'Overview of Acute Medicine and future challenges in Ireland'



Prof Garry Courtney National Clinical Lead for Acute Medicine







Specialty

- Acute medicine *
 - Cardiology
 - Clinical (medical) genetics
 - ✓ Clinical Immunology
 - Dermatology
 - ✓ Diabetes mellitus
 - Endocrinology
 - Gastroenterology
 - General medicine
 - Genito urinary medicine
 - Geriatric medicine
 - Haematology
 - Infectious diseases
 - Metabolic medicine
 - Nephrology
 - Neurology
 - Oncology
 - Palliative medicine
 - Rehabilitation medicine
 - Respiratory medicine
 - Rheumatology
 - Spinal paralysis
 - Transfusion medicine
 - Tropical

16yrs+



Acute medical bed days used and discharges Jan to Dec 2024

Hospital Model	Acute Medical bed days used 2024	% of all acute medical bed days used 2024	Acute medical discharges 2024	% of all acute medical discharges 2024
Model 2	212,444	8%	39,429	12%
Model 3	1,004,730	40%	161,157	47%
Model 4	1,298,598	52%	139,998	41%
	2,515,772		340,584	
	•		^	NAA 00 500/

Acute Medicine

As % of adult Med & Surg emerg admissions

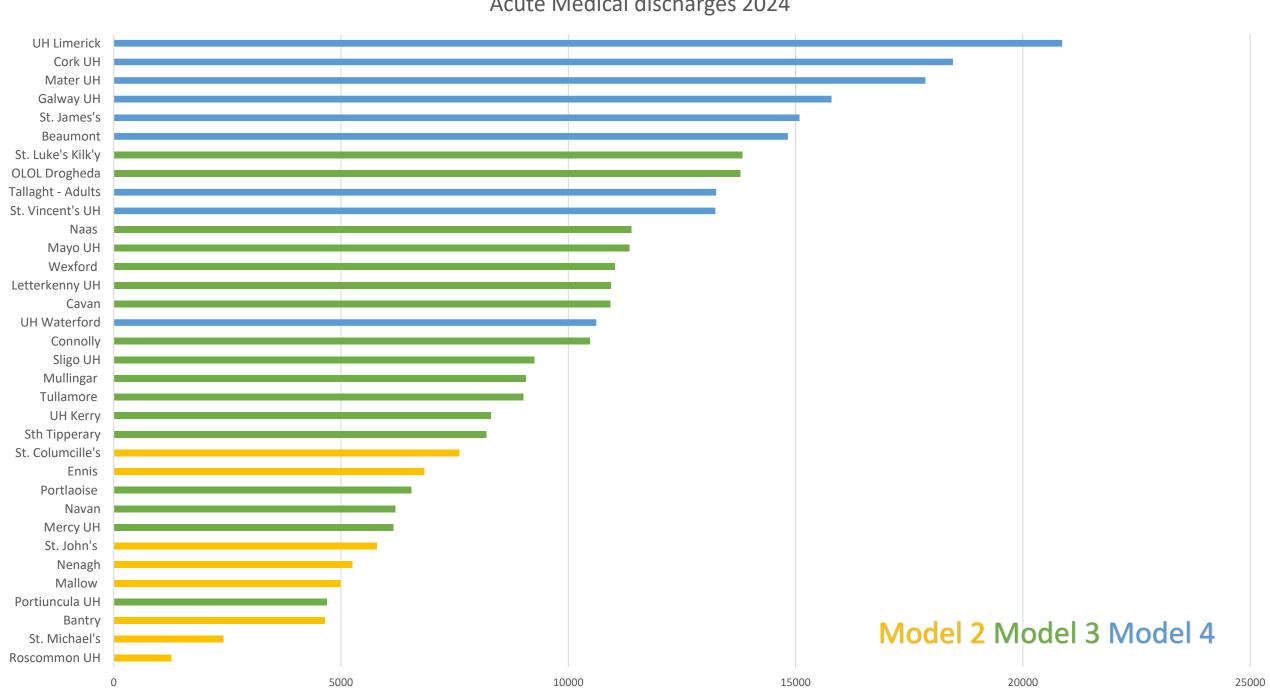
As % of adult Med & Surg bed days used

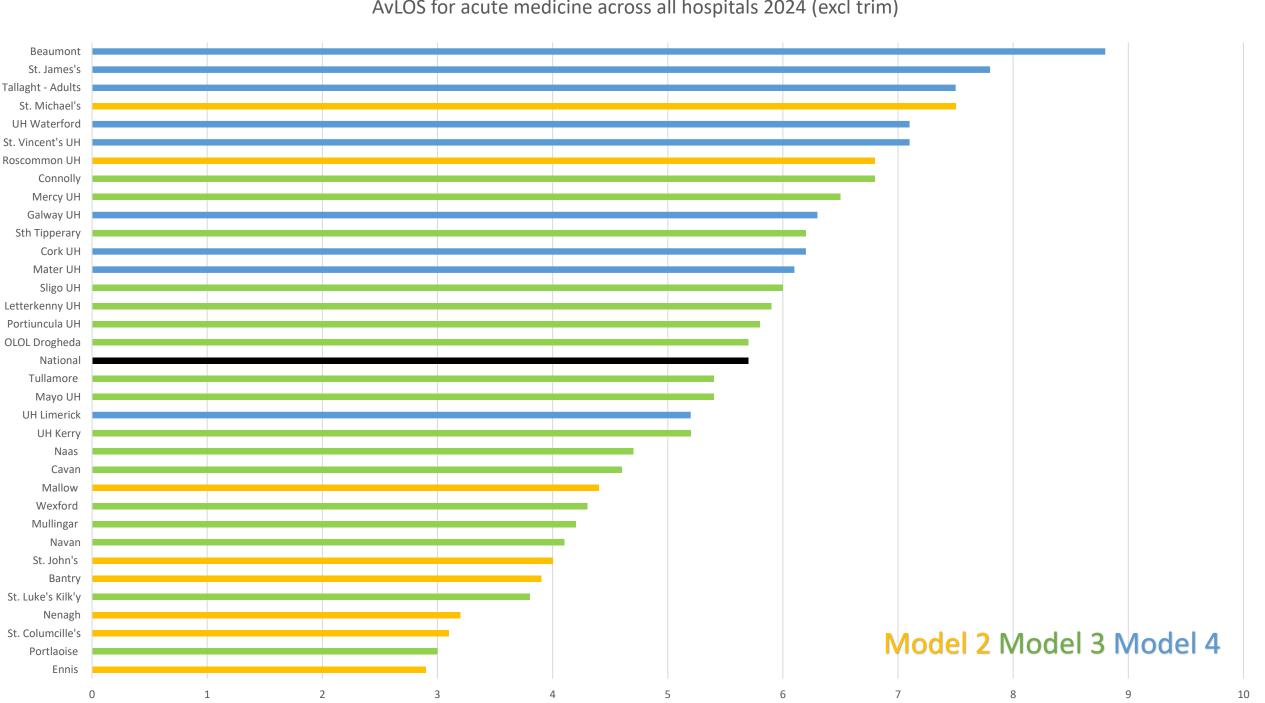
Acute Medicine

73%

M3 80.18%

M2 99.08%





% 0 day discharges acute medicine Jan to Dec 2024

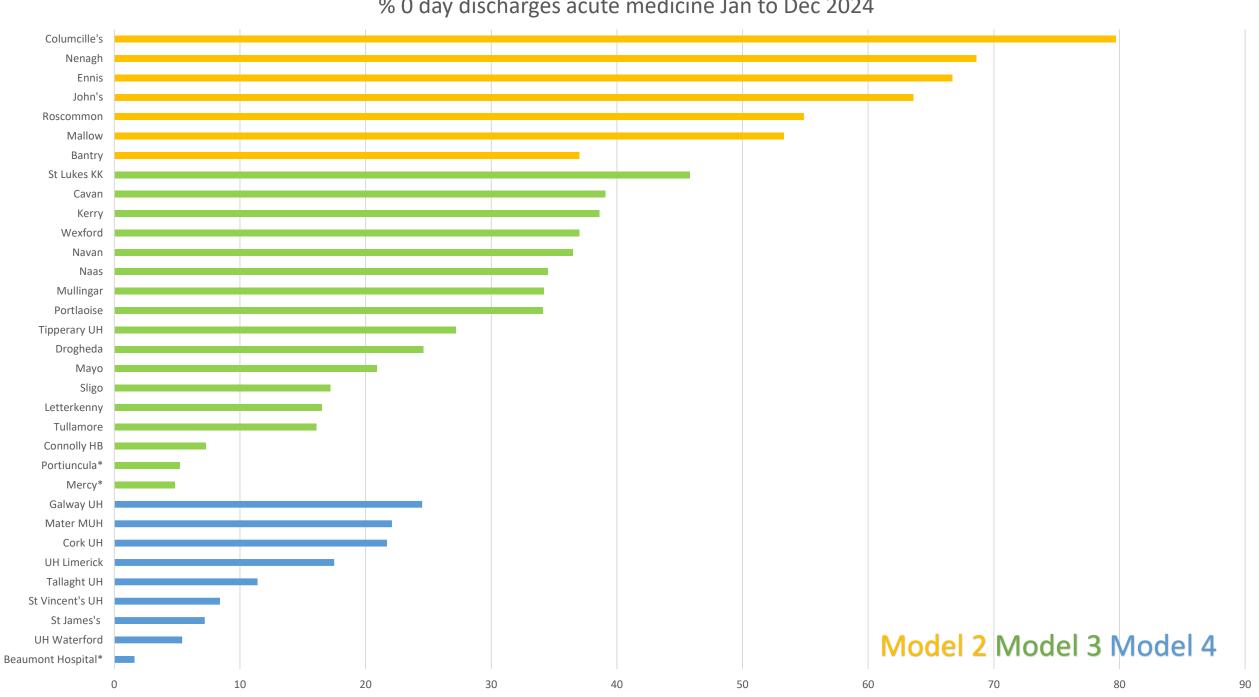
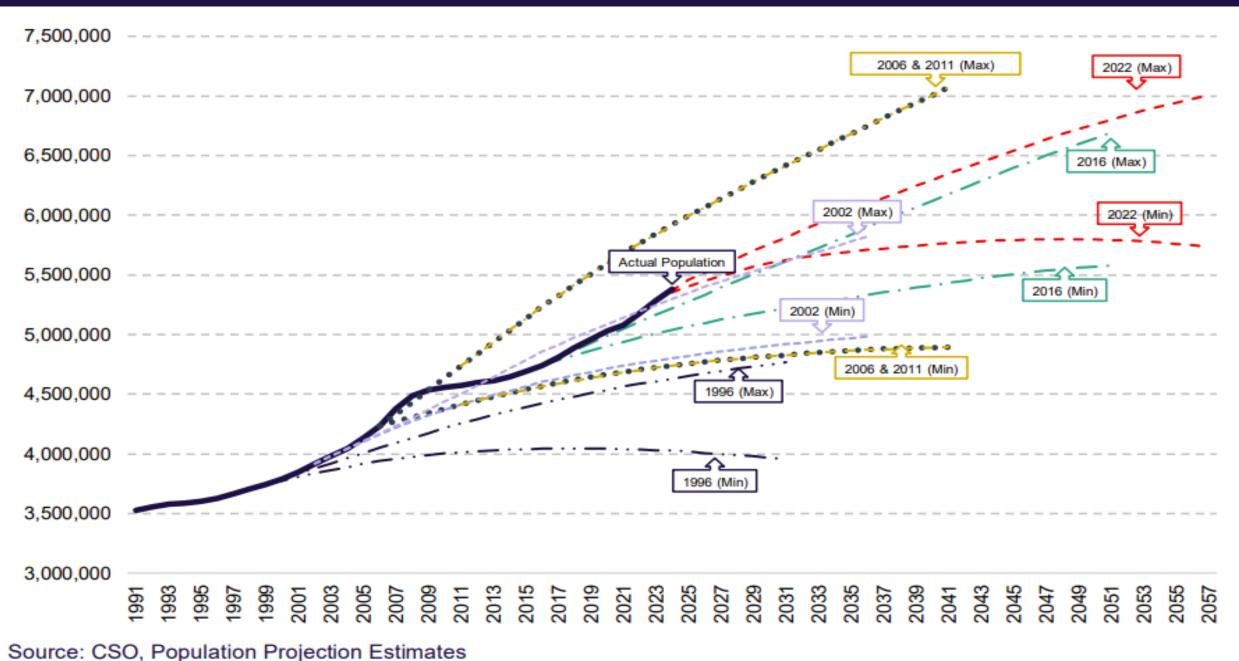


Figure 1: CSO Population Projections 1996-2022



3. Improving flow across primary, secondary and community care

One of the biggest challenges with urgent and emergency care is the ability to separate the two and manage them differently. It will be important to find a way to organise the system to really understand the opportunities for future success.

Definitions⁸

Emergency: Life-threatening illnesses or accidents which require immediate, intensive treatment. Services that should be accessed in an emergency include ambulance (via 999) and emergency departments.

