2. Improving patient flow: Optimising the fast track model in emergency departments

A Timely Emergency Care Collaborative how-to guide for health services

OFFICIAL

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Institute for Healthcare Improvement

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In this document, 'Aboriginal' refers to both Aboriginal and Torres Strait Islander people. 'Indigenous' or 'Koori/Koorie' is retained when part of the title of a report, program or quotation.
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Contents

Introduction

The Timely Emergency Care Collaborative (TECC) aimed to reduce delays for patients needing emergency care in Victoria through improving hospital-wide patient flow.

The project involved 14 teams from hospitals across Victoria, as well as a team from Ambulance Victoria. The Victorian Department of Health delivered the project in partnership with the Institute for Healthcare Improvement.

The project ran from December 2022 until the end of June 2024. Almost every team showed significant improvements in the timeliness of emergency care, as measured by emergency department lengths of stay.

The project set out with a change theory of how to improve hospital-wide patient flow. This change theory was developed by drawing on international evidence, local and international expert input and the ideas of the participating teams.

Through the results of testing and the insights from participating teams, the change ideas that were found to be most impactful (feasible to implement, demonstrated improvement) were identified as 'high-impact change ideas'. These ideas have been written up as a series of 'how-to guides'.

This guide is one of a series outlining each of these high-impact change ideas. All guides are available from Emergency care <https://www.health.vic.gov.au/patient-care/emergency-care> or by contacting TEC2@health.vic.gov.au. A summary of the overall change theory from the TECC can also be found on the Emergency care webpage <https://www.health.vic.gov.au/patient-care/emergency-care>.

The change theory and learnings from the TECC project continue to inform other departmental projects including the Timely Emergency Care (TEC) 2 Program.

Problem this change idea addresses

Poor patient flow in emergency departments (EDs) for low-acuity/low-complexity presentations can lead to overcrowding, increased wait times and delays in care delivery. These inefficiencies can compromise patient care and experience, reduce staff satisfaction and contribute to bottlenecks that impact the overall function of the ED. Addressing this issue is critical to ensuring timely and effective care for low-complexity patients while maintaining the capacity to manage more urgent or complex cases.

Overview of the change idea

A specially designated 'fast track' stream within the ED improves flow for patients with low-acuity/low-complexity presentations. This results in shorter waiting times, increased patient satisfaction and fewer patients who leave without being seen. Creating a fast track stream also mitigates ED overcrowding by prioritising patients classified at the lower Australasian Triage Scale (ATS) levels 3–5.

Defining the fast track patient cohort

Fast track patients are primarily people with low-acuity, single-system complaints who can be classified as:

- **fast track discharges** – patients suitable for discharge to their primary residence within 4 hours of arrival
- **fast track admissions to ED short stay unit (ED SSU)** – patients who need a short period of observation or treatment and can be discharged to their primary residence from the ED SSU
- **fast track admissions to inpatients** – patients who need admission to an inpatient ward after brief assessment and management.

Examples of typical presentations suitable for the fast track stream are shown in Table 2.1.

Table 2.1: Typical fast track presentations

Classification	Typical presentations
Fast track discharges	• Minor wound and musculoskeletal injuries • Minor infections of the skin or urinary tract
Fast track admissions to ED SSU	• Renal colic • Hyperemesis gravidarum • Migraine headache • Tonsilitis/quinsy • Cellulitis • Patients requiring ultrasound/CT scans to aid in diagnosis (for example, DVT)
Fast track admissions to inpatients	• Single limb orthopaedic fractures necessitating operative management • Infections (without sepsis) requiring > 24 hours of antibiotics • Wounds +/– tendon injuries requiring operative intervention

The fast track patient cohort can be clinically defined in multiple ways including:

- diagnostic group – minor illness or injury
- acuity by triage category – lower ATS acuity categories 3, 4 and 5.

Key exclusion criteria for the fast track steam to exclude complexity and acuity from this group may include:

- **level of care required** – patients with high nursing care needs such as non-ambulant, spinally immobilised, frail or older adults
- **instability** – patients within the parameters of a MET call (tachycardia, hypertension, altered conscious state, trauma alert criteria)
- **diagnostic uncertainty** – undifferentiated complex presentations that need extensive investigation or management.

