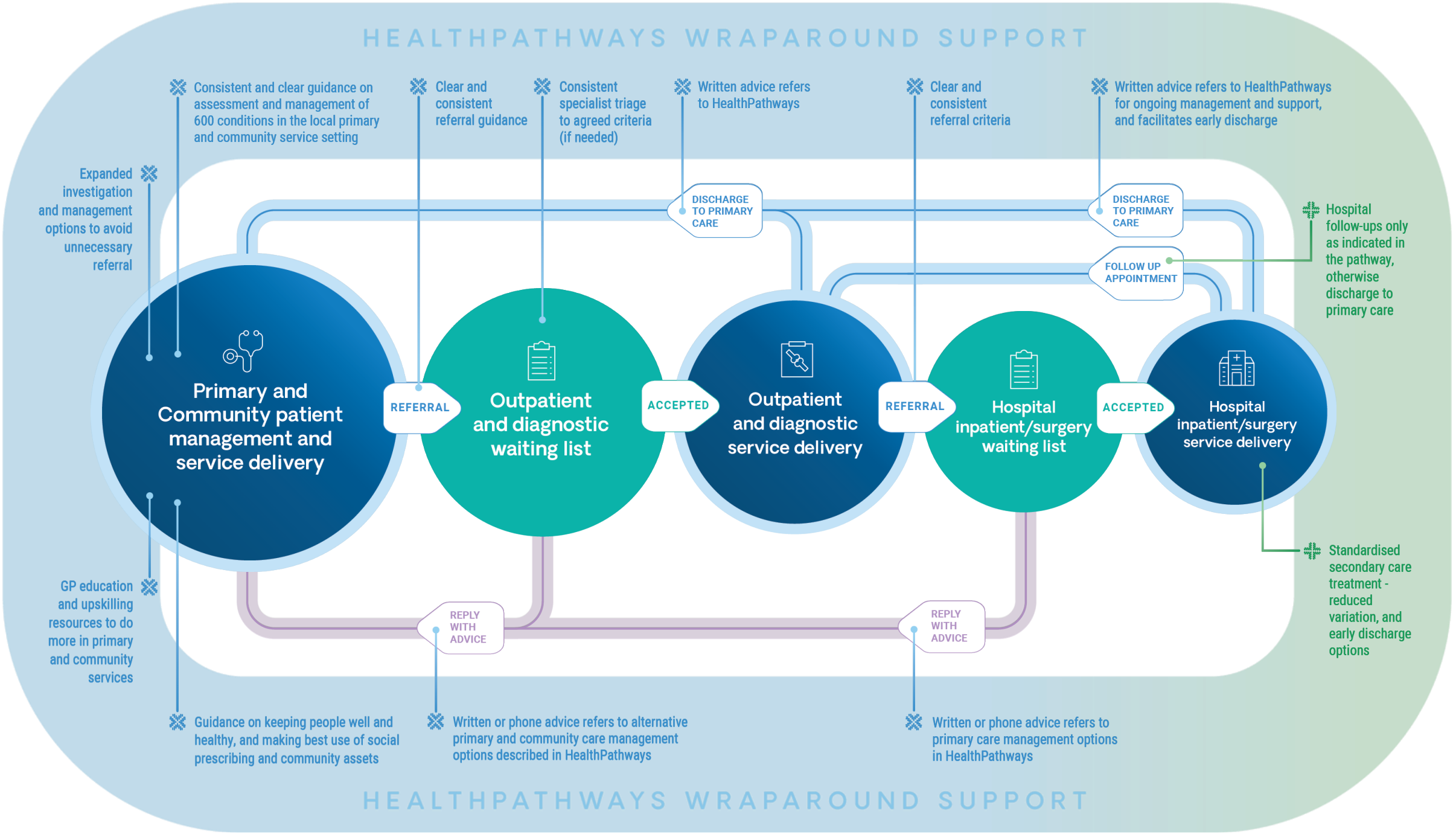
HealthPathways Community

Community HealthPathways

Hospital HealthPathways

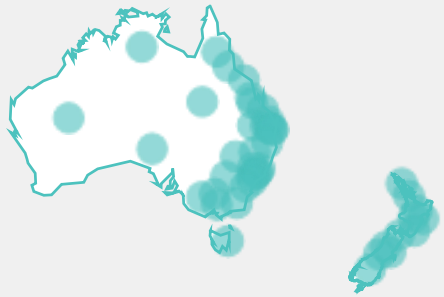
Impact across the system

HealthPathways Community


HEALTHPATHWAYS WRAPAROUND SUPPORT
Consistent and clear guidance on assessment and management of 600 conditions in the local primary and community service setting
Clear and consistent referral guidance
Consistent specialist triage to agreed criteria (if needed)
Written advice refers to HealthPathways
Clear and consistent referral criteria
Written advice refers to HealthPathways for ongoing management and support, and facilitates early discharge
Expanded investigation and management options to avoid unnecessary referral
DISCHARGE TO PRIMARY CARE
DISCHARGE TO PRIMARY CARE
FOLLOW UP APPOINTMENT
Hospital follow-ups only as indicated in the pathway, otherwise discharge to primary care
Primary and Community patient management and service delivery
REFERRAL
Outpatient and diagnostic waiting list
ACCEPTED
Outpatient and diagnostic service delivery
REFERRAL
Hospital inpatient/surgery waiting list
ACCEPTED
Hospital inpatient/surgery service delivery
Standardised secondary care treatment - reduced variation, and early discharge options
GP education and upskilling resources to do more in primary and community services
REPLY WITH ADVICE
REPLY WITH ADVICE
Guidance on keeping people well and healthy, and making best use of social prescribing and community assets
Written or phone advice refers to alternative primary and community care management options described in HealthPathways
Written or phone advice refers to primary care management options in HealthPathways
HEALTHPATHWAYS WRAPAROUND SUPPORT

The HealthPathways Community at a glance

Australia and New Zealand regions



United Kingdom regions

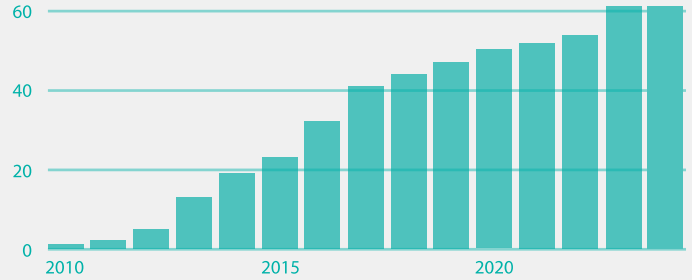
Total number of implementations

60

Total patient numbers in regions

34.3M

Cumulative number of regions over time



Clinical pathways localised	Pages currently being localised	Page reviews completed	Page reviews in progress	Services in HealthPathways Directory
21,120	4,296	23,755	4,438	51,152

Total people contributing feedback or to pathway development

GPs	Specialists	Nurses	Allied Health
11,000	8,588	8,971	5,945

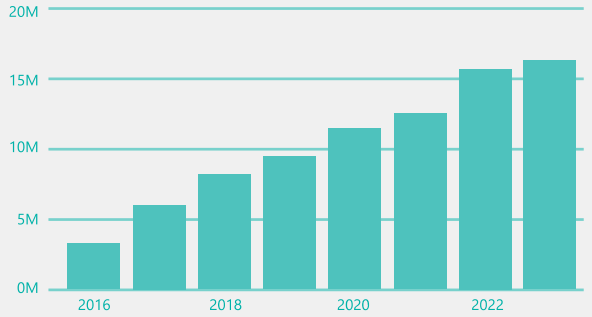
Total feedback posts

1,932,250

Page views in last 12 months

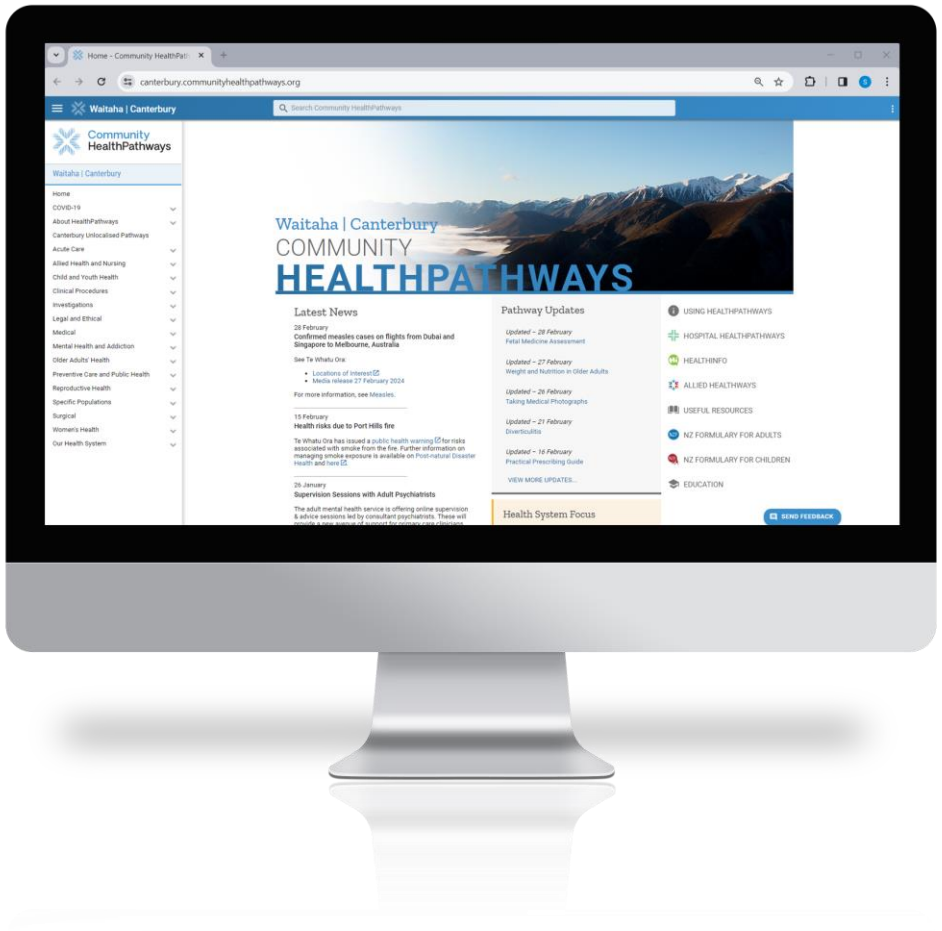
15,793,371

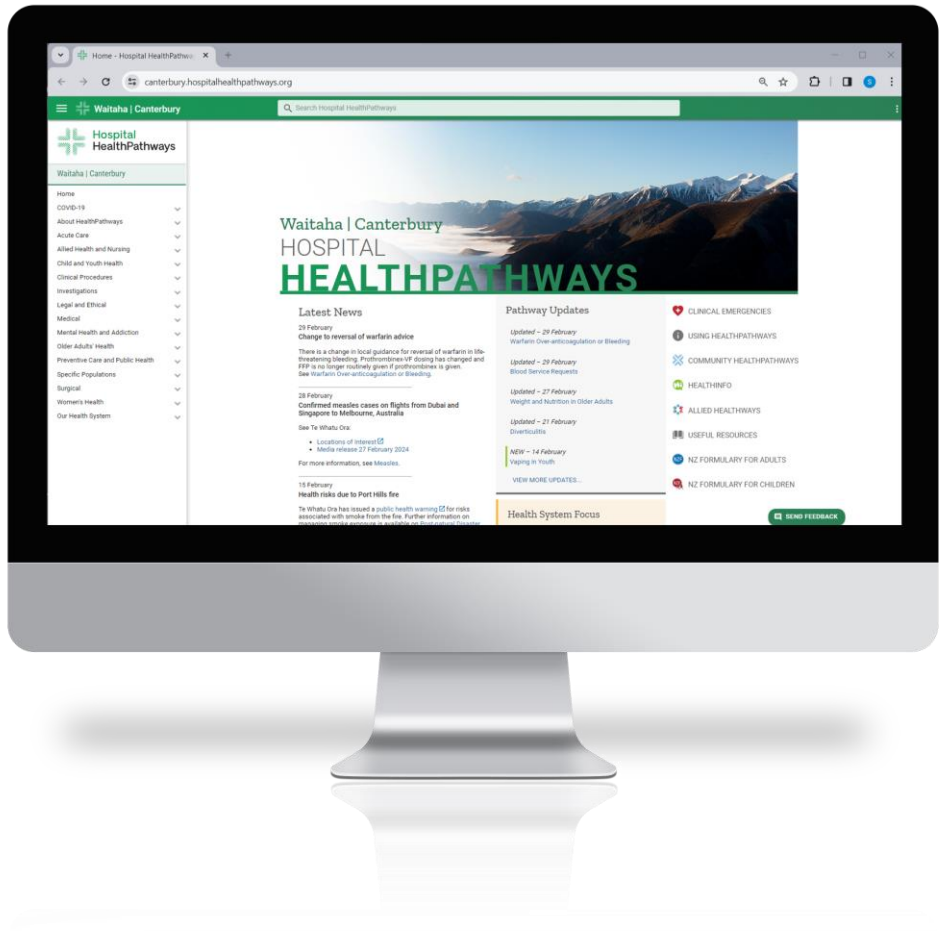
Total website page views



Demonstration

HealthPathways Community





Community HealthPathways impact

HealthPathways Community

South Tyneside 2023 HealthPathways User Survey results

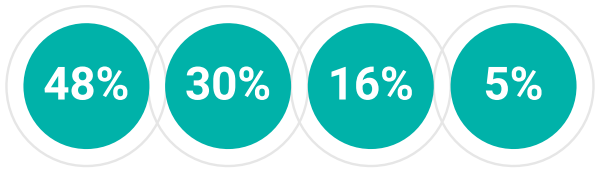
97% *of respondents*

use HealthPathways **at least once a week**

ALMOST HALF (47%) USE IT DAILY

On average, HealthPathways **saves users 1 hour per week**

Time saved per day:



109 responses

85% clinical (GPs, Nurses, Allied Health, Pharmacists)

80% of clinicians agree that HealthPathways helps them to **assess the patient** in front of them

91% of clinicians say that HealthPathways helps them **understand and follow local referral processes**

86% of clinicians say that HealthPathways helps them **identify and access services** that they would otherwise not be aware of

87% of clinicians say that HealthPathways makes them **more confident** managing the patient in front of them

WHAT PEOPLE HAVE TO SAY:

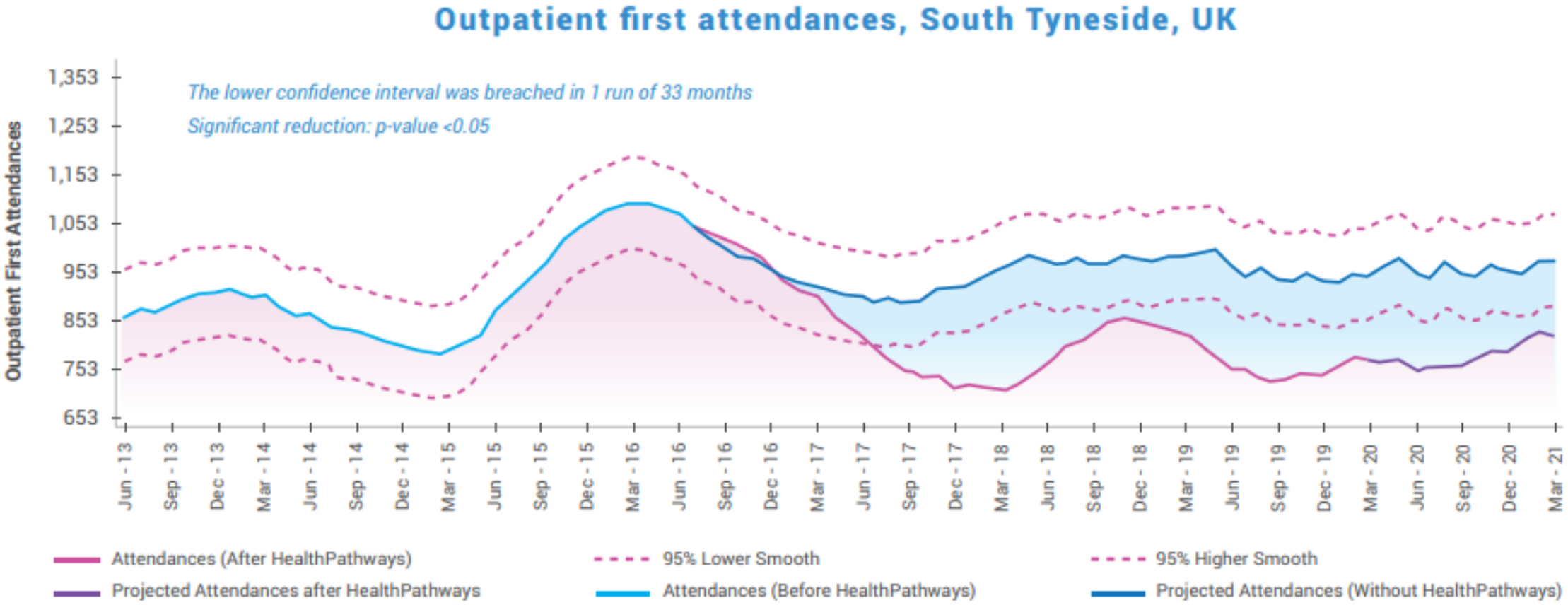
"I really like using HealthPathways. It is easy to navigate and increasingly covers many areas. I find it much more useful than NICE guidelines for getting local advice and local referral pathways etc."

"I like the layout, the succinct practical accessible information guiding diagnosis and patient management …I would be lost without it."

"Very useful for what tests to request, when and where to refer, also clinical considerations."

Community HealthPathways impact

Community HealthPathways



Hospital HealthPathways Impact

Hospital HealthPathways

OF CLINICIANS USE HHP AT LEAST **ONCE A WEEK**

OF CLINICIANS USE HHP EVERY OR **MOST WORKING DAYS**

- Reduced delays in care by providing guidance at the point of care
- Significant reduction in variation of practice between doctors
- Improved patient flows by agreeing in advance on how to manage a condition
- Amylase blood test compliance improved by 13%, resulting in 54 fewer tests.
- 50% drop in hospital admissions with Transient Ischaemic Attack
- ED Flow issues
  - Input – CHP
  - Throughput- HHP
  - Output- HHP

> *It's an incredibly useful resource that's been invaluable in day-to-day practice, especially as a junior doctor, and especially out of regular working hours when seeking the advice of senior colleagues is potentially less easily accessible.*

CHP and HHP form a powerful combination to support efficiency in health systems by encouraging communication and collaboration across pathways to support clinicians at the point of care with **‘this is how we do things around here today’**

What has connected?

Anything else?

What needs further discussion?

Speaking Now…

Joe Lillington
Senior Data Scientist
NHS Health Economics Unit

Modelling patient flow in the A&E

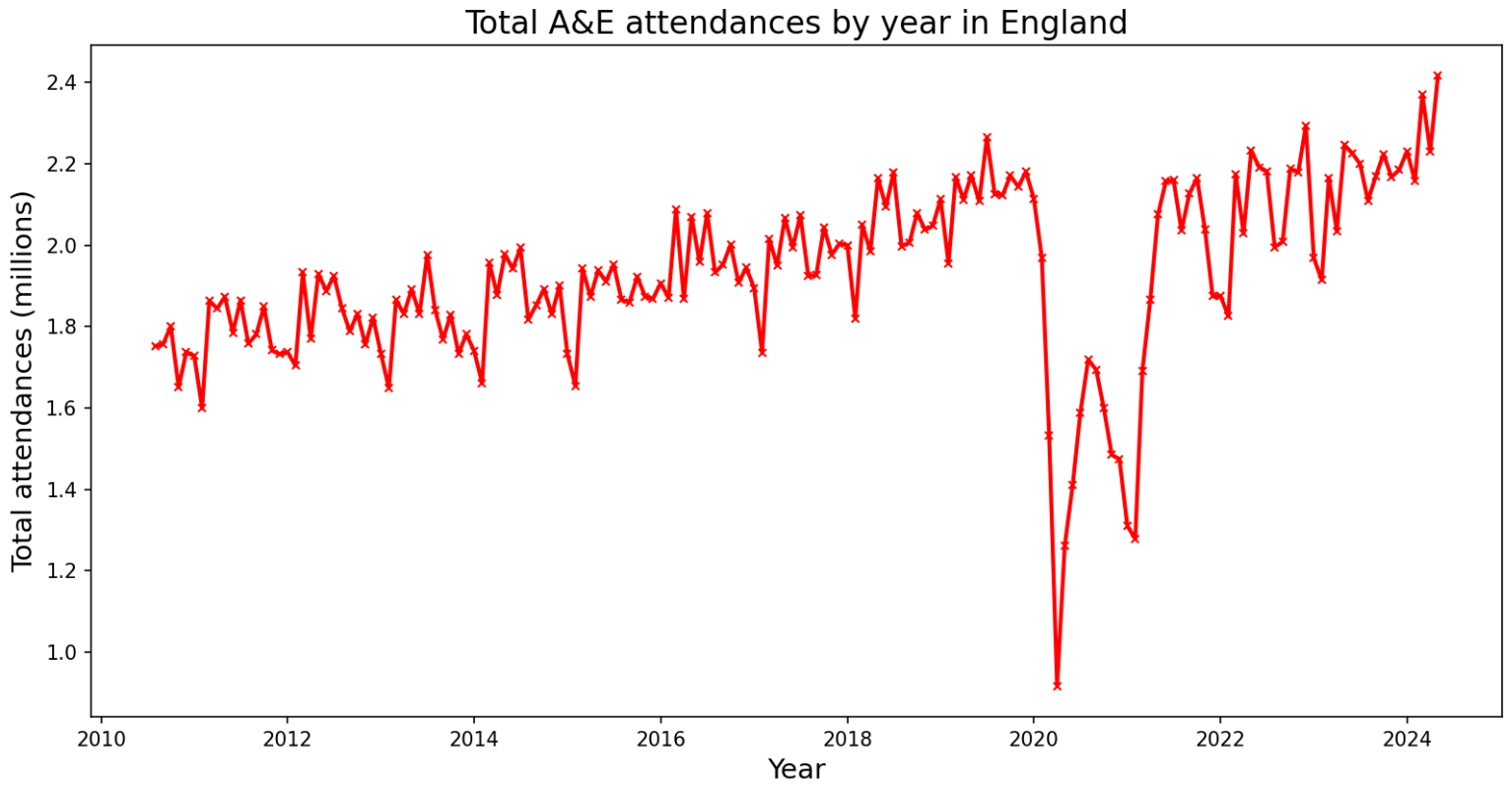
Dr Joseph Lillington

Senior Data Scientist, Health Economics Unit

2nd July 2024

Reasons for modelling A&E patient flow

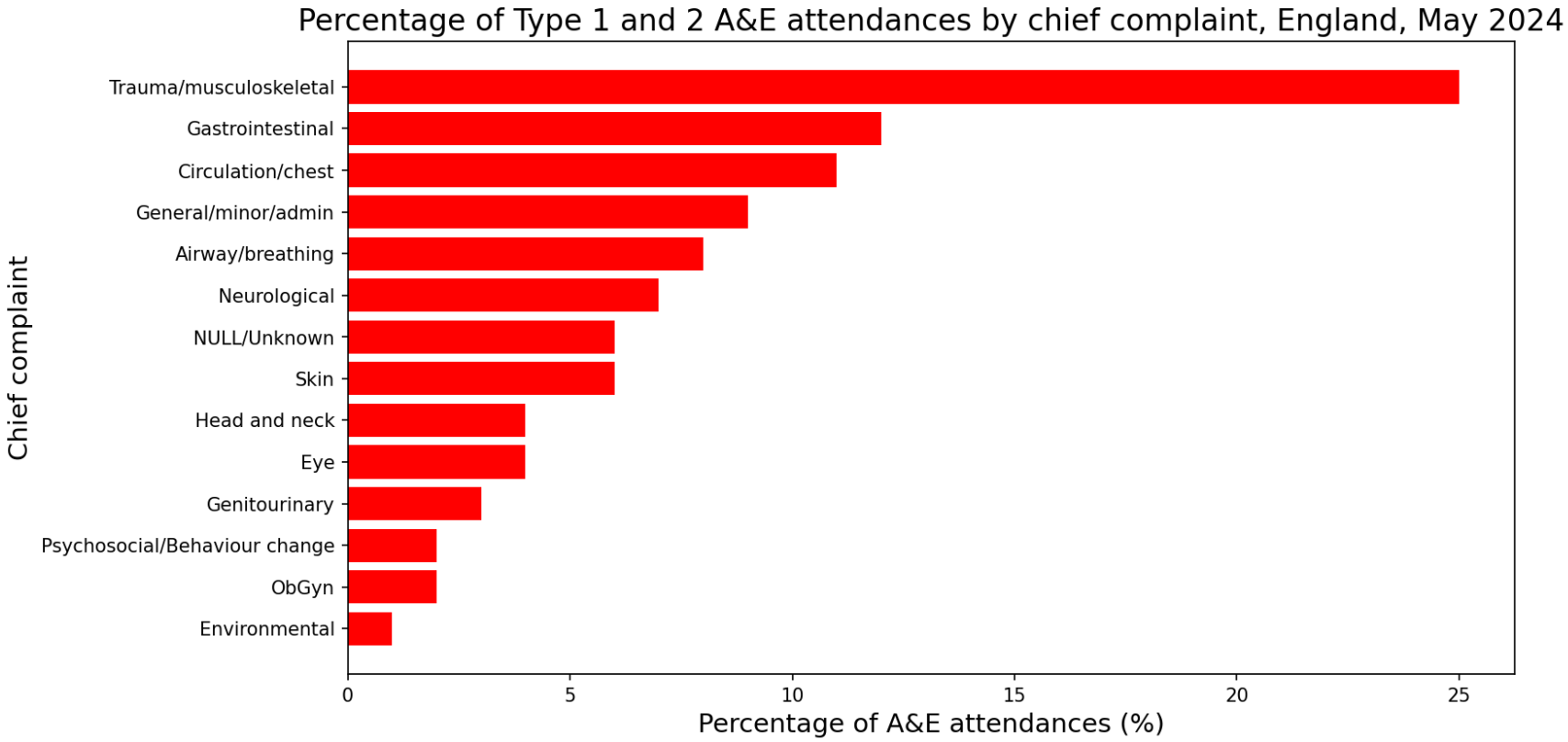
There is high patient demand



[1] NHS England, 2024.

Reasons for modelling A&E patient flow

Presentations can be complex and varied



[2] NHS England, 2024.

Reasons for modelling A&E patient flow

- **A&E significant variation:**
  - Choosing acuity
  - Culture to admit
  - Resourcing capacity – staff, space

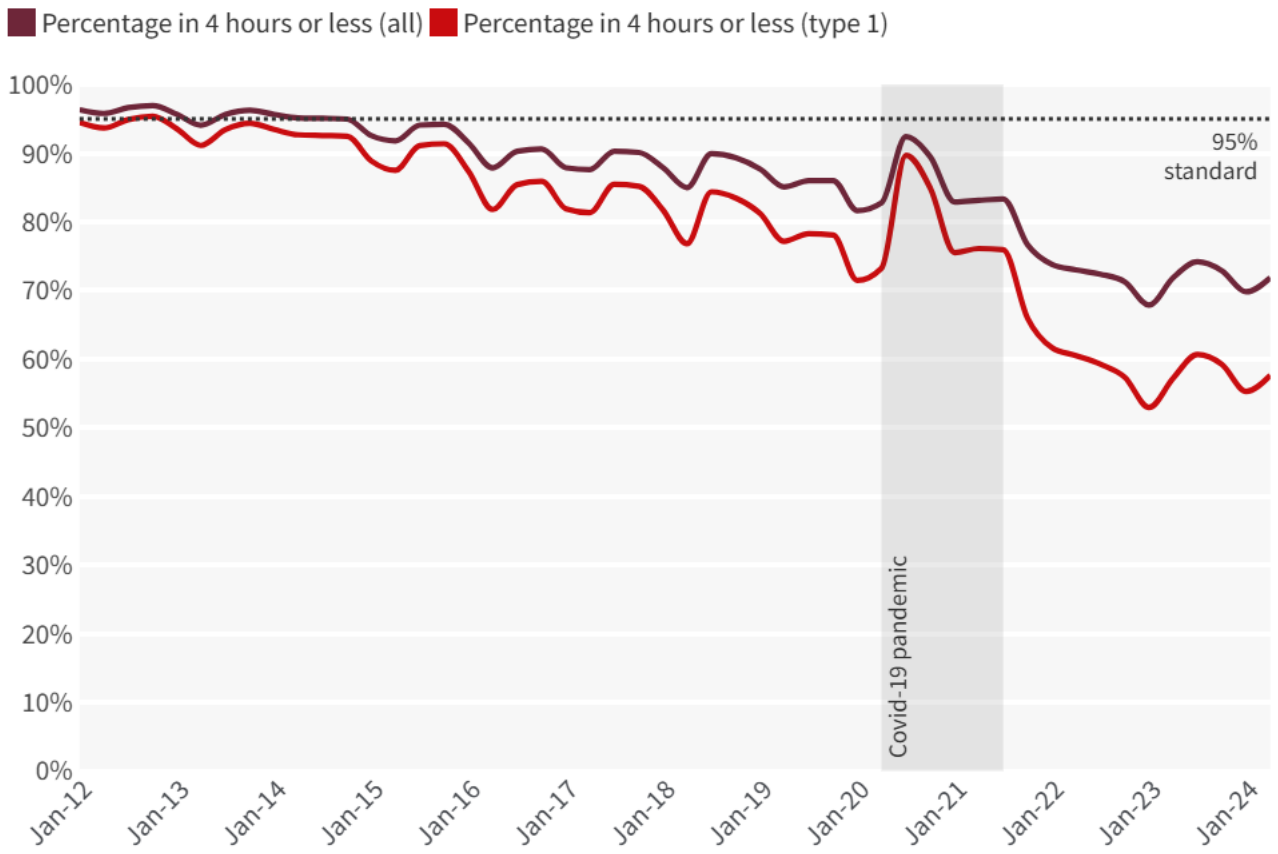
ECDS acuity classes

1 Immediate emergency care
2 Very urgent emergency care
3 Urgent emergency care
4 Standard emergency care
5 Low acuity emergency care

[3] NHS England, 2024.