Urgent: An illness or injury that requires urgent attention but is not a life-threatening situation.
Urgent care services include a phone consultation through the NHS111 clinical assessment service, pharmacy advice, out-of-hours GP appointments, and/or referral to an urgent treatment centre (UTC).

Same-day emergency care services

Same-day emergency care services (SDEC) have the potential to take stable patients out of emergency departments, where they do not require a bed but need a period of observation, specialist review, investigation, treatment or follow up. Some SDEC models have evolved into a 'pull' system whereby SDECs stream appropriate patients to them from the ED front door. There is potential for SDEC to be part of the solution, following further evaluation.

Future State

- New ways of multidisciplinary working
- Separate Urgent Care from Emergency Care (Pre-triage streaming)
- Develop Same Day Emergency Care (SDEC)
- Confront Boarding (wrong patient, wrong place, wrong time)
- Switch from ABF to QBF
- Focus on patient care
- And staff care
- Equity, Efficiency, Equanimity, Equilibrium



The "Acute Take": How it overlaps with the Acute Medical programme in a Model 4 Hospital

Mr Ryan Wylie, Operations Manager,
Dr Catherine McGorrian, Clinical Director
Emergency and Specialty Medicine Directorate
Mater Misericordiae University Hospital
Chair, RCPI Clinical Advisory Group for Acute Medicine

"All the hospitals are struggling with the acute take and post-call ward round"

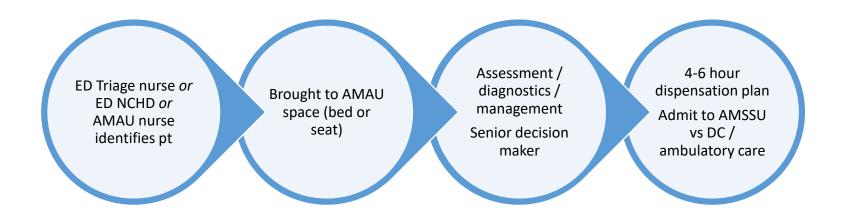
The Traditional General Medicine on Call

- One Medical physician / consultant on call x 24 hours
- Next day ward round from 8am or 9am
 - Decisions come late
- Patients admitted to your specialty ward
- Managed by the general & specialty physician during the inpatient stay
 - lead clinician might not have been the best fit for the clinical issue



2012 Onwards: National Acute Medicine Programme Launch

- AMAU staffed with new acute medicine team— co located with ED
- Development of patient pathways
- AMSSU developed with a target LoS 72 hours.
- New concept and different perceptions



Post COVID: Rebuilding and Re-Tooling

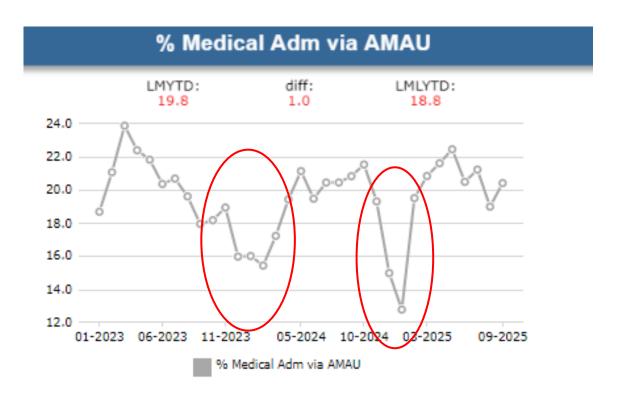
- A new AMAU with 12 clinical spaces
- AMSSU co-located with 29 beds
 - New SOPS: flow routes and bedside cardiac monitoring
 - Grows the Acute team
 - Daily huddle and daily ward round
- Direct flow from AMAU to AMSSU
 - Communication
- Senior management support
 - Value the role of Acute Medicine
 - Importance in preserving rapid dispensation pathways



AMSSU

Challenges along the way

Hospital escalation: leading to boarding into assessment beds



Acute medicine pathways to accommodate the "Acute Take" patients

- Daily Stream from ED
- "See You Tomorrow"
 - Stable unscheduled care ED patients
 - Next day attendance for assessment, diagnostics, senior decision maker
- GP direct access to AMAU
- Saturday AMAU opening
- "Fit to Sit" patients more ambulation
 - Role of the streaming CNS





A new model to support the "acute take" / GIM on call?

- 2021: Acute admissions were increasing
- Traditional model of one consultant on call
 - Quality of care and patient safety
 - NCHD quality of learning and EWTD issues
 - Patient decisions coming later
- COVID pandemic lessons of change and flexibility
- Gathered designates from GIM specialties
- "We Not You"
- Respectful communication change agents naysayers resilience

Medical senior decision making



- Collaborative rounding model
- Up to 9 hours of senior decision maker acute rounding in ED / acute admission wards
- 9 hours of senior decision maker in AMAU
- Patients distributed to best specialty team at 10am meeting

Outcomes & Learnings

Patient discharges with Primary Dx related to specialty: Jan to June 2024

2024-Medical Specialties-Patient Discharges from MMUH-HIPE Data Review									
% Ratio Specialty HIPE Coded for Primary Diagnosis on Patient Discharge									
All Admissions	Note: From Feb 2023 - Part Admits not included in the data								
Monthly Overview 2024	By Primary Diagnosis - New Definition								
By Specialty	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24			
Cardiology	88%	89%	94%	93%	88%	90%			
Endocrinology	25%	18%	22%	20%	10%	17%			
Gastroenterology	69%	63%	82%	84%	77%	80%			
Infectious Diseases	78%	88%	81%	73%	74%	74%			
Neurology- (Non Stroke)	92%	98%	96%	96%	93%	93%			
Nephrology	53%	56%	70%	55%	60%	90%			
Respiratory	83%	90%	83%	85%	93%	84%			
Rheumatology	27%	30%	20%	28%	25%	16%			
Stroke	85%	94%	98%	92%	95%	95%			

- MMUH 2024:
- 17,856 acute unscheduled medical admissions
- Of which 23% seen via AMAU
- & 13% more seen by acute med consultants in ED
- 3,943 patients who had same day discharges

Outcomes & Learnings

- Learnings from the Change process
 - Keeping the patient at the heart of the conversation
 - Resilience and Local Leadership
- Maintaining a quality, consistent and effective AMAU stream is hard



No room for complacency

What's Next?