Fast track stream principles

Key principles to guide setting up or improving a fast track stream and to sustain these improvements over time are listed below. Adapt these to suit your local context:

- The ED maintains a designated fast track stream with protected beds as part of its service model.
- Triage identifies and streams patients to fast track.
- Unambiguous inclusion and exclusion criteria are established for the fast track stream.
- Fast track patients undergo early assessment to begin diagnostics, analgesia and timely referral (for example, to a short stay unit or specialty inpatient teams).
- Nursing staff coordinate flow, directing patients to and from the fast track area and designated waiting room.
- Patients deemed unsuitable for fast track care (due to acuity or nursing care needs) are prioritised for transfer to other ED clinical areas.
- A senior medical decision-maker helps eliminate flow barriers by assisting the broader team in decision making and escalating waits and delays as necessary.
- A centralised patient dashboard, either integrated into the electronic medical record or presented on a whiteboard, captures the patient's care plan, provisional diagnosis and progression of care, including wait times and delays.
- Agreements for whether fast track cubicles can be used for other patient cohorts under rare circumstances (for example, escalation procedures in response to an event) should be in place. This includes the process for rapidly returning to the protected fast track model as quickly as possible.

A word of caution: Using fast track cubicles for other patient cohorts

Fast track streams are often not sustained because 'under pressure' there is agreement to use fast track cubicles for other patients. Over time this becomes normalised and the model collapses. Agreeing when fast track cubicles can be used for other patients as well as when and how the cubicles will return to being protected is critical to sustained improvement

How to test these change ideas

The Plan-Do-Study-Act (PDSA) framework offers guidance for testing these change ideas. This framework uses rapid cycle tests to quickly learn and adapt change ideas. As confidence in the idea increases, cycles can be longer and tested under different conditions. The guidance below focuses on the first testing cycle. Plan extra test cycles ahead of time so there is continuous testing and adaptation of the idea until it is ready for permanent implementation.

For more information about PDSAs refer to the Institute for Healthcare Improvement website <https://www.ihi.org/how-improve-model-improvement-testing-changes>.

Before testing

Ensure there is appropriate clinical leadership and engagement

The clinical director of emergency medicine should sponsor and support this change idea. To increase the chances of success, a change from existing practice will need strong leadership. Before beginning to plan for testing the change idea, ensure appropriate clinical engagement of the senior emergency medicine and/or SSU team.

Understand your current state

Convene a multidisciplinary team to review your current state. This should include the following:

Patient flow performance review:

- Review ED length of stay over time for non-admitted patients and by triage categories 3 to 5.

Environment/equipment review:

- Evaluate your current environment including the bed and chair numbers, assessment and treatment spaces (procedure +/– plaster), waiting room and co-located amenities.
- Evaluate diagnostic and treatment equipment and supplies including investigation, pathology, microbiology, pharmaceuticals (for example, analgesia, antiemetics, antibiotics) and procedural equipment (wound care, suturing, plaster, specialist supplies).
- Evaluate administration equipment and supplies including computer workstations, printers, paper forms and patient handouts.
- Evaluate current infection control supplies: linen, skips, cleaning supplies, etc.

Workforce review:

- Evaluate staffing numbers, skill mix, roles and responsibilities.

Current practices and process review:

- Conduct staff interviews and direct observation of current practices and processes to understand the streaming, management and progress care for these cohorts.
- Evaluate current streaming criteria and their application (Are they followed?).
- Evaluate the current cubicle use to understand how patients are allocated to spaces in the ED.

A process map may be helpful to display the current state and to identify points of non-value time/delays or variation between staff and teams.

Develop your change idea for a new or improved fast track

This should include:

- clearly defining the fast track patient cohort (inclusion and exclusion criteria)
- the agreed number of 'protected' cubicles/spaces for initial testing (this may start small and be expanded over time as confidence increases that the model is working and not negatively impacting patient flow across the ED)
- defining processes, roles and responsibilities
- identifying equipment and supply requirements.