Reasons for modelling A&E patient flow

Performance has deteriorated in recent years.



[4] The King's Fund, 2024

Reasons for modelling A&E patient flow

- **Potential for significant cost-savings.**
- In 2022/23, the DHSC spent £182 billion on healthcare
- In 2024/25:
  - 1 UTC attendance, receiving lowest level of investigation and treatment: ~£91
  - 1 major A & E attendance, complex investigation and treatment ~ £137 to 445
- From previous slide – **millions of attendances -> very expensive system**

[5] The King's Fund, 2024

Reasons for modelling A&E patient flow

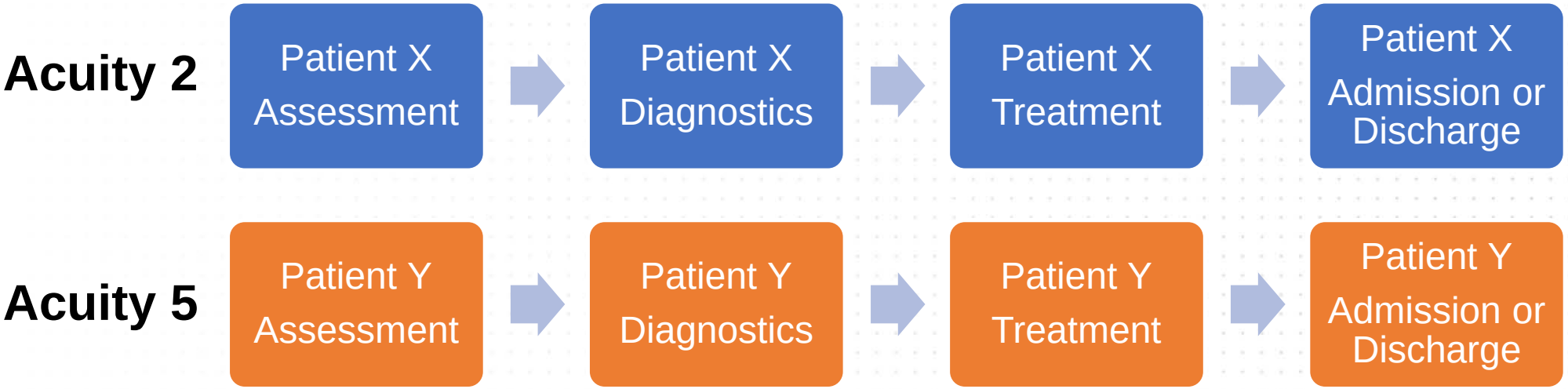
- **Evidence-based** – Uses knowledge of patient pathways and measured ED data
- **Relatively inexpensive** – UEC system changes can be very expensive
- **Proactive** – Can explore impact changes before they happen

There are lots of choices of models

Going to briefly discuss discrete event models

Discrete event simulations

- **Modelling the events that happen to patients, individual by individual**
- **Driven by competing resources, e.g. finite no. clinicans; cubicles**

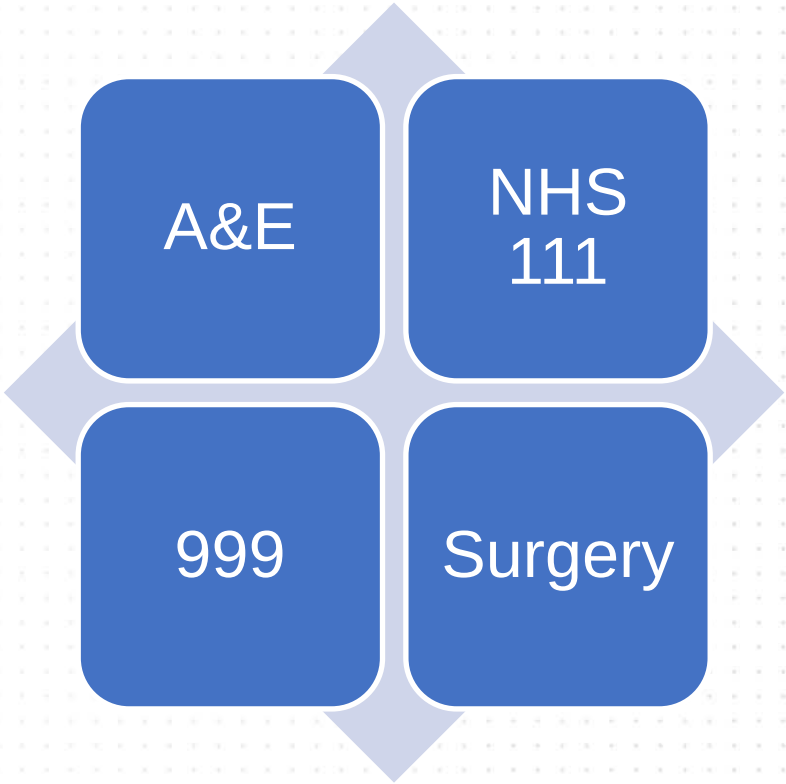


Discrete event simulations

- **Using simulations:**
  - Modelling patient journeys, patient by patient
  - Respecting that patient processes need to be prioritised from clinical needs
  - Acknowledging that clinical resources are limited
  - Considering uncertainty in event times (Monte Carlo)
  - **Looking at how flow is impacted and the major bottlenecks**

Discrete event simulations

- **Can apply to many queuing problems**



ECDS (Emergency Care Dataset)

- National data on A&E at patient-level
- Various information on:
  - Acuity
  - Chief complaints
  - Demographics
  - Activity (Investigations, treatments, etc.)

[6] NHS England, 2024.

Modelling choices

- We've been asked to develop models for a specific trust:
  - Existing pathways
  - Local data
  - Current issues and potential solutions

- We've also been asked to develop more general models for 'ideal' A&Es:
  - Future pathways
  - Expected data
  - Projected modelling

Considerations

- Good A&E models need to consider upstream and downstream effects:
  - **Upstream:**
    - What conditions are patients arriving at A & E with?
    - How are these likely to vary as the underlying population changes?
    - Why are patients arriving at A&E?
  - **Downstream:**
    - Bed availably impact
    - Tendency to admit impact
    - Other department impact, e.g. ICU, theatres, mental health, etc.

UEC system thinking

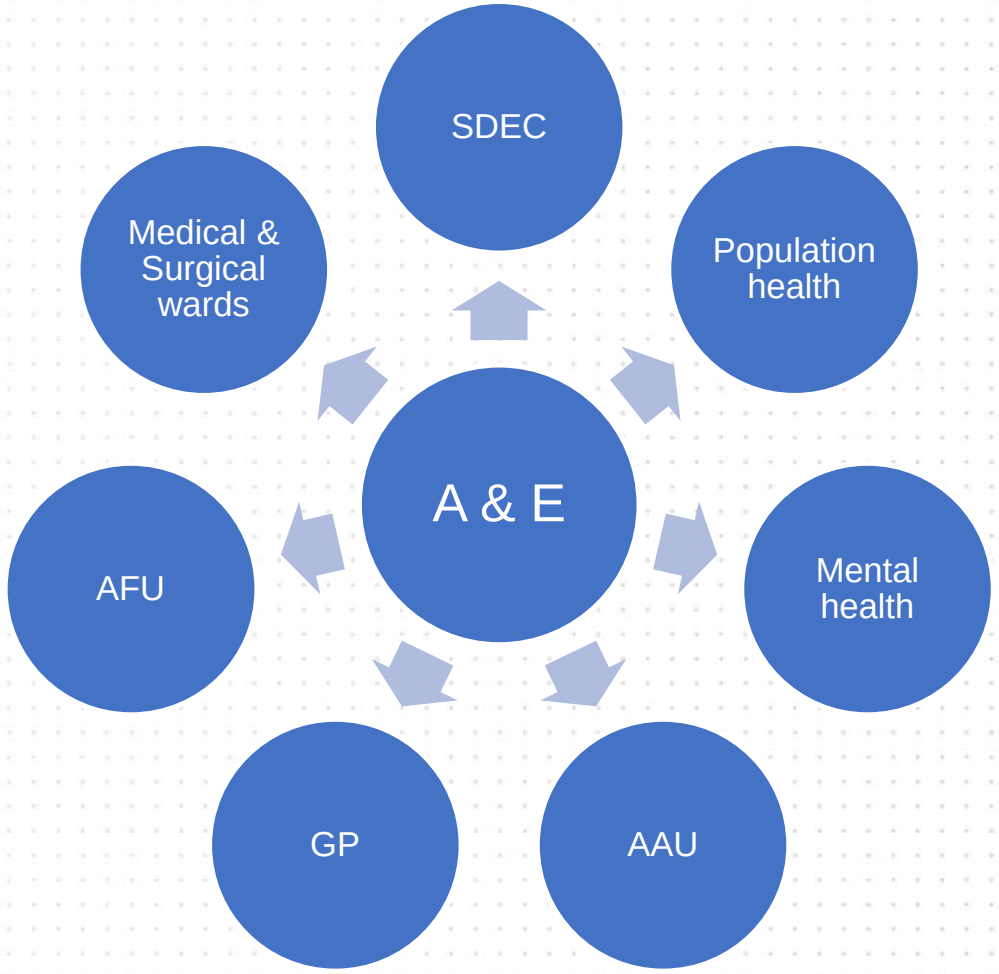
- Lots of discussion on who should be attending A&E:
    - Use of SDEC
    - Use of UTC
    - Acuity 5
    - Mental health
    - Frailty

Combining models at different scales

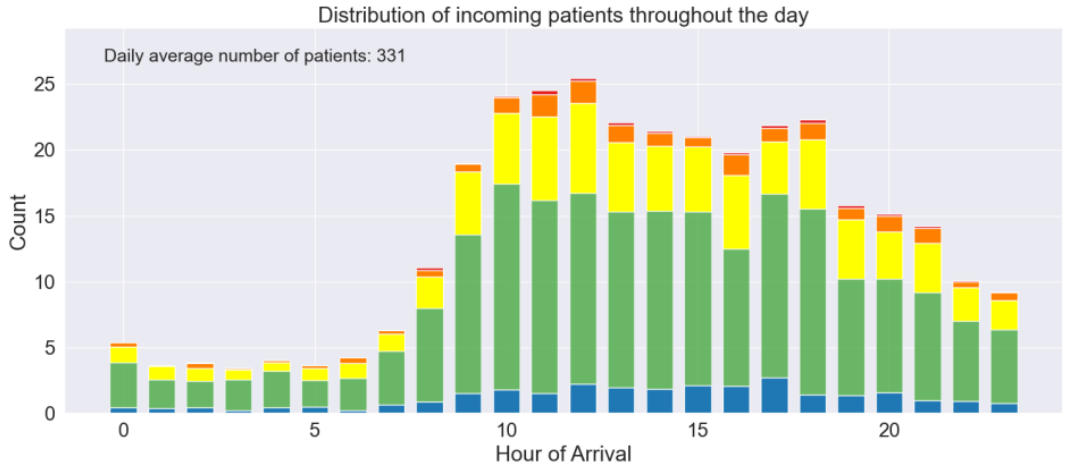
- **Discrete event simulations are low-level models:**
  - Modelling individual patients
- **They can support high-level modelling:**
  - Demand and capacity modelling
  - Systems modelling