- Building on experience and success
- Maintain patient flow into acute assessment space
- Build capacity ambulatory care
- Link to virtual ward
- Engage specialty services vital role in unscheduled care



- cmcgorrian@mater.ie
- rwylie@mater.ie

 It takes a village....thanks to the Nurses, HCAs, HSCPs, ward clerk, admissions team, portering, ANPs, streaming CNS, Acute medicine and specialty physicians, ED doctors, diagnostics, radiology, pathology, patient services, catering & facilities, & the senior management team



Patient Flow in St. Luke's General Hospital

Brid Crennan brid.crennan@hse.ie



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Assistant Director of Nursing 1 WTE

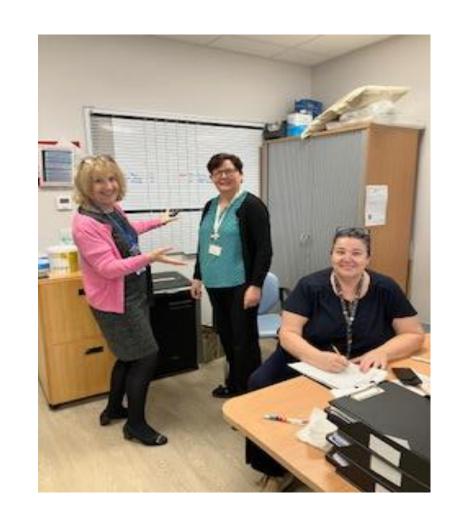
CNM3 Bed Managers X 2 WTE

CNM2 Discharge Planners x 2 WTE

Unscheduled Care Lead

Transport Coordinator x 1

Key Stakeholders from all disciplines





St. Luke's General Hospital has 337 beds of which 269 are for the Acute Service.

Patient flow was identified as a key priority for improvement within St Luke's Hospital.

Providing **high quality care** to the undifferentiated, undiagnosed patient is of great importance to all patients who access the Acute Floor and to the staff that work in it.

Delays in discharges resulting in patients boarding in ED and AMAU for long periods lead to poor patient experience times and patient outcomes.

Great work had been carried since 2023 which has led to Introduction of the Visual Hospital







The Visual Hospital process works by visualising patient demand for discharge and acting on this.

Patient demand to get in is very predictable. Equally patient demand to get out is predictable by the day and by specialty.

Around 25% of beds on wards are occupied by patients who are medically fit enough for a safe discharge or transfer (MFFD) but they are still occupying a bed.



Process underpinning these improvements – *Collaboration*

Visual Hospital - all key stake holders were involved in planning to facilitate the delivery of an improved, safer patient journey.

- All patients have a predicted date of discharge within 24 hours of admission and for the more complex patients 48-72 hrs (with frequent review).
- 24 hour notice of pending discharge is given to all patients and care givers, which then allows for smooth discharges throughout each day of the week, focusing on earlier discharges.
- Weekly Home First meetings between the hospital and community services where all patients with a length of stay greater than 14 days are discussed, problems in delaying discharge are actioned. This effectively manages the length of stay process for patients.
- Weekly meetings between the Dublin SE team, St Luke's Hospital and Disability and Community Services to discuss all patients on the Delayed Transfer of Care list and actions taken.

HE Streaming Model

- Pre-Triage Streaming as been active in St Luke's Acute Floor for 25 years.
- All adult patients register and are pre-triaged, streamed to either the Emergency Department, the Acute Medical Assessment Unit or the Paediatric Assessment Unit.

 This ensures patients receive the right care at the right time in the right place and appropriate follow on care.



- Attendances to the AF were 51,257 in 2024 which was an increase of 6.9% on the previous year, presentations range from 121/203 per day.
- Of those 11-19% are over the age of 75yrs.
- AMAU Attendances 2024 = 10,658 with a 65% discharge rate
- AMAU High Same Day Emergency Care discharges.
- Average length of inpatient stay is 3.3 days.
- 30d Readmission rate for medical patients is 13% and surgical patients 4.3%





- Compliance with the KPIs in the ED and AMAU, now no patients waiting > 24
 hours to transfer to a bed from the Acute Floor.
- All patients over the age of 75 years are prioritized for inpatient bed.
- Introduction of a Digital Solution Support System ensures staff are working with real time data underpinning compliance with KPIs.
- Additional MDT Huddles at specific times throughout the 24 hours in the ED
- 75% of patients in the ED + AMAU are reviewed, admitted or discharged within 6 hours and 99% of patients are cleared with 24 hours.
- Increased awareness and understanding among all staff of the KPIs which has led to Improved team work and communication.



- Ambulance Turnaround Times, noticeable increase in presentations in the past year.
- Increase in GP referrals and late presentations and increase in walk-in presentations.
- CAMHS
- Disabilities
- Home Supports in the Community
- Inter-hospital transfers awaiting specialist care

HE Next Steps

- ➤ Ultimate Goal: no patients cared for on trolleys awaiting transfer to an inpatient bed
- > Recovery is good following periods of surge activity

Additional 2 AMAU Consultants has resulted in a decrease of

23% in overnight admissions

Second Medical Register on duty at weekends to focus on discharges

➤ Introduction of the Virtual Ward and development of pathways

> CNM2 CIT/OPAT to focus on recruiting patients for this service



St Luke's General Hospital for Carlow Kilkenny



Author: Catherine Rowe

Role: RANP Acute Medicine

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Background to service development:

- 7 day AMAU service (08.30-22.00)
- Rapidly expanding population
- Growth & expansion of AMAU services underpinned by close

interdisciplinary working relationships

Challenges for role development:

- Prolonged waiting times for less urgent cases
- Patient overcrowding
- Breach of patient experience times (PET)
- High incidence of patients leaving before assessment/completion of care
- High patient dissatisfaction
- Adverse patient outcomes



Key objectives:

- Contribute to the total quality management of patient care within the AMAU
- Assess, diagnose, treat, evaluate, refer or discharge patients under the RANPs care
- Improved patient outcomes
- Improve the flow of patients & quality of care
- Facilitate the continuing professional development & education of the AMAU team
- Promote a collaborative approach to acute medical care