Where a change to an electronic medical record or other IT system is needed, determine if an interim process can be implemented while undertaking initial testing. This will reduce unnecessary testing delays and avoid changes to IT systems based on an untested model.

Plan

Decide when to start testing your fast track model

Avoid starting your testing on a Monday or after a public holiday. These are typically days that put increased pressure on EDs and may also impact staff awareness and readiness for the test after a break.

The duration of the test of change should be determined by:

- the level of staff support/readiness for the change
- the potential risk associated with the change
- the level of confidence that the change will lead to improvement.

A model can be tested for just a few hours if a short cycle would help address the concerns of staff and to allow for rapid adaptation. However, there should be a plan to continue testing the model (with adaptations through rapid PDSA cycles) for long enough to have data that would show whether the change is leading to improvement (reduced ED length of stay) and not resulting in unintended consequences. This may be a few days to a few weeks, depending on the patient volumes seen through the new model.

The model may also need to be tested under 'different conditions' (different shifts or days of the week, different clinicians or teams) to give confidence that it can be consistently delivered and will lead to improvement. The inclusion/exclusion criteria, number of protected cubicles and response under escalation procedures may also be tested and adapted over time.

Plan for data collection

Establish a plan for collecting data before testing begins. Recommended measures to consider are outlined in the next section.

Define clear operational definitions for measures. Outline who will be responsible for collecting (or extracting) data and how often. Work out how the data will be analysed and by whom.

It is also important to plan how to get qualitative feedback about the test of change. Planning a short huddle at a convenient time of day when team members can be quickly assembled can be a simple and effective way to gain rapid insights and adjust the model to address any identified issues.

Prepare the team

Align staff rosters as needed to support the new model. Ensure all staff involved in the test get adequate training. Providing role cards and process flows that outline the key tasks and expectations can be useful as an easy reference during early tests.

Communicate to others

Ensure other staff who may interact with the team are aware of the test of change. This includes why the change is being tested and what they can expect.

Do

Start testing

Carry out the test of change as per the PDSA plan.

Collect data and feedback

Collect data during the testing cycle.

Capture feedback at huddles.

Study

At the end of the testing cycle, gather the team to review the data and feedback. Identify what is working well and opportunities for improvement. Develop ideas for any adjustments that could be made to improve the model.

Act

Decide whether to continue testing and if any adjustments are needed. Start the next PDSA cycle accordingly.

Note that the intent should always be to continue testing unless:

- the change was determined to be inappropriate (unsafe, unsustainable or no confidence that it would lead to improvement), or
- the model has been tested long enough that it is ready to transition into permanence (implemented as the new standard way of working).

How to measure if the change is leading to improvement

The following measures could help you understand if there are improvements in the ED SSU. For more information on measurement for improvement, refer to the Institute for Healthcare Improvement website <https://www.ihi.org/how-improve-model-improvement-establishing-measures>.

Measure	Metric	Operational definition	Why use this measure
Outcome measure 1	ED non-admitted length of stay	The average length of stay of all patients discharged from the ED	Fast track processes primarily improve non-admitted ED length of stay by reducing ED length of stay for patients discharged home and converting longer stay discharges to ED SSU admissions. This measures whether the fast track model is achieving the objective.
Process measure 1	Time to be seen (by ATS triage categories 3, 4 and 5)	The average time between arrival to assessment by first clinician for patients allocated to the fast track stream (by ATS)	Indicates whether the model is reducing delays between presentation and clinical assessment.
Process measure 2	Proportion of fast track shifts with senior decision-maker	The proportion of available fast track shifts filled by a senior decision-maker (FACEM, senior registrar or lead nurse practitioner)	Improvement in this measure indicates effective identification and prioritisation of patients for discharge, creating capacity for new admissions from ED.
Process measure 3	Appropriateness of cubicle use	The number of patients who were moved into an fast track cubicle during a shift who **did not** meet fast track inclusion criteria	Identifies where there is non-adherence to the intended fast track model.
Balance measure 1	ED length of stay	The average length of stay of all patients in the ED	Checks that the fast track model is not having unintended negative impacts on the flow of the whole ED.
Balance measure 2	Representation rate	The percentage of patients admitted to ED SSU whose care is subsequently transferred to an inpatient unit	Checks that the fast track model is not compromising the quality of patient care.