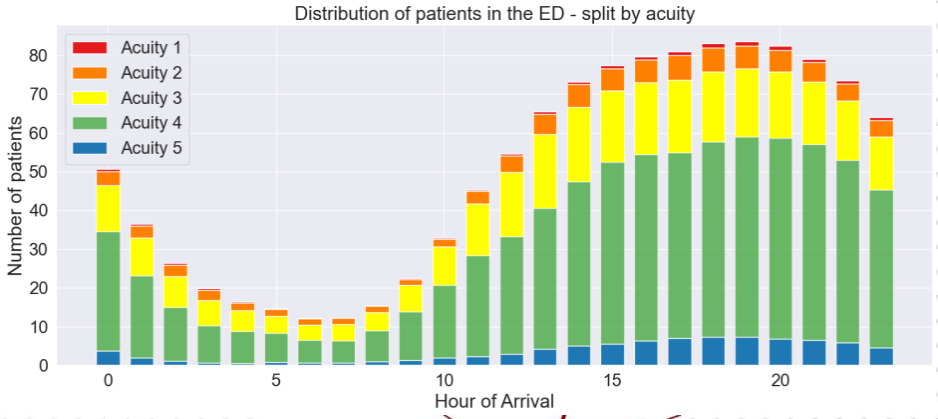
Modelling complexity

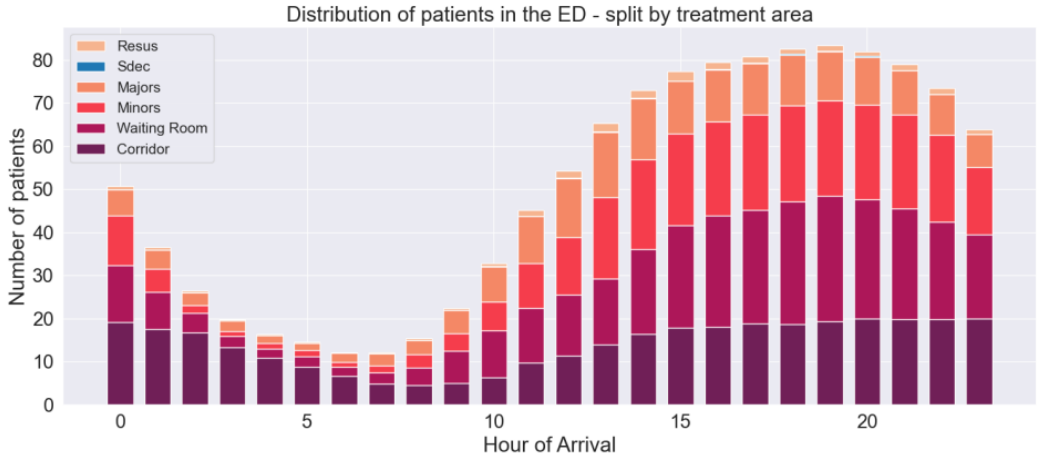
- **Aiming to avoid overfitting**
- **Want to validate on multiple metrics:**
  - Outcomes not just activity

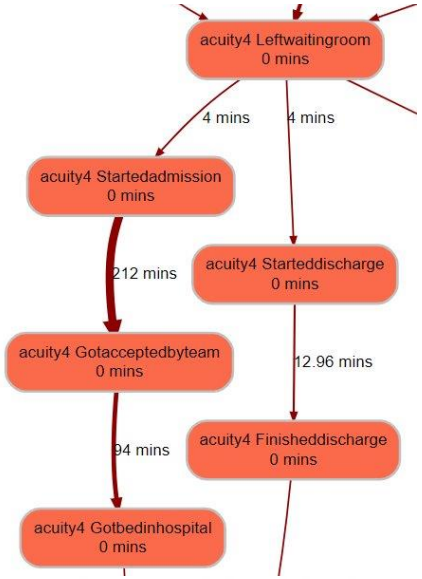


Example outputs

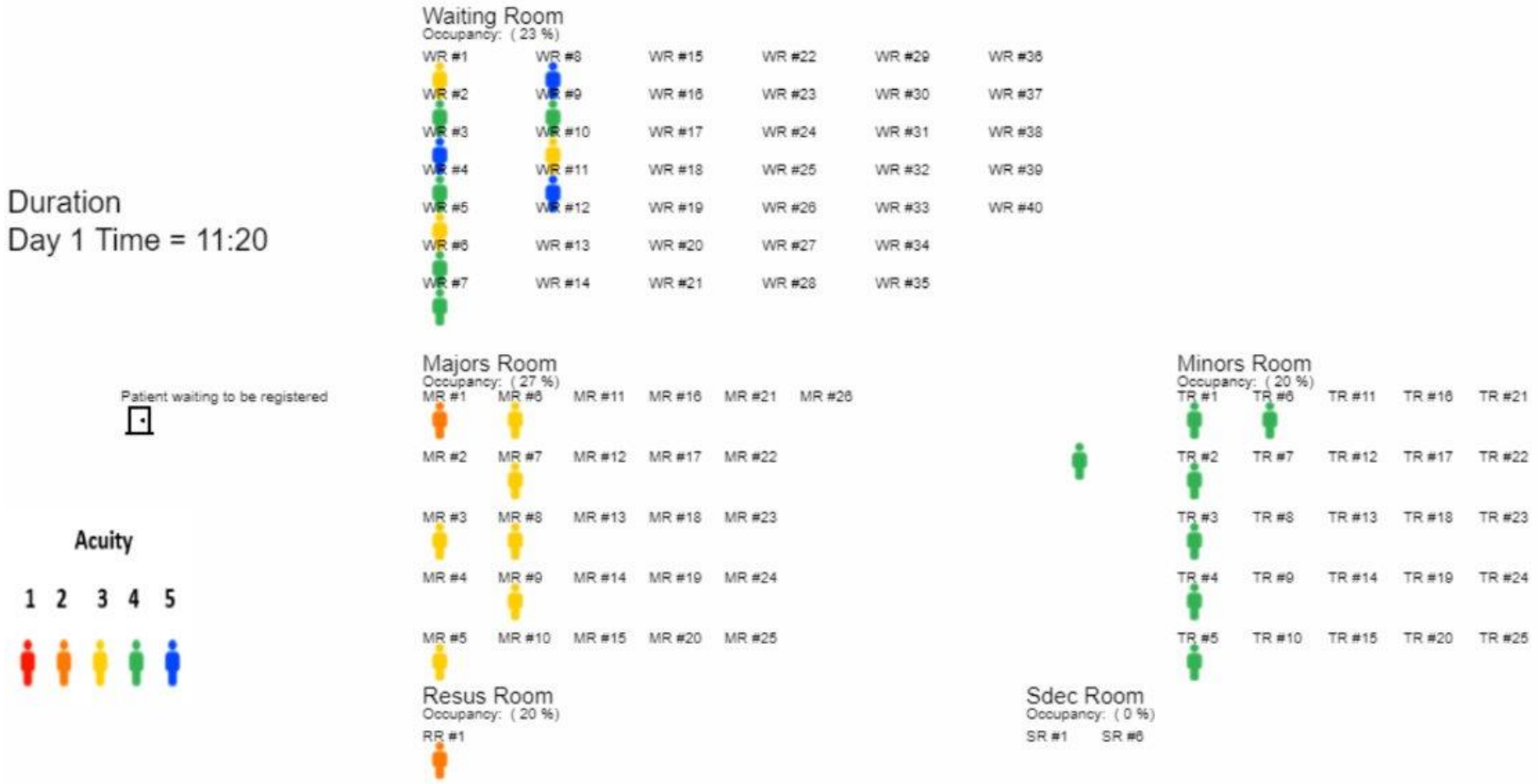








Example outputs



The ‘Human’ factor

- What happens when it is absolutely critical for a patient to be treated?
- How do performance targets impact patient flow?, e.g. 4 hr and 12 hr targets

A&E patient flow models are powerful

- **Consider system complexity –** modelling interconnected areas
- **Require pathway support** – buy in from clinical leaders
- **Need iterative development** – local processes will impact patient flow, long-term model thinking
- **Depend on careful validation** – multiple metrics

Thank you for listening!

Dr Joseph Lillington

Senior Data Scientist, Health Economics Unit

joseph.lillington@nhs.net

References

[1] Slide 2: NHS England. A&E Attendances and Emergency Admissions. Statistics » A&E Attendances and Emergency Admissions (england.nhs.uk). Accessed 1/7/24.

[2] Slide 3: NHS England. A&E Attendances and Emergency Admissions. Published 13/5/24. Statistics » A&E Attendances and Emergency Admissions 2024-25 (england.nhs.uk). Accessed 1/7/24.

[3] Slide 4: NHS England. Guidance for emergency departments: initial assessment. NHS England » Guidance for emergency departments: initial assessment. Accessed 1/7/24.

[4] Slide 5: The King's Fund. Accident and emergency (A&E) waiting times. Accident and Emergency (A&E) Waiting Times | The King's Fund (kingsfund.org.uk). Published 29/5/24. Accessed 30/6/24.

[5] Slide 7: The King's Fund. Key facts and figures about the NHS. NHS: Key Facts And Figures | The King's Fund (kingsfund.org.uk). Published 25/6/24. Accessed 1/7/24.

[6] Slide 12: NHS England. ECDS guidance and documents. Available at ECDS guidance and documents - NHS England Digital. Published 21/5/24. Accessed 30/6/24.

Case Study…

vitalhub
United Kingdom

Slido

Please scan the QR Code on the screen. This will take you through to Slido, where you can interact with us.

SCAN ME

Speaking Now…

Lisa Riley
Deputy CEO & Vice President of Strategy and Sales - VitalHub UK


vitalhub
United Kingdom
Smart Technology | Connected Care
Lisa Riley, Deputy CEO

If you haven't been to an Accident and Emergency department lately,
here is what you might find...

Patients' time is the most important currency in healthcare!

If you only had 1000 days to live, how many would you choose to spend in hospital?

vitalhub
United Kingdom

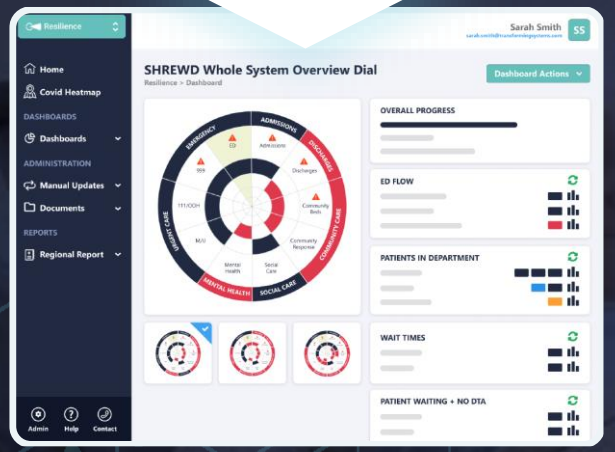
A window of opportunity was missed…

We don’t know what windows of opportunity people have so we need to take advantage of the ones that are offered to us!

SHREWD

Whole System Visibility

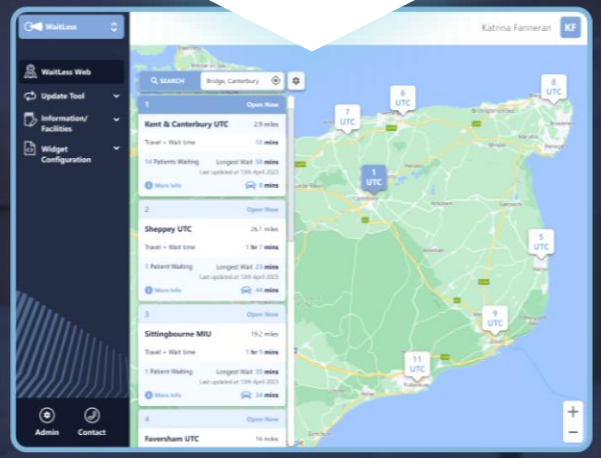
A live operational management platform that provides instant visibility of whole-system data, supporting command centre utilisation, improved patient flow, and enhanced system performance.



SHREWD

WaitLess for Patients

A patient facing app that provides users with real time information about access to urgent care; displaying current wait and travel times that help load balancing across the wider system. Featuring a DOS for each facility and also pharmacies.



alamac

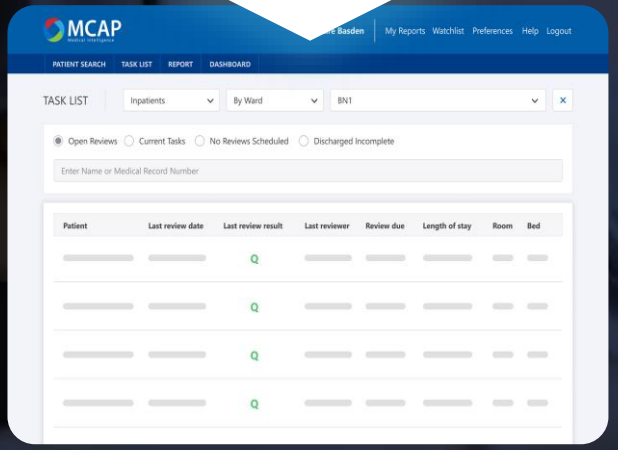
Data and Analytics Reporting

Data driven interactive reporting, analytics and forecasting for greater understanding of operational efficiency and to support situational awareness and continuous improvement.

MCAP

Clinical Decision Support

A decision support tool that uses inbuilt clinical criteria to help identify the most appropriate patients to admit and discharge, for use by teams or as a managed service improvement audit delivered by us.



vitalhub
United Kingdom

SHREWD Resilience

Visibility of pressure for whole health and social care systems

SHREWD Resilience takes complex digitised data from multiple providers across healthcare networks, from Acute and community hospitals, to ambulance and primary care, and creates instant whole-system visibility of pressure. This is used to provide a real-time view of pressure points in the flow of patients through the urgent and emergency care pathway.