St Luke's General Hospital Carlow/Kilkenny

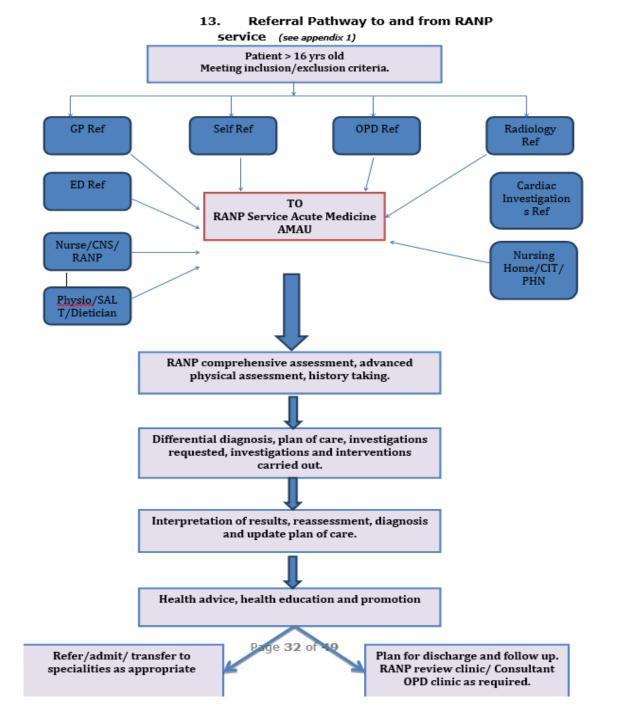


Inclusion/Exclusion criteria for the ANP service in AMAU*

Inclusion Criteria	Exclusion Criteria
Respiratory	Resp rate >28 SaO2 < 88% on O2 Stridor and/or breathing effort without air movement. Respiratory failure needing greater than 40% supplemental O2 or non-invasive ventilation. Difficulty speaking in full sentences
Cardiovascular	Haemodynamically unstable patients Patients presenting with haemodynamically unstable bradyarrythmia persistent HR less than 40bpm & 2nd & 3nd degree AV block /tachyarrhythmia persistent HR >130 or any ventricular arrhythmia Life Threatening cardiac arrhythmia Implantable device dysfunction New Neurological deficit Patients connected to the stroke pathway Haemodynamically unstable GCS < 13
Gastrointestinal Abdominal pain Vomiting + Diarrhoea Dehydration Genitourinary Suspected UTI Pyelonephritis Dysuria, Frequency Microscopic Haematuria	NEWS > 6 Life threatening electrolyte imbalance K > 7mmol/l and <2.5mmol/l or Na<120mmol/l Melaena Hematemesis Frank Haematuria
Renal angel pain/costovertebral angle tenderness Other Sore Throat Cellulitis Haemodynamically stable patients with anaemia. C2H5OH intoxication	Sepsis or septic shock Haemodynamically unstable Acutely ill patients who require urgent intervention/resuscitation or admission to high dependency unit. NEWS > 6 Life threatening electrolyte imbalance Pregnant women Patients presenting with complaint related with Active Cancer Patients Under 16 years of age Patients Presenting with Mental health problems Transplant patients Hb <8



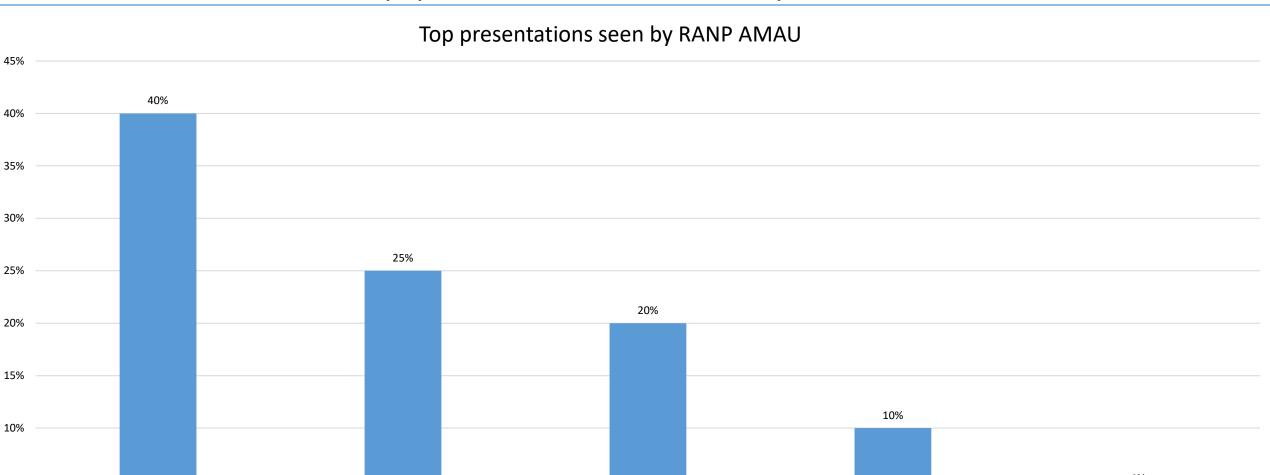




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Top presentations seen by RANP



Respiratory

Chest pain

Limb Problem i.e DVT



Generally unwell



Palpitations/A Fib

Data Summary 2023 RANP Service Acute Medicine

	RANP	% RATE	AMAU overall
# of patients seen by RANP Acute Medicine service 2023 total	1,393		9,814
# patients D/C	1,137	81.73%	61.27%
# patients admitted	250	17.9%	48.73%
Average time from seen by RANP to completion of Planned care	2:50hrs		
Average PET Time	3:45hrs		8:25hrs

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RANP Activity

# referrals for cardiac diagnostics	294	21%
# Patients requiring radiology other than Chest x-ray	366	26.30%
# D/C patients requiring no f/u from any HCP	545	48%



ANP Service AMAU 2024			
			20047 - 10 -1 - 0 -1 -04400 -1
Total number of patients seen	1090		2024 Total Patients Seen by RANP Service
Total number of patients discharged	952		AMAU - 1090
Total number of patients admitted	136		All III TO LOSO
Average PET time			

Caseload	Chest Pain	393	13%
	Limb Problem	260	Admits
	Respiratory Symptoms	193	
	Generally Unwell	155	
	New Abnormal Pulse/Palpitatons	44	■ Total number of patient
	GI Symptoms	8	discharged
	Urinary symptoms	8	■ Total number of patient
			87% admitted Discharges
			Distriction
Investigations/ Refs	X-Ray	754	
	Cardiac Investigations	223	
	USS Doppler	186	
	СТ	28	
	Resp referral	60	
			Caseload
			Urinary symptoms 8
			GISymptoms 8
			New Abnormal Pulse/Palpitatons 44
			Generally Unwell 155
			Respiratory Symptoms 193
			Limb Broblem
			Limb Problem 260
	+		Chart Pain
St. Luke's General Hosp	ital		Chest Pain 393
St. Luke's General Hospi			0 50 100 150 200 250 300 350 400 450
			2 22 220 200 220 300 320 400 400
	 	I	

Data Collection Tool

AUDIT SHEET ANP SERVICE AMAU

Date_____

L Number/ Initials	S/B	Presenting Complaint	Check in Time	Triage time	Time Seen	X-Ray Prescribed?	Additional investigations required? i.e. echo/ultrasound	Meds Prescribed?	Admit/ discharge	Time Plan completed	XRAY RPT

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Future planning:

- Plan going forward is to provide 7 day RANP service in AMAU
- Advance planning for more ANPS to cover for 7 day service
- RANP review clinics
- Research projects







Tipperary University Hospital

Model 3 AMAU

DR RAQUEL BRAUNS, CONSULTANT AMAU

Overview



Initial State

AMAU Activity

Average Daily Attends	9.7
Median Daily Attends	6.5
Operational days	247
2023 Total Attends	2404
2023 Total Admits	528
Admit % Rate	22.0%

- Medical Pathway activity number = 12 daily
- Medical Pathway Cat 2 patients in breach of 10-minute KPI

(a) People

- TAT for Covid Testing 24hrs Impacting:
- AMAU Overflow numbers
- Bed Days lost while awaiting diagnostics

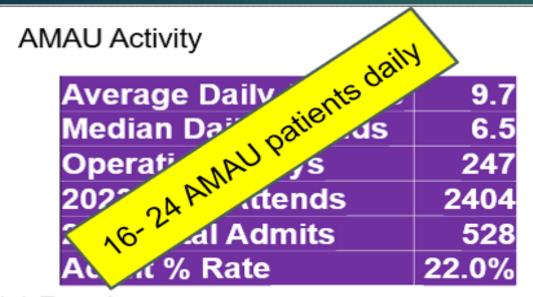
(b) Quality

 Time for Cat 2 to be seen – in breach of 10-minute KPI

(c) Cost

(d) Time

Target State



Medical Pathway activity ny 12

medical Pathway on Medical breach of 10 pathway ments in Pathway of the Pathway o lens in Pathway dents in

(b) Quality

(a) People

TAT for Covid Testing – Impacting:

AMAU Overflow

Results within 1 hour Bed Days **a**waiting diagno

Cat 2 within 10-minute KPI each of Time for Cat 2 to be seen 10-minute KPI

AMAU 'Protected, Prebooked & Increased'

Reason for Action

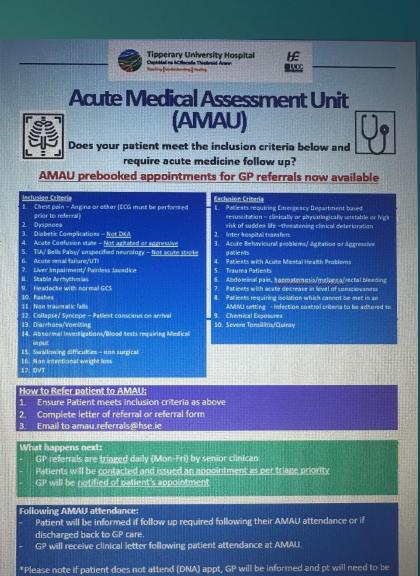
 To maximise the utilisation of the AMAU by increasing throughput

- Earlier start times for pre booked slots
- Networked with local GPs to increase the utilization of pre booked slots
- In order to reach 16 patients consistently per day we continue to aim to secure 6 patients for the early pre booked slots
- Further GP engagement- GP forum with physician group
- AMAU working has benefitted from being a protected "space" and not impacted by surge

Streaming

Reason for Action

- Streaming was identified as a service improvement strategy for directing patients to the appropriate pathway.
- It can improve patient flow and facilitates timely and efficient treatment in an appropriate location resulting in an effective patient experience/ value adding process.

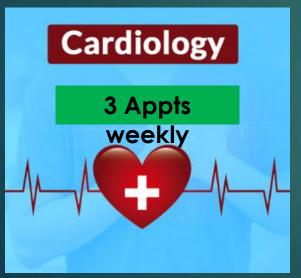


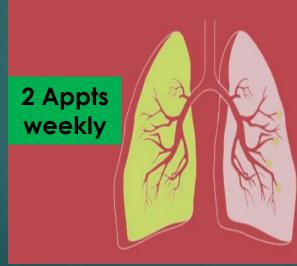
re-referred by GP

Rapid Access Clinics

Reason for Action

 To allow alternate pathway from AMAU directly to Cardiology and Respiratory specialty initially



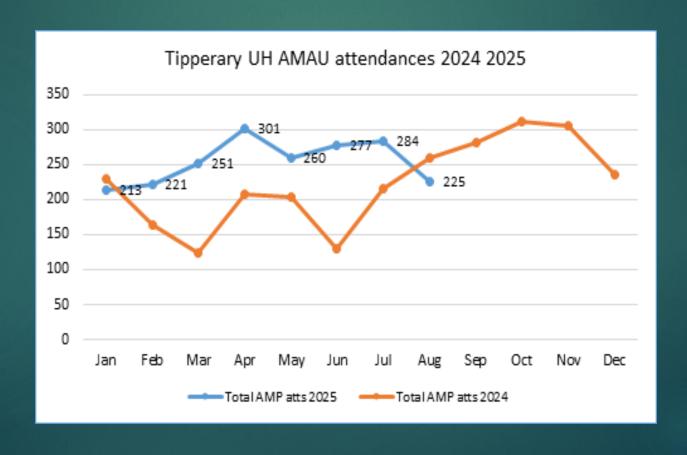


- Cardiology and Respiratory services are in agreement to provide Rapid access clinic slots.
- Respiratory rapid access 2 slots per week
- A Fib 1 slot blocked specifically for AMAU as rapid access.
- Rapid Access Cardiology RAC Clinic 2 slots weekly

Out of hours Diagnostics

- Cardiology diagnostics available 8-1800- on Saturday's to alleviate pending request times.
- Radiology facilitating lunchtime slots, for example to maximise the AMAU pre booked attendances.

High level summary of AMAU monthly attendances



Challenges:

- Ensuring adequate GP referrals to uptake pre booked slots @08.30am
- Timely arrival of patients to their appointment to ensure work up/diagnostics and consultant review is complete in morning session therefore facilitating the phased arrival and discharge from the unit resulting in afternoon session capacity

Insights

- Additional admin supports required to ensure GP prebooked appts fully scheduled and utilised in the running of the AMAU
- Working group engagement

Worked Well

- When patients arrive to AMAU @08.30am, this allowed processing of patients and subsequent ward rounds for early senior decision making
- ED approach to Category 2 patients -continues
- AMAU protected service (not used for surge capacity)

Benefits:

- Patient pathway from pre booked to AMAU- very smooth and direct
- Patient benefit to access specialist care first time
- Reduce ED triage interventions
- Direct pathway to AMAU (ED Attendance avoidance)
- Utilisation of available diagnostics to support decision making and pts plan of care and discharge where appropriate

Key Next Steps

- Further Expansion of AMAU
- Increase throughput from 16 to 24 patients daily
- Increase staffing to meet demands
- Additional ANP support
- ▶ Currently 1 ANP
- Extended hours 6 day operation Monday to Saturday 8 to 10 pm
- ▶ GIM Rapid Access Clinic
- Short Stay Unit