Case study: Emergency department fast track

Organisation	Goulburn Valley Health, Shepparton
Service type	Major Regional Hospital
Problem	Chronic ED overcrowding led to boarding of admitted patients in fast track, limiting the efficiency of care for low-complexity patients.
Change idea	Protect fast track cubicles for low-complexity care.
Changes	• PDSA 1: Two cubicles were quarantined for the care of fast track patients • PDSA 2: Five dedicated fast track cubicles to FT1–FT5 and allocating a dedicated staffing resource (nurse practitioner and senior decision-maker) between 9:00 am and midnight
Measures	**Outcome measure (see Chart 1):** Non-admitted ED length of stay • Decreased by 33.3 minutes • Improved by 12.2% **Process measure (see Chart 2):** Volume of fast track patient flow • Increased 126–250/day • Increased by 198%
Key enablers	**Fast track nurse champions**: Rostering the same nursing staff members (1–2 champions) into the fast track space improved the continuity and consistency of the new model of care. **Leadership support**: Admitted patients were no longer allowed to wait for admitted in fast track cubicles. This rule was supported and supervised by the ED leadership team, preserving fast track for low-acuity care. **Designated senior decision-maker**: Allocate a senior decision-maker and nurse practitioner to fast track accelerated clinical decision making. Rapid access to equipment: Patient care equipment, computers, purposely stocked trolleys and workstations in fast track improved flow. **Fast track waiting room**: Fast track patients were more efficiently managed in a waiting area closer to fast track. Signage and verbal communication explained and promoted movement to the waiting room.

Contact: Jayne Lastarria, ED Clinical Coordinator, Jayne.Lastarria@gvhealth.org.au

Chart 1: Goulburn Valley Health – Emergency Department non-admitted length of stay (mins) – Individuals chart