- Provides early warnings of increasing pressure to enable preventative action
- Helps to maximise efficiency and improve consistency to enhance patient safety
- Proactively alerts users to situational changes to enable fast action responses

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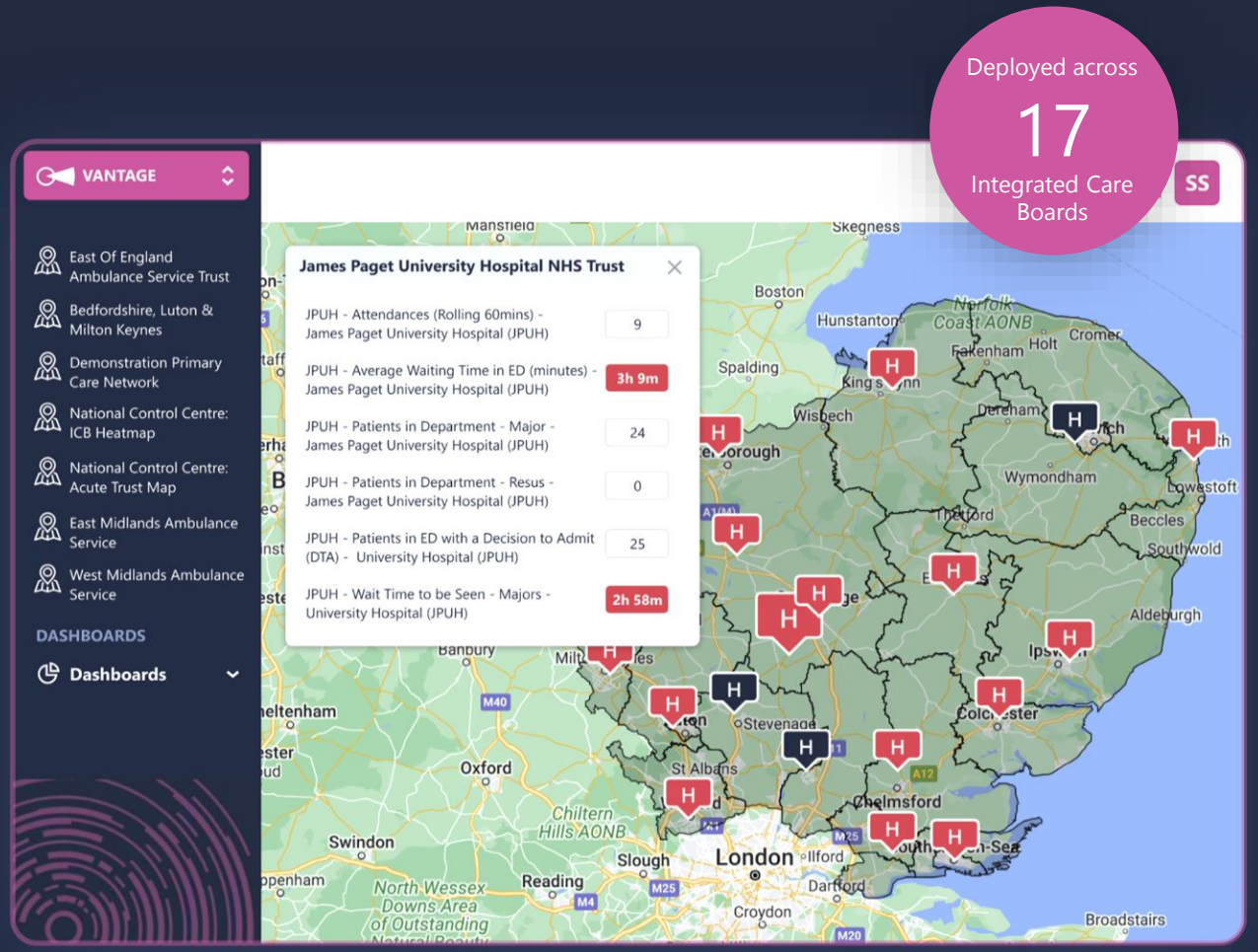
United Kingdom

SHREWD Vantage

Regional intelligence & visibility of category specific data



Creates a centralised version of truth for ambulance providers, pan region, enabling them to buy time by allowing decision-makers to quickly view demand and resource levels and take action to alleviate pressure across multiple sites. This at-a-glance view of pressure helps staff to redirect ambulance teams to less pressured sites, reducing ambulance handover delays.

- Saves time interpreting multiple data sources to help staff understand the current position
- Improves visibility and awareness of network-wide issues at a strategic level
- Supports staff to utilise available capacity to ease the pressure on A&E departments

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SHREWD WaitLess

Allow patients to find the most suitable location for minor injuries and illnesses

11%
Reduction in A&E attendances

WaitLess shows the quickest, most suitable location to access treatment for minor injuries, based on real-time waiting time, and live traffic and travel information within a geographic region. The app encourages patients away from overburdened A&E departments and enables them to consider underutilised treatment sites.

- Combines travel and live wait times at all Urgent and Emergency Care sites, empowering patients to decide where to attend for treatment
- Helps to reduce pressure on A&E and support network-wide load-balancing by redirecting patients to more appropriate care
- Saves patients' time by sign-posting to the fastest place to receive care for their urgent care needs

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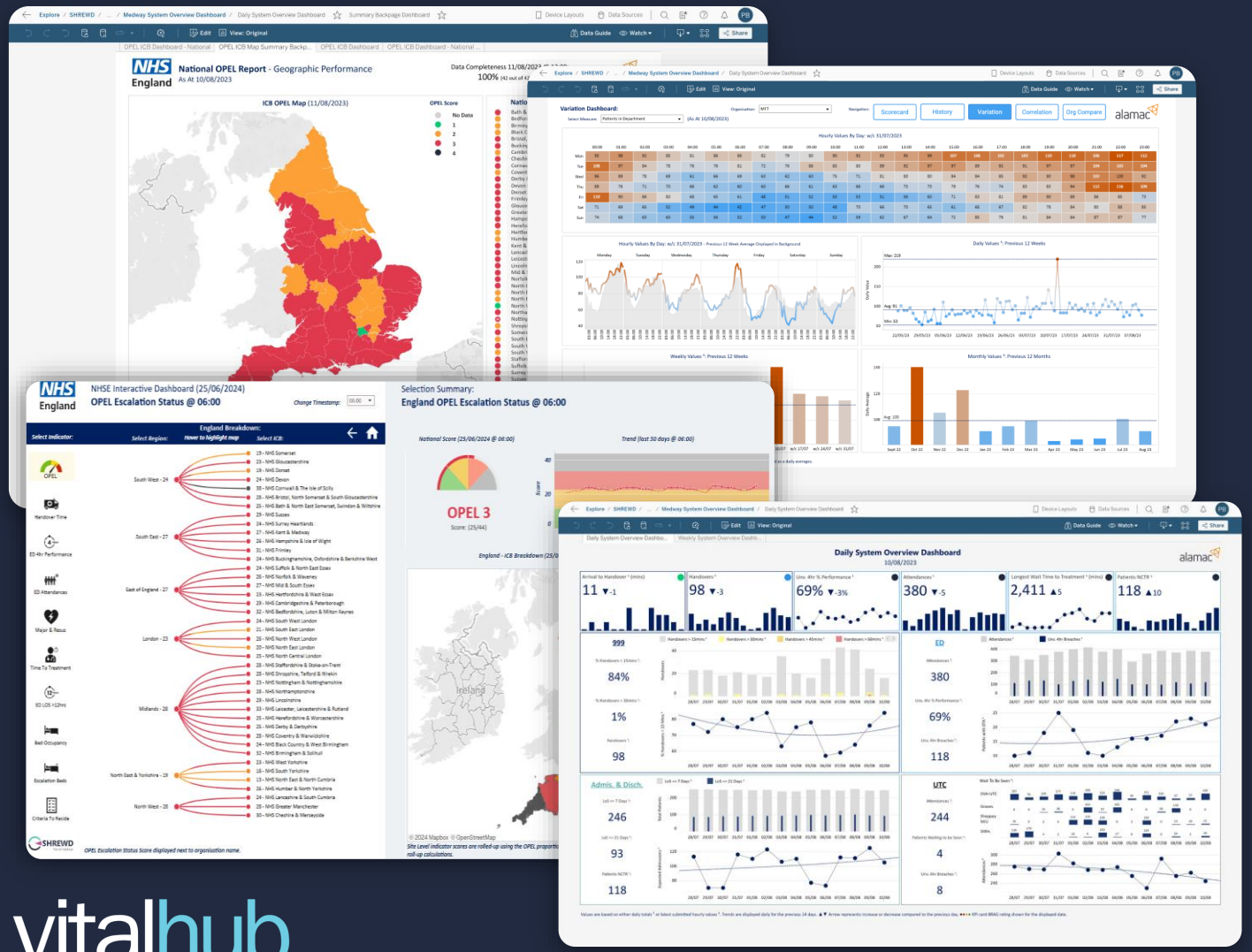
Data Analysis

Data-driven interactive reporting



Alamac provides flexible, interactive reports that can be adapted to meet the specific requirements of individual health economies.

The outputs from our reporting suites provide detailed analytical information regarding any capacity constraints, enabling healthcare staff to make key decisions about how to deal with pressures and help deliver improved care.

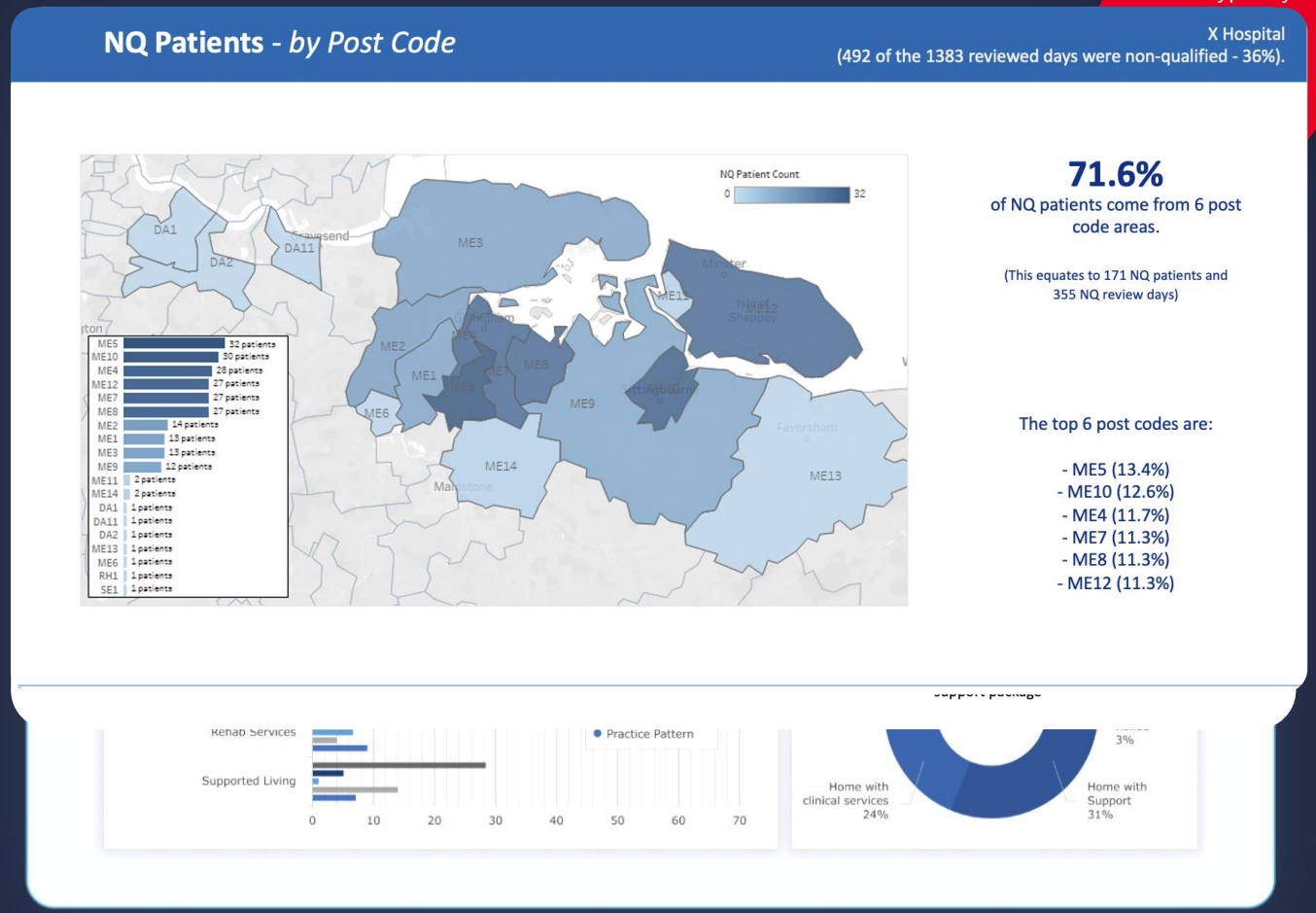
- Support decision-making with a real-time system dashboard, reporting calculated metrics for operational escalation management
- Support patient care into the future with scenario models and forecasts of demand and capacity impacts on performance indicators
- Modelling tools support delivery and performance assurance, with expert support through build, implementation and operationalisation.

vitalhub United Kingdom

MCAP Snapshot Discharge Audit

Identify patients residing in hospitals that are clinically suitable for discharge

MCAP typically



Discharge audits identify patients who are non-qualified to reside in a hospital bed and help to define the most appropriate level of care for the patient, given their clinical needs. The outcomes from the audit enables operational teams to make informed decisions about how to focus resources to generate the greatest impact on safely flowing patients and freeing beds.

- Analyse the demand and capacity of the secondary care system, based on the current acuity mix of the patients
- Discover the number of admissions that can be deferred to avoid the admission cap, winter overload or current high demand
- Identify both internal and external blockages that are currently preventing a reduction in admissions or Length of Stay

vitalhub United Kingdom

The Patient's You Don't See

Dr Dalia Ludwig
Consultant Rheumatologist, General Physician & Clinical Lead for Patient Flow
University College London Hospital NHS Foundation Trust

Sally Beyzade
Matron for Patient Flow
University College London Hospital NHS Foundation Trust

Serena Ng
Senior Improvement Facilitator - University College London Hospital NHS Foundation Trust

The Patients You Don’t See

Dr Dalia Ludwig, Clinical Lead for Patient Flow

Sally Beyzade, Matron for Flow

Serena Ng, Senior Improvement Facilitator

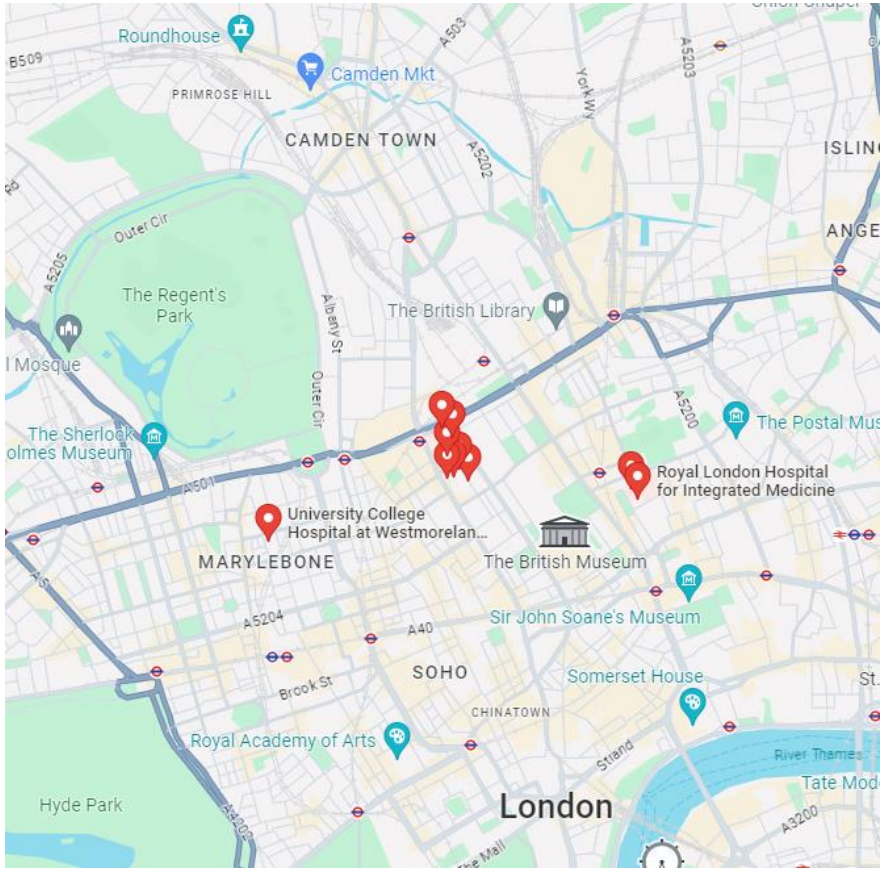
“I just didn’t realise the value of a single empty bed…”