Thank You

Keeping it local - Medical Assessment Units in Model 2 hospitals

Dr Daniel Schmidt, Consultant Gastroenterologist & Acute Physician, Mallow General Hospital

Background

- Who am I
 - Returned 2019 from Addenbrookes
 - Acute Medicine
 - 60-130 admissions per day
 - No specialty cardiology/respiratory
 - Hepatology
- What is MGH/Model 2 Hospital?
 - Small Hospitals Framework
 - 7/8 Model 2 hospitals
 - Practice is heterogenous across sites
 - Some misunderstanding about what we provide



38 min (37.6 km) via New Mallow Rd/N20

COVID 19

- 54 beds
- Limited capacity to take transfers



Post - COVID

- 74 beds
- 98 beds in
- 2026









MAU – How is it run/staffed

- 6 Consultants GIM/Specialty
- Daily 0800-2000
 - Weekday
 - Weekends
 - Reduced staff
 - · Reduced diagnostics
- Access
 - GP referral all seen same or next day
 - Ambulance call to on call Consultant
- Self presenters
 - Increasing challenge
- Scope of safe practice
- Transfers
 - Stroke
 - Poisoning
 - Acute abdomen
 - STEMI
 - ICU
 - Bleeding



Diagnostics in MAU

- POC
 - VBG
 - CK/BNP/trop
 - D-dimer
 - CRP
 - Urea and Creatinine
- Echo/US
- Resp
 - PFT
 - FENO

- Radiology
 - US
 - CT
- Cardiology
 - EST
 - Echo
 - Event/Holter
- Gastroenterology
 - Endoscopy

Discharge pathways

COPD rehab

Tissue viability

Cardiac rehab

Ambulatory Heart failure

Diabetes CNS

A day in the life

• 14 patients

- 9 admitted
- (very unusual)

- Age 74-92
- Mean 83

• 4 patients cam by ambulance

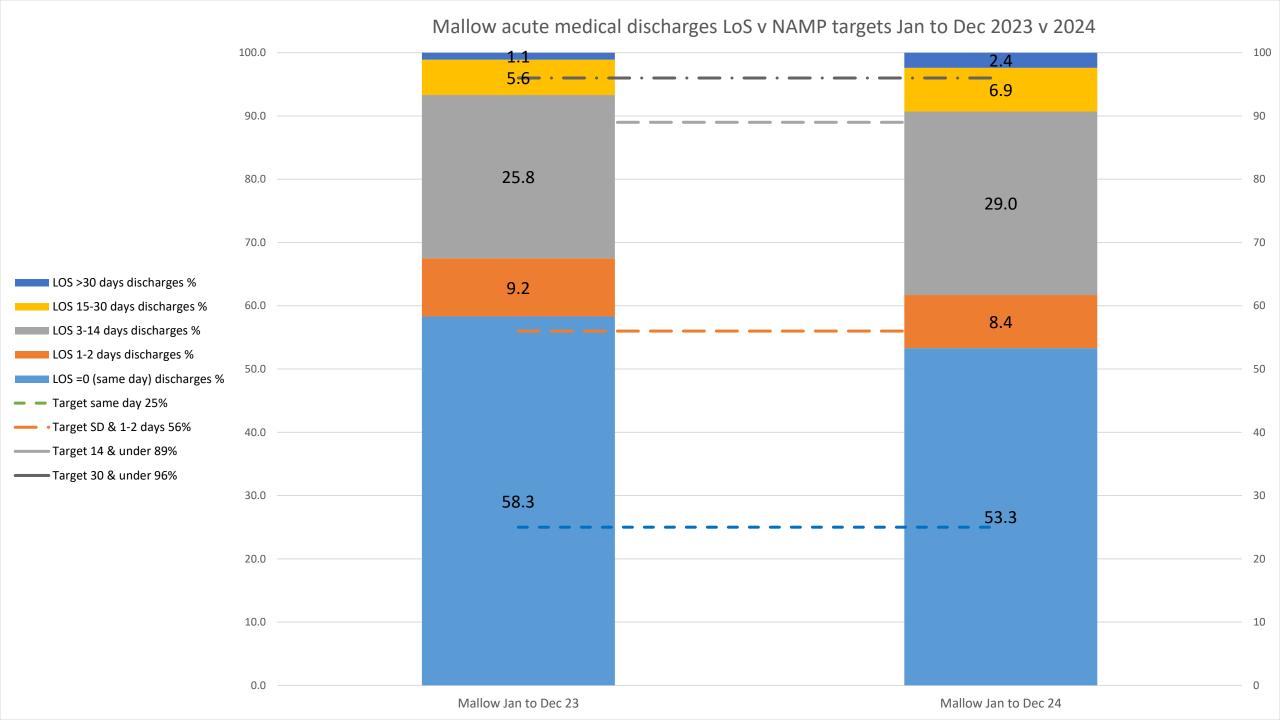
- 1 incarcerated inguinal hernia
- 1 PUJ ureteric stone

 Overall vey high average care needs among admitted patients

Specialty work at MGH

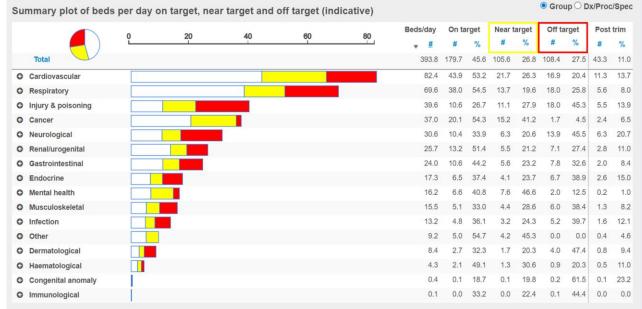
- Gastroenterology
 - 1000 new referrals per annum
 - 900 endoscopic procedures
 - 4-500 IBD patients
 - 100 on biologic therapies
 - 1400 OPD appointments per annum
- Respiratory
 - Gen resp clinic
 - COPD rehab
 - Regional centre for sleep studies

- Cardiology
 - Ambulatory heart failure
 - Cardiac rehab
 - Gen cardiology clinic
- Geriatric Medicine
 - Falls clinic
 - Memory clinic
 - LPF fair deal for the region
- Obesity/endocrinology
 - Regional centre for medical management of obesity
 - Diabetes clinic