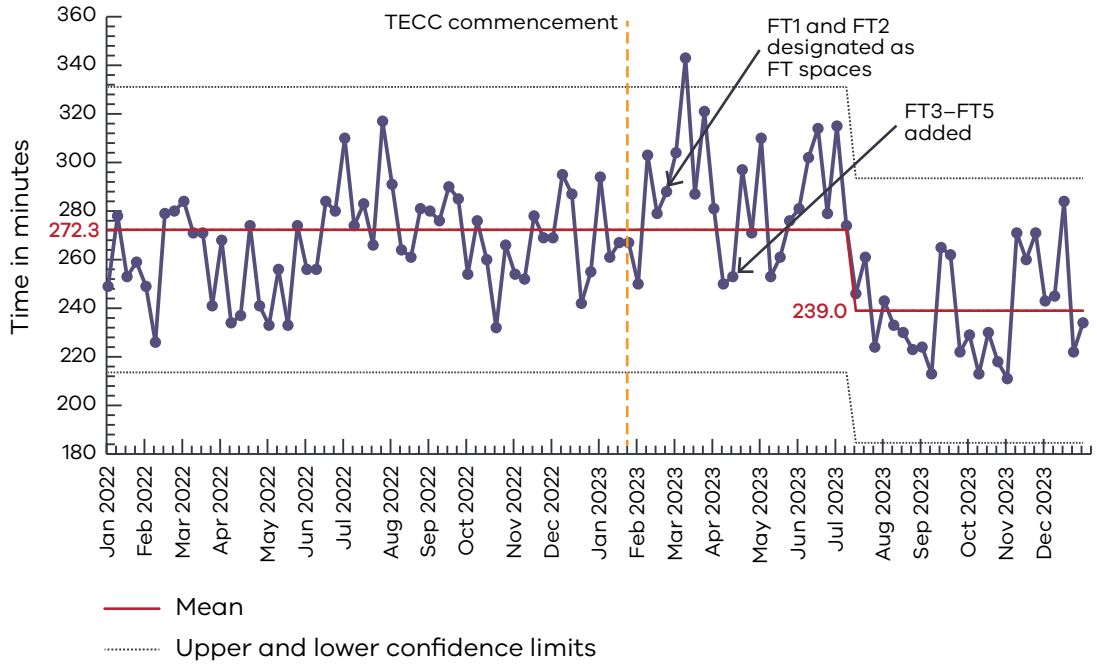
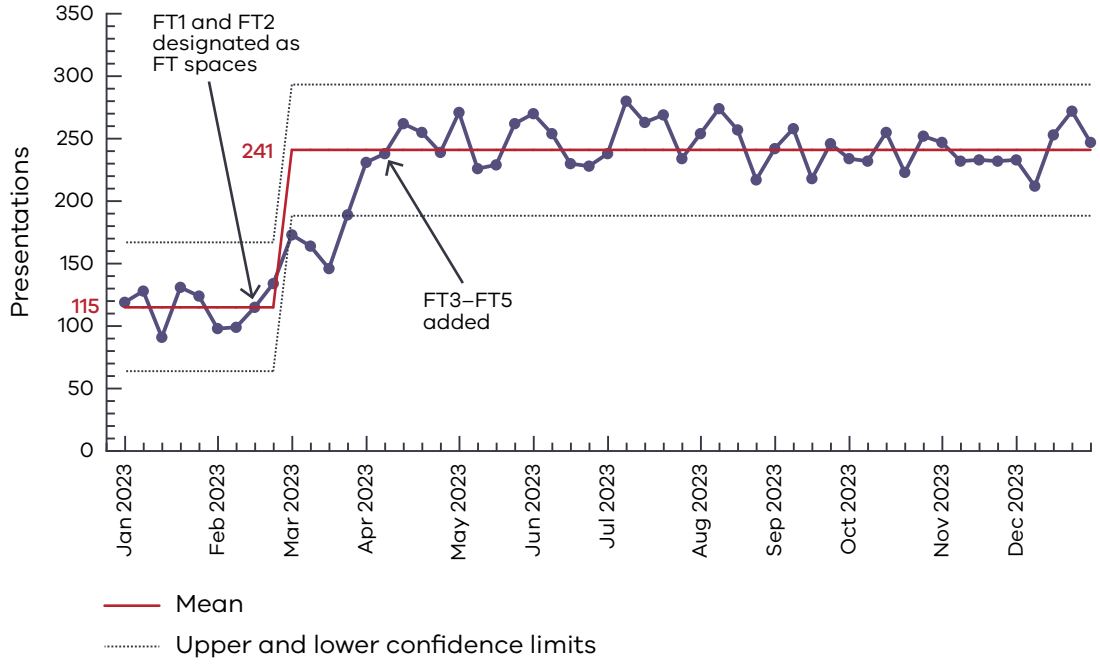


Chart 2: Goulburn Valley Health – Number of fast track presentations weekly – Individuals chart



Appendix 2.1: Fast track model of care

Background

Fast Track (FT) is both a streaming Model of Care (MoC) and a dedicated area in the Emergency Department (ED) for assessment and treatment of ambulant, low complexity patients who are likely to be discharged home or back to the community. Triage processes stream patients into FT using predetermined inclusion/exclusion criteria.

FT aims to increase ED throughput by:

- Expediting the care of ambulatory patients with less urgent symptoms and conditions;
- Diverting the care of patients who meet particular clinical criteria through a separate stream in the ED;
- Using a geographically dedicated area staffed by dedicated senior medical, nursing staff and physiotherapists;
- Providing care that is standardised and targeted to specific conditions and injuries.

Specific Objectives

- To reduce waiting times and length of stay for low complexity patients, subsequently improving patient satisfaction and achieving KPIs.
- To provide a safe and effective MoC that assists with the streaming of patients with low complexity (single system) problems.
- To reduce the number of patients leaving without being seen, left after treatment started, or left with advice.