ABOUT UCLH

North Central London Population 1.4 million

11,827 staff

848 beds



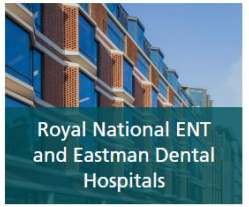

Elizabeth Garrett Anderson Wing


Hospital for Tropical Diseases


Institute of Sport, Exercise and Health


National Hospital for Neurology and Neurosurgery


Royal London Hospital for Integrated Medicine


Royal National ENT and Eastman Dental Hospitals


University College Hospital

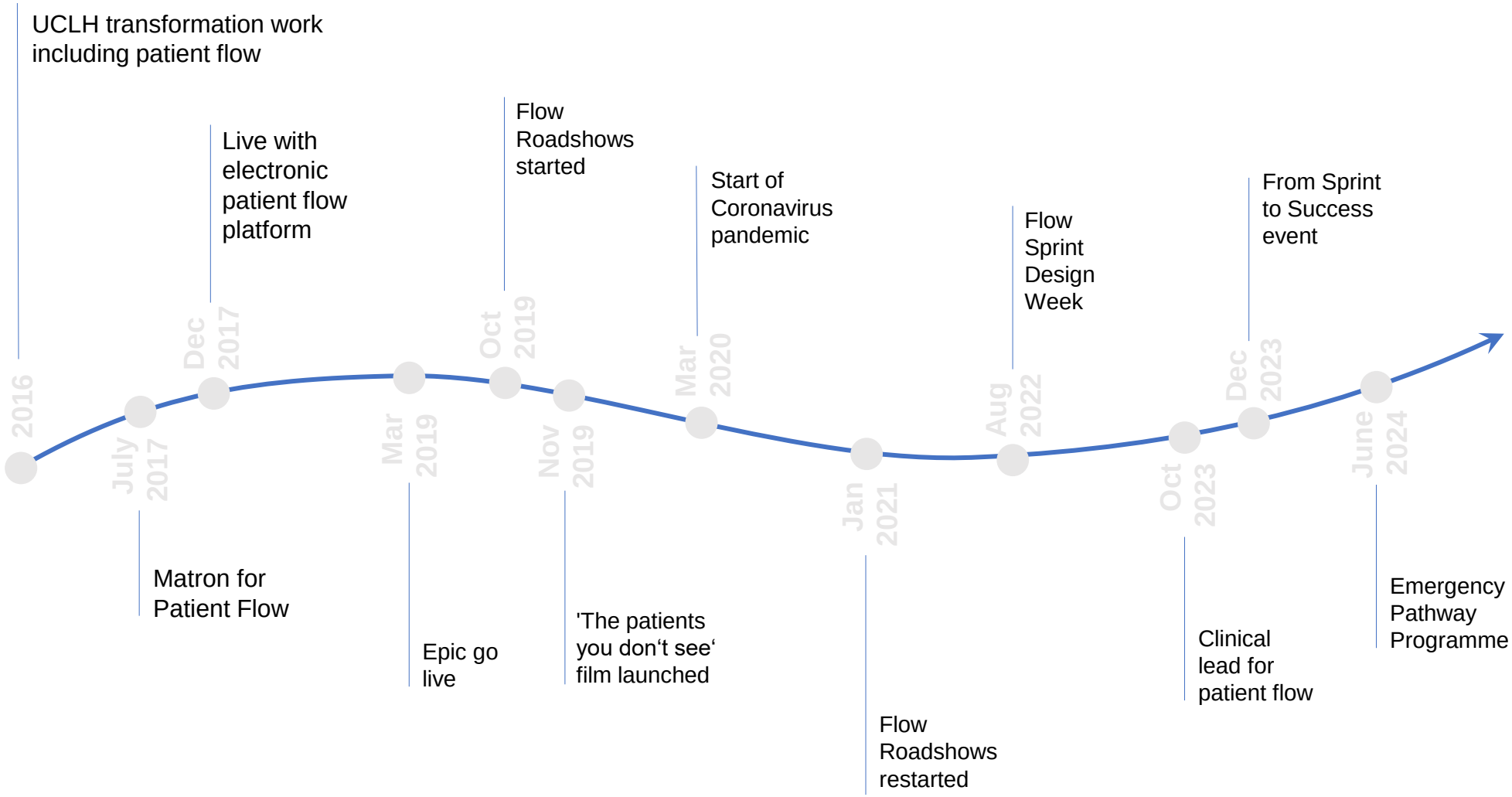

University College Hospital at Fitzroy Walk (opening 2025)


University College Hospital at Westmoreland Street


University College Hospital Grafton Way Building


University College Hospital Macmillan Cancer Centre

OUR JOURNEY SO FAR



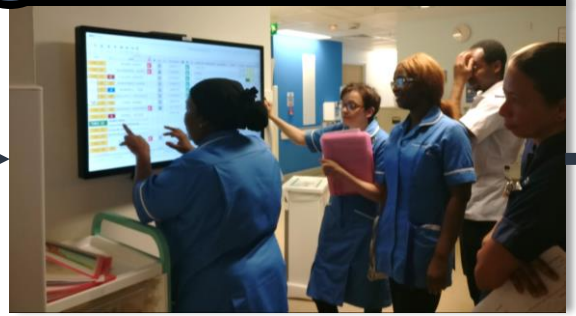
CHALLENGES FACED

PROBLEMS		WHAT HAS HELPED US
• **Paper**, board and magnet based • We could only patient flow information if we were standing in front of it • **No access to real time** data		LEVERAGING TECHNOLOGY
• Difficult to **engage the multidisciplinary clinical teams** • Feeling around 'bed management' just being about **getting the next patient in** • **Siloed** flow practices • **Variation** in flow practices across sites		MULTIDISCIPLINARY ENGAGEMENT
• **Challenge to spread** the improvement approach • Limited use of **data for improvement** and little exploration of variation of data		IMPROVEMENT APPROACH