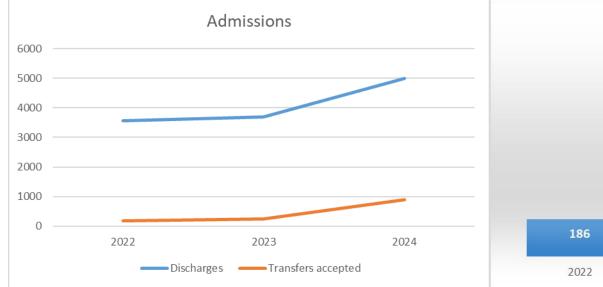


Summary of Acute Medical Activity by bed days used by DRG Mallow General Hospital and CUH (Jan to Dec 2024)



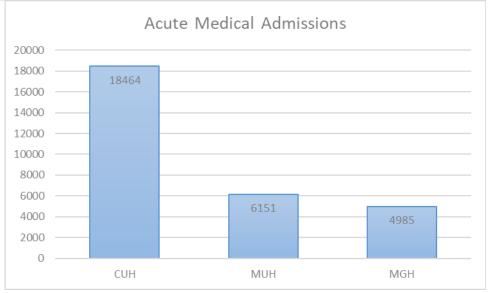


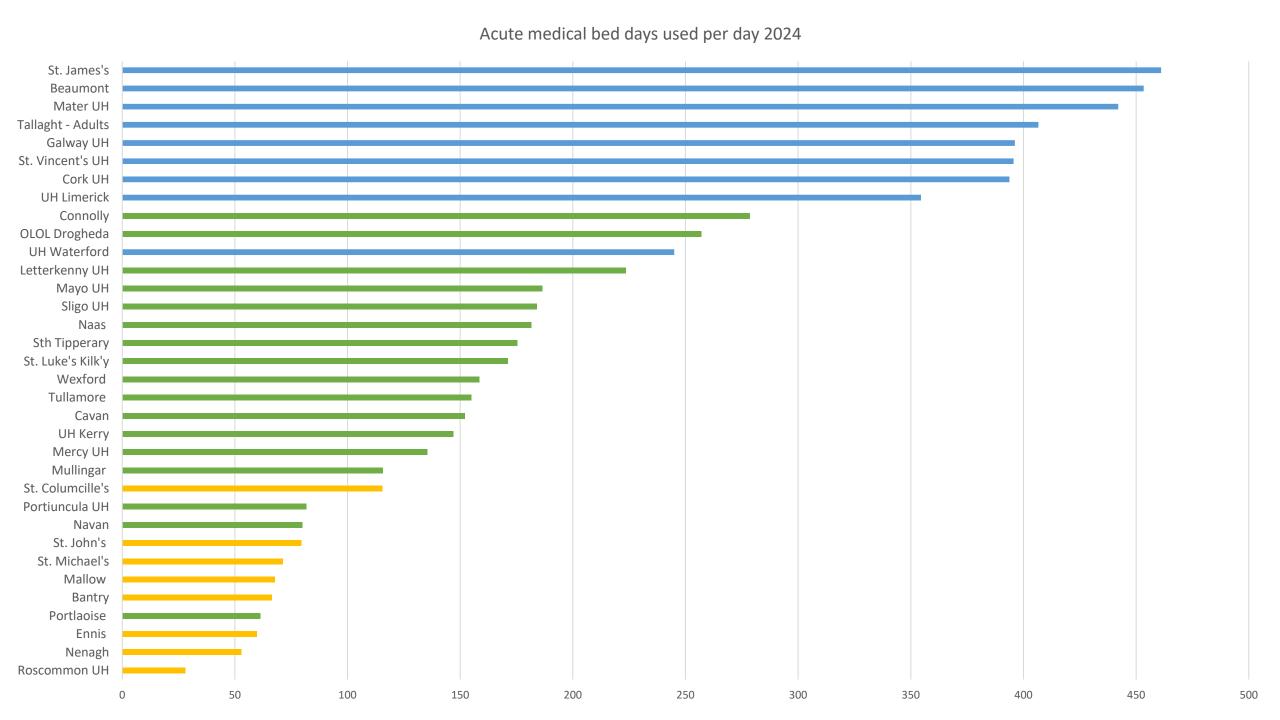
Year on vear activity — how to stream patients

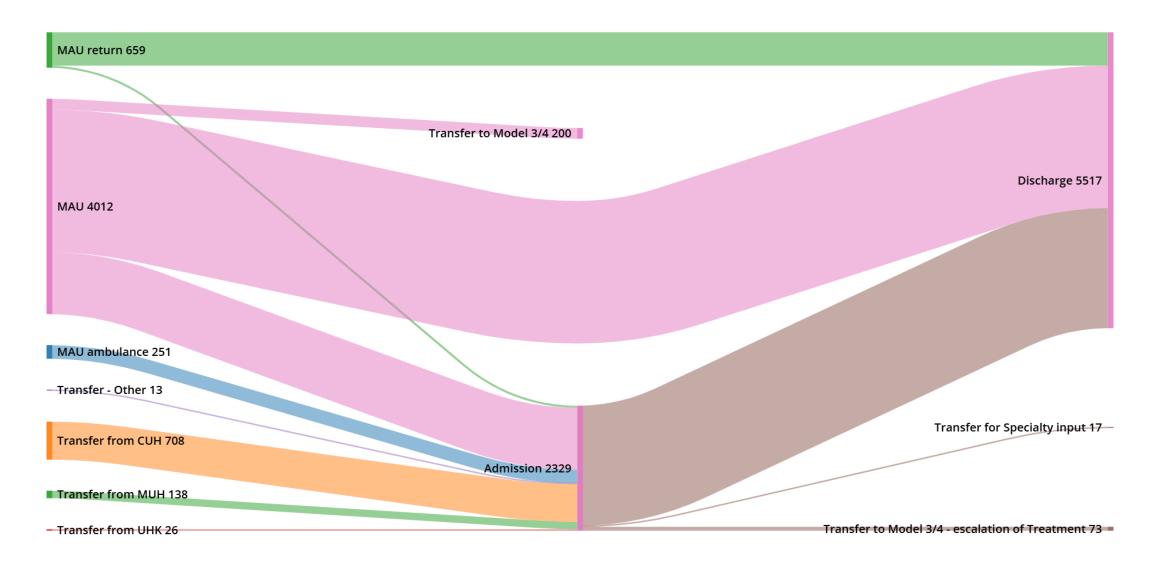




- Introduced CNM
- YOY 20% increase in discharges
- Comparison is difficult
- 60-70% of CUH medical admissions
- Age/frailty/isolation/rural







Future

Currently commissioning 24 bed ward







• This will require further increase in transfers

- May see increased MAU activity
- This will require additional staff and modifications to the model of care as currently provided

Acknowledgements

MGH staff

Acute Medicine staff