Expected Outcomes

- reduction in waiting times for low complexity patients (measured by category 4 and 5 time to treatment against targets).
- A reduction in length of stay (LOS) of patients streamed to FT (indicated by non-admitted National Emergency Access Target (NEAT) and average non-admitted LOS).
- Demonstrated improvement in patient and staff satisfaction (indicated by complaints, compliments, Victorian Healthcare Experience Survey (VHES) and staff feedback).
- A reduction in the number of patients leaving without being seen, left after treatment started, or left with advice.

Location

A purpose-built FT area has its own waiting room, a combination of treatment chairs and trolleys, and a dedicated consult/ophthalmology/gynaecology assessment room. The FT area is directly adjacent to the main ED waiting room, the Satellite Imaging Hub (SIH), and in very close proximity to the procedure/plaster room.

The treatment spaces are:

- FT1 – dedicated consult/ophthalmology/gynaecology assessment room;
- FT2, FT3, FT4 – fast track cubicles with chairs
- FT5 is allocated to the CIN/ Wait room nurse and is used as a flexible space for waiting room patients to have interventions completed. The FT staff may use this space for brief assessments and consultations.

- FT6, FT7, FT8 – fast track cubicles with trolleys – these are flexible beds used as fast track or acute bays depending on demand and clinical need
- The Procedure room is also available for completion of procedures including suturing, reduction of fractures, Biers Block, Sedation with Nitrous Oxide.

Allocation of patients to FT 1–FT5 is at the discretion of the staff working in FT.

Hours of Operation

The FT area operates from 0900 hours to midnight, seven days/week. Use of the area on night duty is dependent on staffing and is at the discretion of the ANUM and admitting officer.

Responsibility / Personnel Able to Perform

At GV Health, the FT area is staffed by medical officers, nurse practitioners (NPs), nurse practitioner candidates (not counted in NP or nursing numbers), nurses, physiotherapists and other health professions as required on a referral basis. The entire team is responsible for assessing and managing patients in a timely manner and ensuring final disposition from the ED occurs within the four-hour NEAT benchmark.

The area is overseen by an ED Consultant or the Admitting Officer (AO) and the Patient Flow ANUM.

Some physiotherapists at GV Health are credentialed to provide Primary Contact Physiotherapy (PCP), with others able to assess and treat patients on a secondary contact or referral basis. Where rostered, the PCP's will work within the FT MoC. Non- PCP physiotherapists will be present within the FT area for secondary contact where available.

Streaming

Patients allocated to the FT stream are examined in order of arrival (unless clinical urgency requires expediency). Patients allocated to the FT will be under the care of the Triage Nurse until FT accepts the patient.

Inclusion and Exclusion Criteria

The overriding principle for Fast Track is if the patient looks sick and requires an extensive workup they are not suitable for the area.

The area is designed to treat patients who:

- Are likely to be discharged home within four (4) hours OR admitted to SSU within four (4) hours as per short stay admission criteria;
- Present with minor illness or injury, i.e. low complexity patients where the patient is not systemically unwell (single system problem);
- Are usually ambulant and likely not required to lie in a bed;
- Are triage Category 3, 4 or 5 (see notes below re: Category 2 patients).

Specific inclusion and exclusion criteria including clinical examples are provided in Appendix 2.2. Where patients fall into the "Orange" category the suitability can be discussed directly with the FT clinician, or alternatively the AO or an ED Consultant. Decision making for these patients will consider staff skill mix, clinician scope of practice and demand within the department. Where the triage clinician is unsure and time does not permit for a consultation/discussion, the patient should be streamed to the acute cubicles, for further review and discussion when time permits.

Inclusion Criteria

Patients who:

- Meet the key criteria listed above;
- Are triaged as Category 2 but:
  - Are presenting with blood or body fluid exposure
  - Have an isolated distal limb injury triaged to Category 2 due to pain.
- Can be likely to be admitted to Hospital in the Home (HITH) or the Short Stay Unit (SSU) if presenting with a low complexity problem.