LEVERAGING TECHNOLOGY

1 Boards and magnets

2 Patient Flow Teletracking

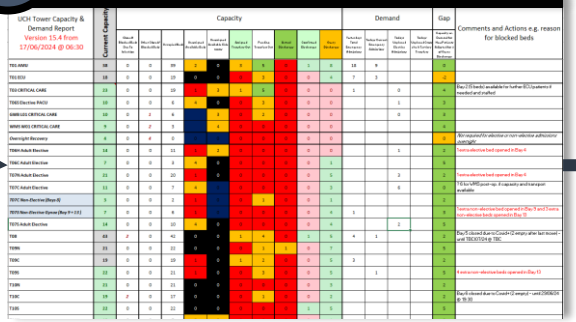


3 Electronic Health Record

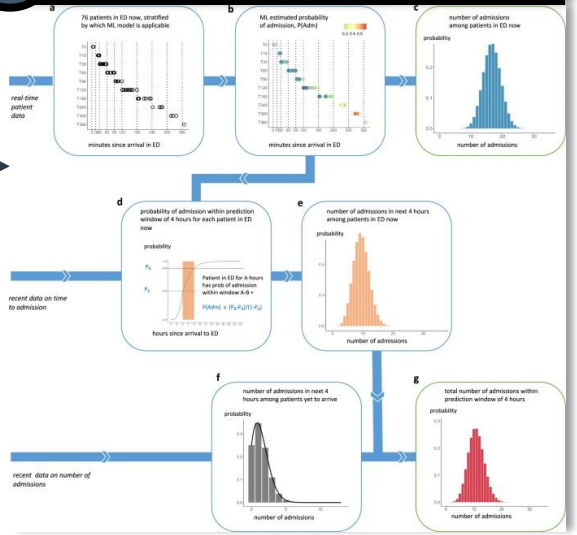
This technology enabled…

4 Real time data

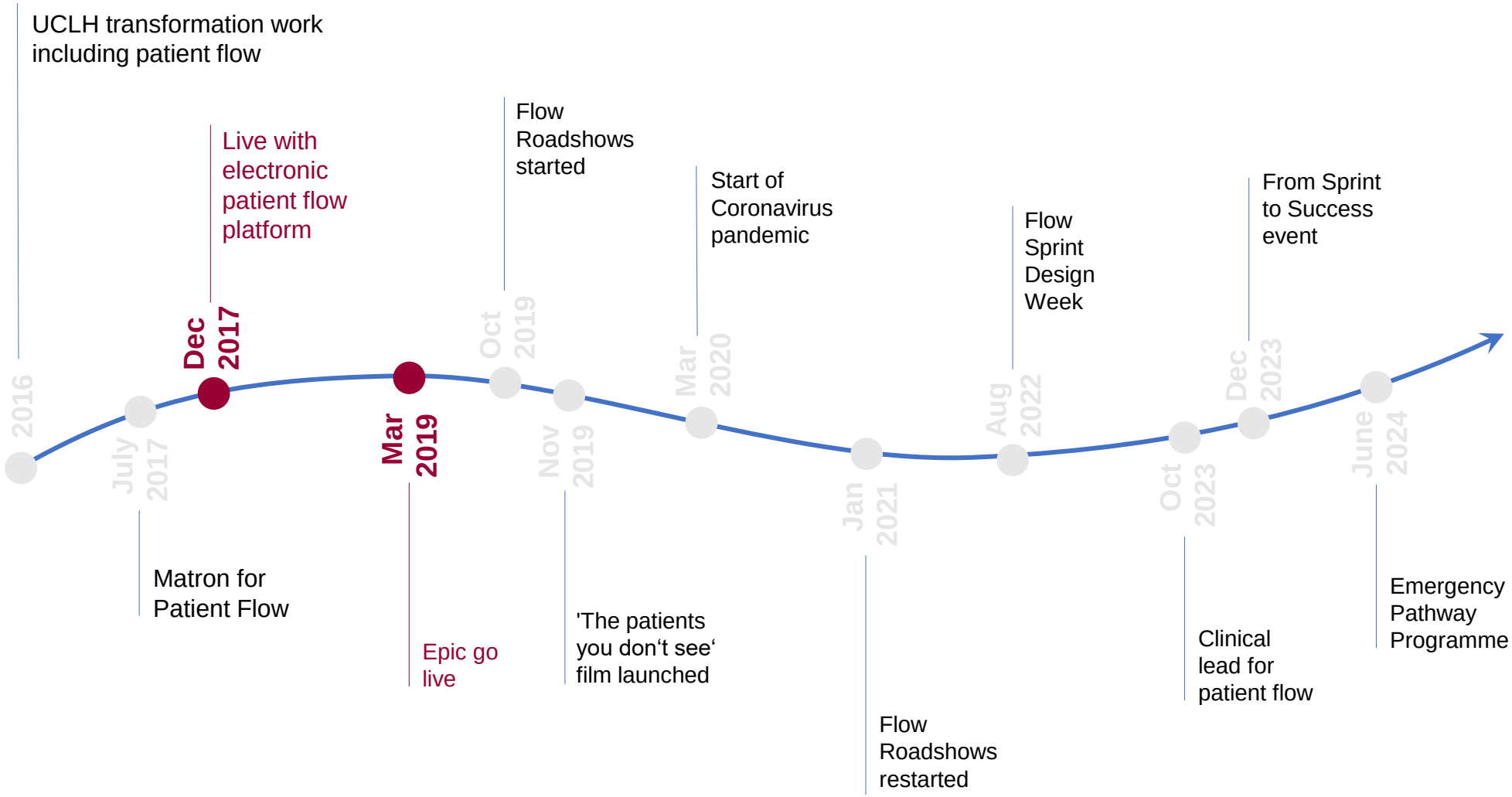
5 Flow Report 4 x day



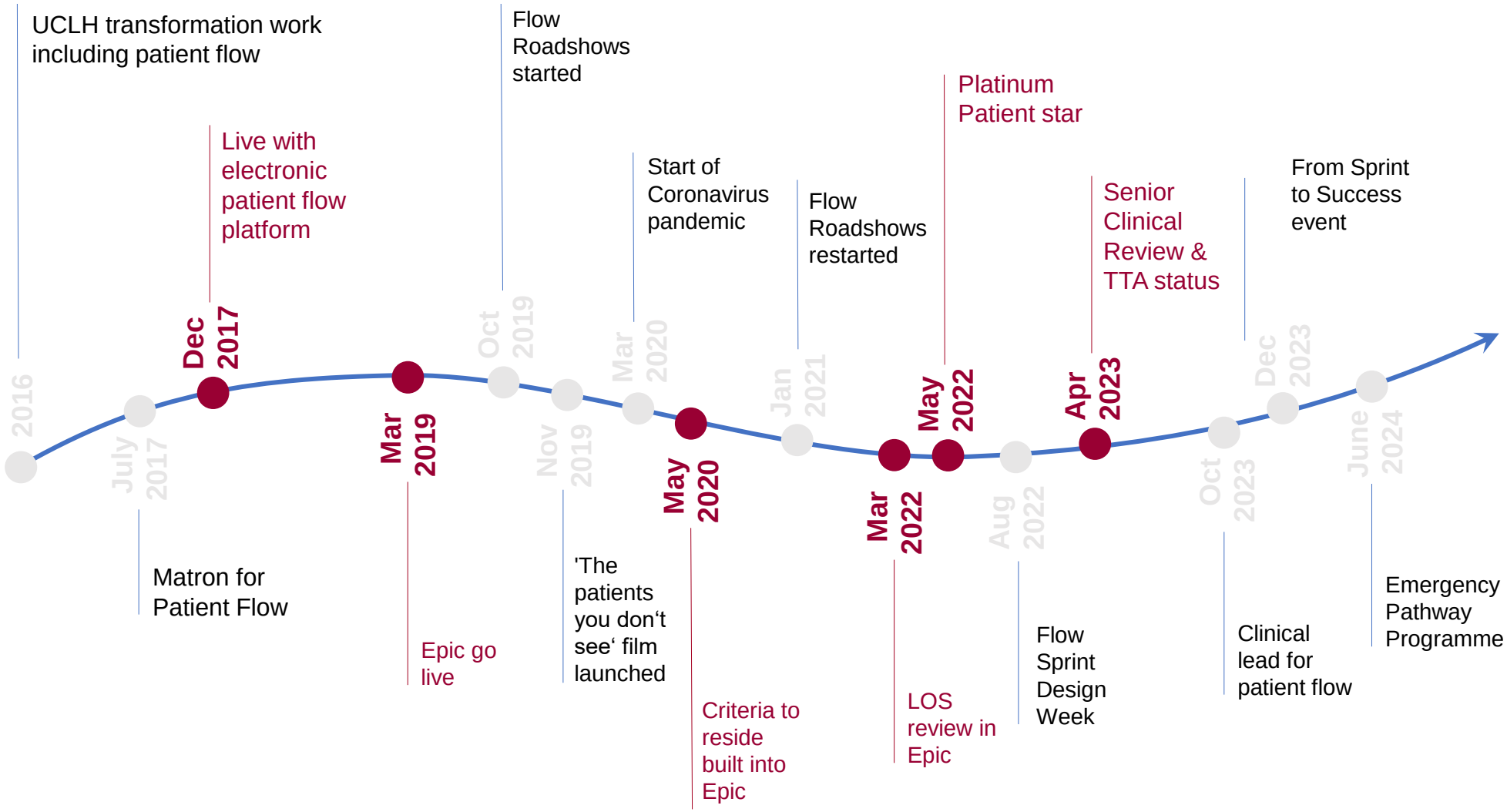
6 Predictive analytics



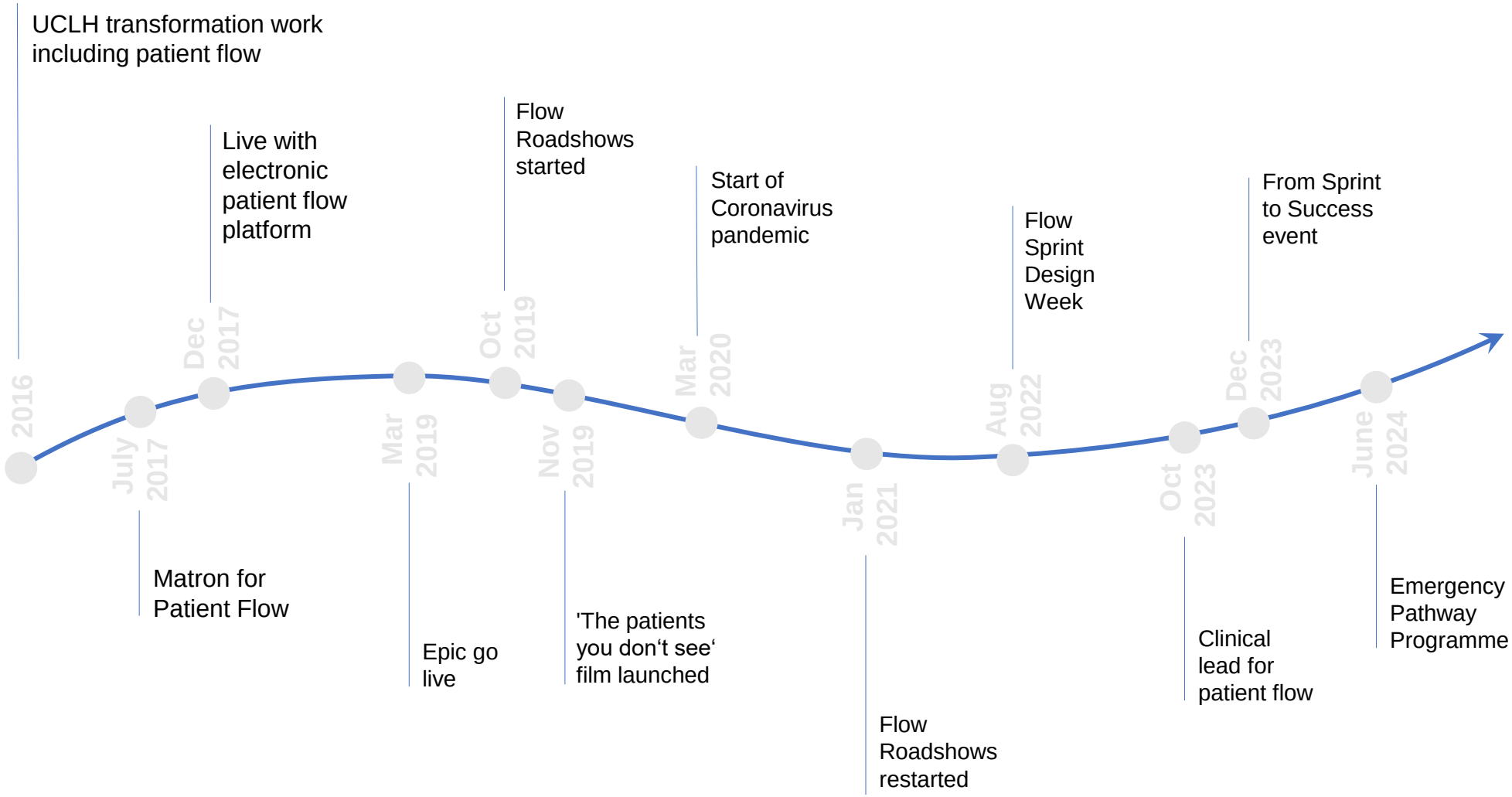
LEVERAGING TECHNOLOGY



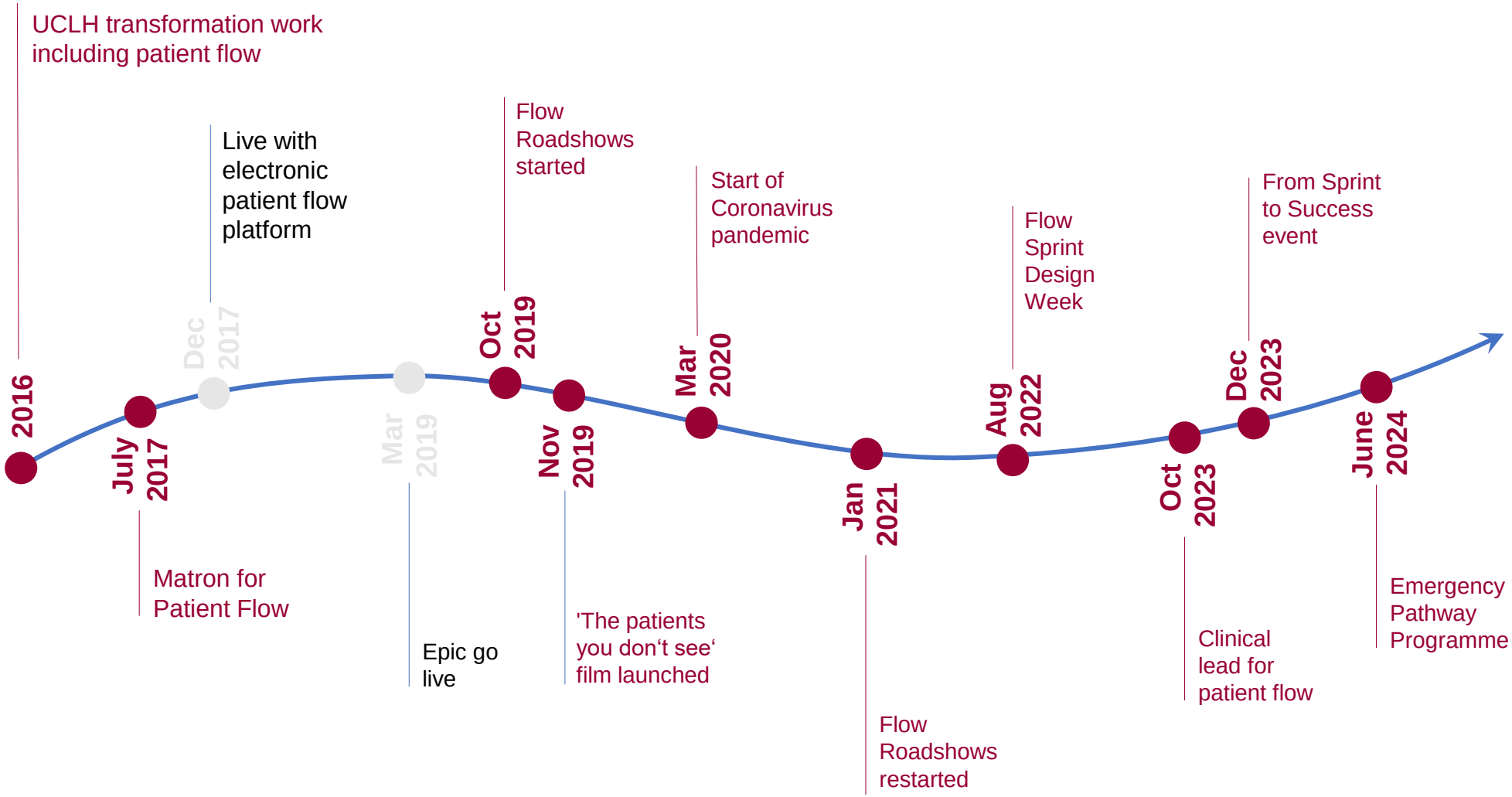
LEVERAGING TECHNOLOGY



OUR JOURNEY SO FAR



MULTIDISCIPLINARY ENGAGEMENT



MULTIDISCIPLINARY ENGAGEMENT

HOW HAVE WE ENGAGED PEOPLE…

GOING TO WHERE PEOPLE WORK

Flow Roadshows

CLINICAL PATIENT FLOW ROLES

Matron for Patient Flow; Clinical Lead for Patient Flow

ENGAGEMENT EVENTS

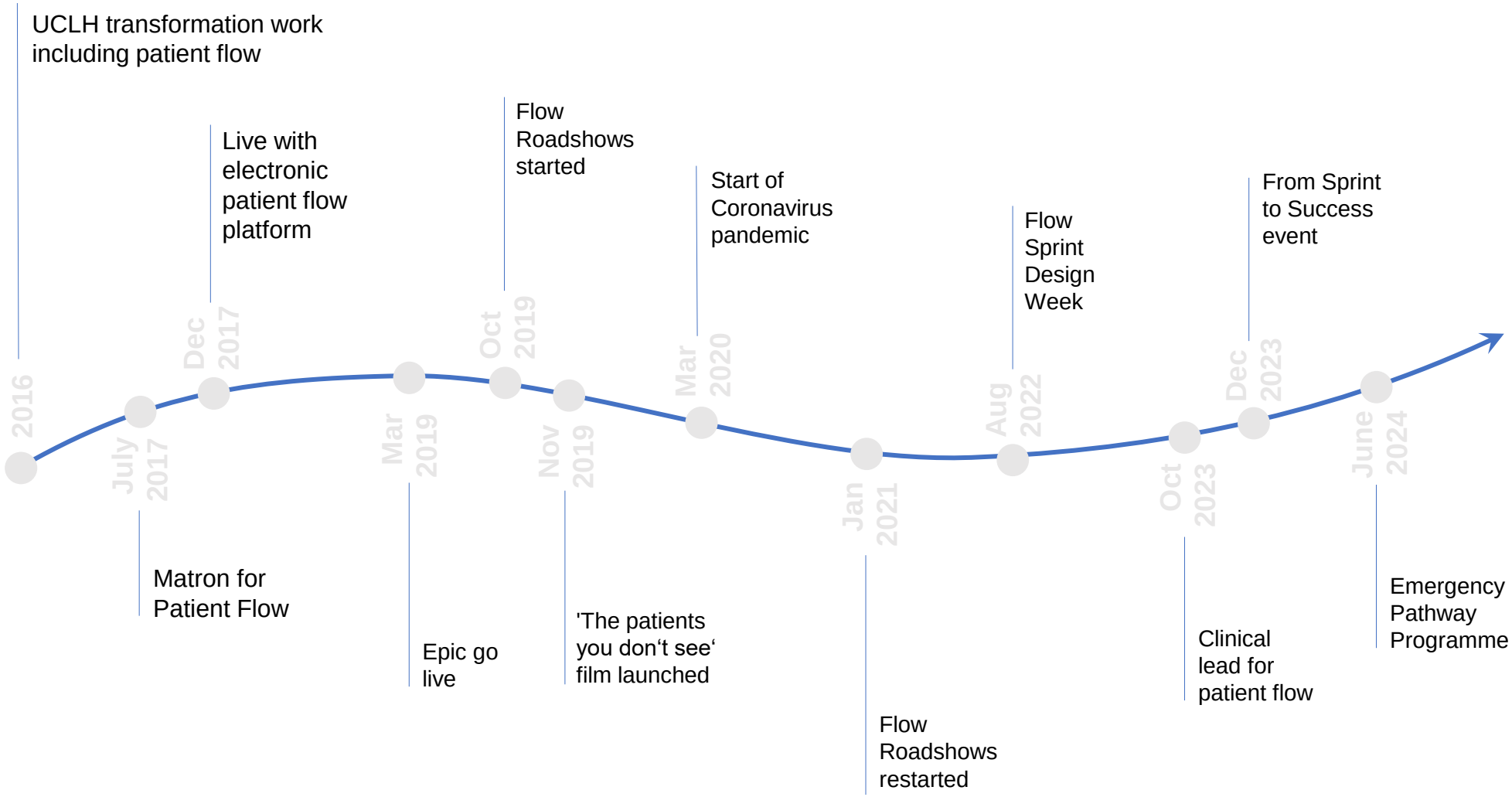
Design Sprint Week and From Sprint to Success facilitated by the Improvement Team