Exclusion Criteria

- Triage Category 1 or 2 (excluding exceptions mentioned above)
- Patients presenting with a condition and or symptoms where the outcome is likely to be an admission (not including SSU)
- Shock state or vital signs meeting MET call criteria
- Decreased level of consciousness, GCS <15 (i.e. significant Intoxication, delirium, advanced dementia, etc)
- Multi-trauma, trauma response or need for a pan-scan
- Significant previous aggressive behaviour history
- Suicidal patient at risk of absconding
- Stroke call unless stood down as not a stroke
- Suspected sepsis
- Psychotic, aggressive, agitated, or violent patient with behaviours of concern
- Need for cardiac monitoring, e.g., syncope, cardiac-sounding chest pain.
- Need for isolation in a negative pressure room (e.g. measles/chickenpox/TB)
- Significant Abdominal Pain
- Frequent presenters with a known management plan
- Consider co-morbidities before streaming patients over 75 years of age to FT

In addition to the above exclusions, the following paediatric presentations should not be triaged and streamed to FT:

- Children < 12 months of age (except at the discretion of the ED Consultant);
- Children displaying any Behaviours of Concern or with previously documented alerts for BOC (these children will be cared for in a cubicle or resuscitation area);
- Children with significantly abnormal vital signs at triage. e.g. any vital signs in purple zone on VICTOR chart or >2 vital signs in orange zone;
- Children requiring continuous observation or care
- Children presenting with suspected Non-Accidental Injury (NAI)

Patient Flow

Following triage/streaming:

- Patients streamed to FT are directed to the Streaming zone (adjacent the Fast Track waiting room) where they are collected by a staff member to direct them to the appropriate waiting room.
- The patients are marked as "FTW" on the ViTAL patient administration system – the presenting problem entered on Vital/ColdFusion should commence with the letters "FTW".

Reviewing in Fast Track:

- When the clinician is available to see the patient, they will be taken to a FT assessment cubicle where the appropriate clinician will conduct history and examination and establish a plan. Unless clinically essential, the patient will not remain in a treatment space and will be transferred back to the waiting area to await the outcome of initial assessment/investigation/management. Only patients being assessed or receiving care are to remain in a FT treatment space.
- Patients who have received treatment requiring observation (e.g. certain analgesia) would not be suitable to return to the waiting room, but could be admitted and transferred to the SSU (providing they meet SSU criteria).
- FT patients who require more extensive work up and treatment than first identified will be discussed with a Consultant to clarify the need to move to an alternative stream. Once confirmed, the Central ANUM is informed with arrangements made to transfer the patient to the appropriate alternate stream.
- If the FT patient is not able to be discharged within 4 hours, they should be referred on to the SSU, the main ED or an inpatient team at the earliest time point at which this can be identified.
- Patients who require procedures to be performed in the main ED area (e.g. closed reduction of a fracture under sedation) will be managed in conjunction with the Central ANUM and Consultant (or their delegates).

Returning to the waiting room:

- Patients who have been assessed in FT and are returned to the waiting room will be coded as "FTW" on Vital to ensure staff awareness throughout the department of the patient location.

Appendix 2.2: Fast track criteria

	Red / Exclusion	Orange / Discuss	Green / Inclusion
Physiology / Triage / Disposition	• Code Blue / MET call criteria • Triage ATS 1, 2 • Likely complicated medical / surgical admission • Primary presentation a Mental Health compliant • Significant co-morbidities • Paediatrics <12 months • Requires direct observations/ monitoring • Suspected or identified as infectious • Exhibiting or known to exhibit aggressive/ violent behaviour or who are currently intoxicated/drug and/or alcohol affected	• Paediatrics < 2 years • ATS 2 – pain only	• Triage ATS 3/4/5 • Likely to be discharged within four (4) hours
Mobility	• Normally non ambulant	• Normally not independent, but walks with gait aid	• Independent
Trauma or Fracture	• Trauma call / Trauma alert • C-spine immobilisation • Suspected spinal fracture	• Multiple limb injuries	• Digital amputations, Isolated limb trauma, open wound, foreign body, suspected # or shoulder dislocation (non-traumatic) • Not likely to require procedural sedation • Replacement casts