HEARTS AND MINDS

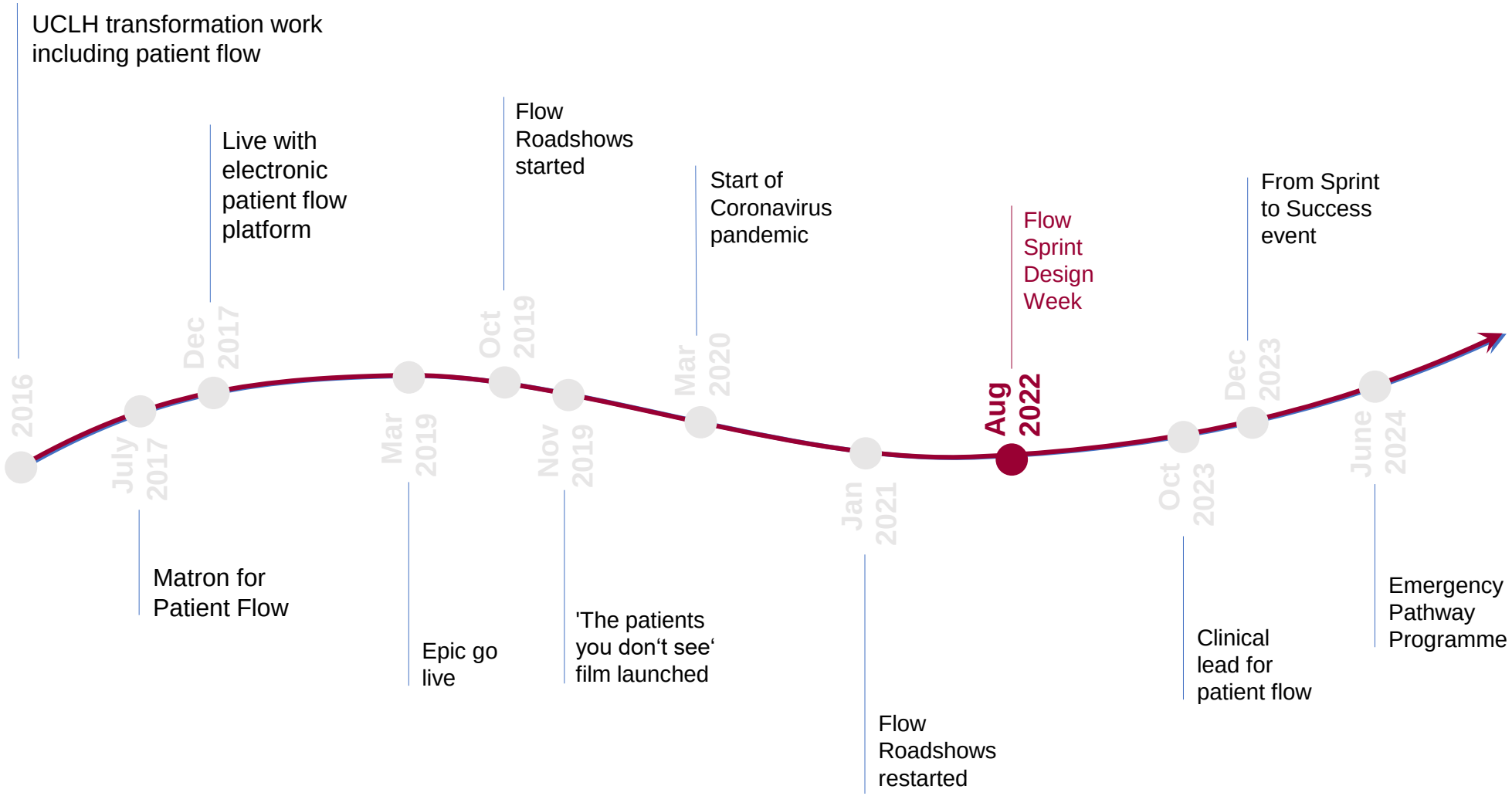
It's all about the patient's you don't see

It’s all about the patients you don’t see!

OUR JOURNEY SO FAR



IMPROVEMENT APPROACH



IMPROVEMENT APPROACH

Design Sprint Week

Monday "GO" - Understanding and Agreeing the Sprint

Tuesday "MAP" - Mapping the system, agreeing key questions

Wednesday "INNOVATE" - Listening to experts, generating ideas

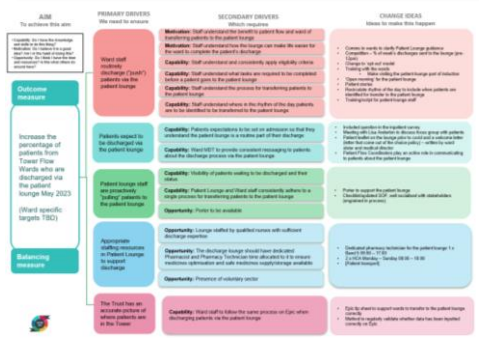
Thursday "DECIDE" - Decisions on high impact changes

Friday "COMMIT" - Signing off plans, understanding stakeholders

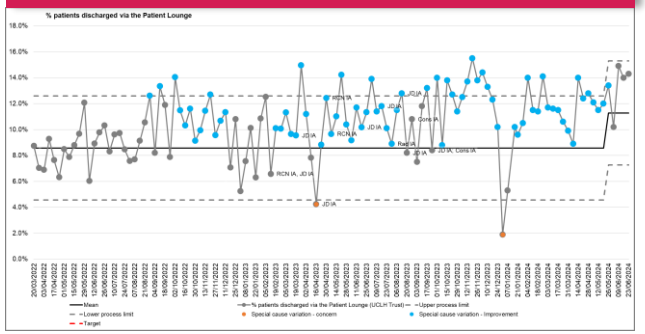
IMPROVEMENT APPROACH

IMPROVEMENT APPROACH

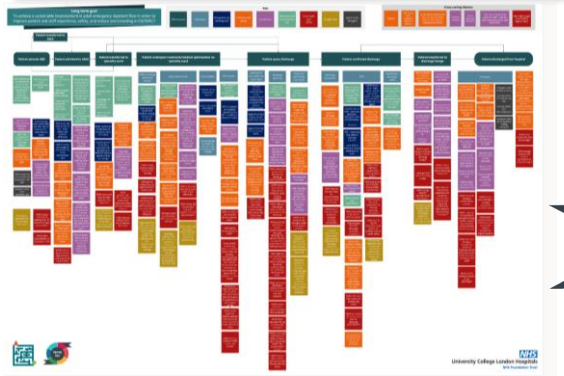
Designing theories of change



Data for improvement



Exploring 'work as done'



Testing things out…

Trial of Band 6 Pharmacist in UCH Tower Patient Lounge

Background

The UCH Patient Lounge is a key enabler to earlier discharge and increased bed capacity and improved flow in the organisation, particularly in non-elective pathways.

This Test of Change aims to address the following challenges:

- Patients cannot be transferred until TTAs have been screened by the ward pharmacist
- It often takes a long time for patients to receive their TTAs on the ward, as this needs to be brought up by a porter, or a ward nurse collects directly from pharmacy
- Patients remain on the ward to receive education on their medication by the pharmacist
- Platinum patients will remain admitted the following day to wait for TTAs

Trial Details

A trial with a Band 6 pharmacist based in the Patient Lounge for 1 week. They did the following to support patient flow:

- Screening simple TTAs
- Liaising with ward pharmacists to screen complex TTAs
- Educating patients on high-risk medications at point of discharge
- Aiding patient flow co-ordination throughout the tower

Date: 5th – 9th June 2023, 9am to 5.30pm

Learning from others

Set out our objective

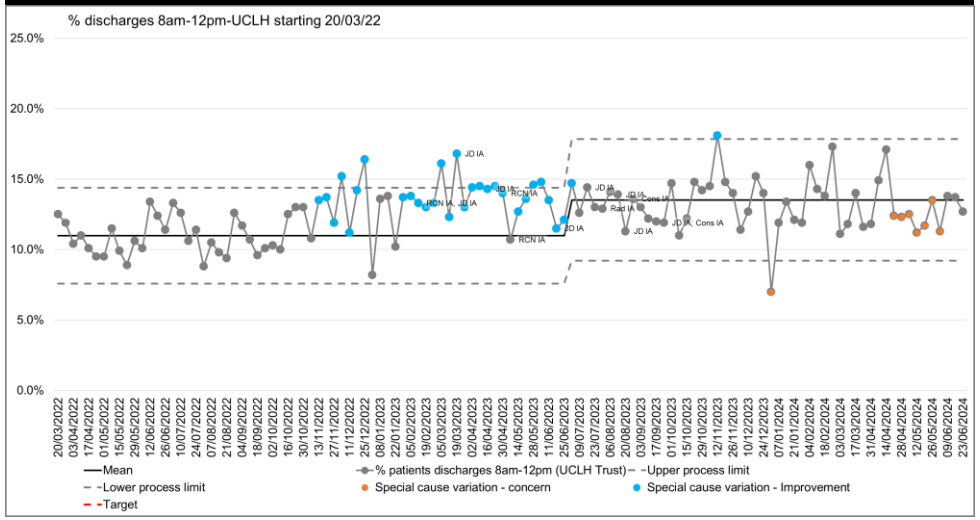
NHS
University College London Hospitals
NHS Foundation Trust

ucl

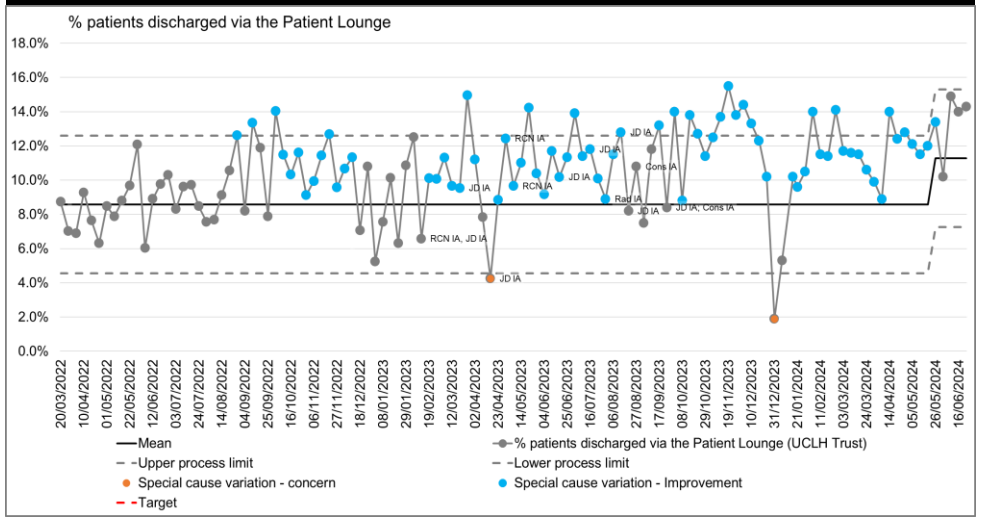
UCLH
Flow Improvement Plan

WHAT IMPACT HAVE WE SEEN?

Statistically significant increase in the percentage of discharges between 8am – 12pm



Statistically significant increase in the percentage of discharges via the patient lounge

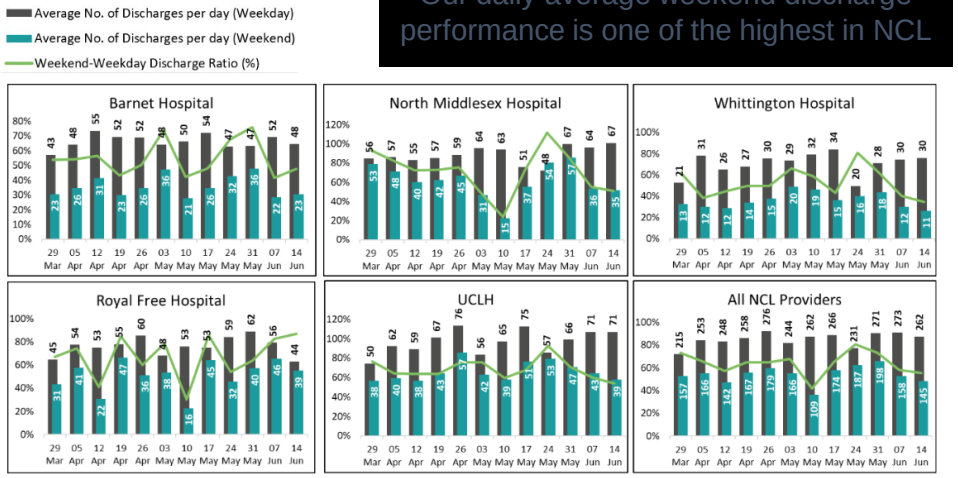


Lowest percentage of our bed base occupied by patients who do not meet the criteria to reside and were not discharged in NCL

Trust	ICB	% bed base occupied by patients who do not meet the criteria to reside and were NOT discharged
Epsom and St Helier University Hospitals NHS Trust	SWL	24.4%
Kingston Hospital NHS Foundation Trust	SWL	21.4%
Imperial College Healthcare NHS Trust	NWL	20.8%
Whittington Health NHS Trust	NCL	20.7%
Lewisham and Greenwich NHS Trust	SEL	19.7%
Chelsea and Westminster Hospital NHS Foundation Trust	NWL	16.0%
Homerton University Hospital NHS Foundation Trust	NEL	15.4%
North Middlesex University Hospital NHS Trust	NCL	14.9%
Guy's and St Thomas' NHS Foundation Trust	SEL	13.6%
Royal Free London NHS Foundation Trust	NCL	10.4%
St George's University Hospitals NHS Foundation Trust	SWL	10.4%
Barking, Havering and Redbridge University Hospitals NHS Trust	NEL	10.3%
Croydon Health Services NHS Trust	SWL	9.9%
University College London Hospitals NHS Foundation Trust	NCL	8.1%
The Hillingdon Hospitals NHS Foundation Trust	NWL	7.8%
King's College Hospital NHS Foundation Trust	SEL	7.5%
London North West University Healthcare NHS Trust	NWL	5.9%
Barts Health NHS Trust	NEL	5.8%

Discharge: Weekend Discharges

Our daily average weekend discharge performance is one of the highest in NCL



Ratio Calculation: Average discharges per day (weekend) / Average discharges per day (weekend)

Source: Surge SMART data

IN SUMMARY

We're doing our best but don't be fooled, we haven't got everything cracked!

What's next…

- Organisational focus on improving performance across the Emergency Pathway
- Focusing on engaging multidisciplinary teams across the Trust to understand what the barriers and enablers are for them to deliver the UCLH rhythm of the day
- Engaging clinical support services to ensure the whole system is supporting flow

OUR REFLECTIONS…

- Engage and empower people
- Everything is context dependent - don't have any preconceived ideas
- Data is a very powerful engagement tool, use it consistently with purpose
- It's all about perseverance and patience - we have learnt to see improvement in years rather than days

Any questions?

Contact

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Serena Ng, Senior Improvement Facilitator serena.ng@nhs.net

Drinks and Networking

CONVENZIS

Thank you for attending The 15th NHS Patient Flow Conference!

Scan here to book onto our next National Patient Flow Summit in November!