	Red / Exclusion	Orange / Discuss	Green / Inclusion
Neurological	• Acute Neurological changes with or without trauma • Fever • History report loss of consciousness (LOC) • Syncope/ pre-syncopal symptoms • Seizures/post ictal • Minor head injuries with cervical tenderness • GCS <15	• Dizziness/ Vertigo	• Headache, no neurological symptoms, no red flags
Musculoskeletal pain or injury	• > 60yrs back pain • Requiring multiple medications for chronic back pain	• 50 – 60yrs back pain	• Muscular back pain < 50yrs (able to ambulate on arrival) • Sprains and strains limbs/ joints/soft tissue injuries
Haematological	• Suspected PE or known PE		• Suspected or confirmed DVT (no SOB/chest pain)
Respiratory & Cardiovascular	• SOB with increased work of breathing (WOB)/asthma • Suspected Acute Coronary Syndrome (ACS) • COVID-19 high risk, Hot Zone (HZ) triage • Chest pain		
Renal/ Abdominal Obstetrics and Gynaecology	• Suspected AAA/ ischemic gut • >50 years with undifferentiated abdominal pain • Diarrhoea	• >50yrs flank pain • >20 weeks Pregnancy • Diagnosed Ectopic • IDC • PV Bleed (refer assessment chart) • Abdominal pain >50 years	• <50 years abdominal pain /Flank pain • UTI / Urinary retention / Pyelonephritis • First trimester PV bleeding (haemodynamically stable) • Gynaecological infections / skin infections • Haemorrhoids • Dysuria without haematuria

	Red / Exclusion	Orange / Discuss	Green / Inclusion
Dermatological	• Petechial rash • Bites – poisonous • Burns • Likely to meet ANZBA guidelines for referral to burns centre (https://www.vicburns.org.au/transfer-referal/anzba-referral-criteria/) • Likely to need procedural sedation • Wound likely to require surgical repair • Rashes with mucous membrane involvement	• Post Anaphylaxis - symptoms resolve post epipen • Burns multiple regions • Rashes without mucous membrane involvement	• Bites (non-venomous) • Skin infection • Abscess including post op complications • Allergic reaction • Isolated burn • Minor lacerations • Dressing changes / suture or staple removal • Localised minor wound infection • Cellulitis (systemically well)
ENT/ Eye/ Dental	• Airway threatened / obstruction • Voice changes with drooling and or stridor • Blunt force trauma / suspected facial trauma	• Epistaxis on blood thinners • Eye trauma/infection	• Foreign body • Suspected infection • Epistaxis / fractured nose • Dental pain/abscess (systemically well), dry socket, simple dental trauma
Other	• Requires Centrelink certificate • Suspected non-accidental injury (NAI) in a child • Transplant / oncology patients • Likely to require complex discharge planning or external hospital referral	• Threatened limb • IV AB	• Results / Medication script or advice • Blood/body fluid exposure • Morning after pill • HIV post-exposure prophylaxis

Acknowledgement

The Department of Health thanks Goulburn Valley Health, who have contributed their improvement strategies and data to show the impact of a fast track model of care in the Victorian context.

Case study: Fast track in an emergency department

Organisation	Royal Melbourne Hospital
Service type	Tertiary metropolitan health service
Problem	Previous discharge streaming model combined acute and complex presentations, limiting the flow of non-admitted patients.
Change idea	• Fast track area and model of care for low-complexity patients • Rapid stay unit beds to enable ongoing care for fast track patients
Changes	**Fast track** • Model of care: Nine treatment spaces and waiting room chairs open 24/7 for patients likely to discharge home • Emergency physician–led, with junior medical, nurse practitioners and advanced physiotherapists • Location: Proximal to waiting room and medical imaging **Rapid stay** • Eight rapid stay chairs, open 0900–0100 hours
Measures	**Outcome measure (see Chart 3):** Non-admitted ED length of stay • Significant improvement (shift) **Process measure (see Chart 4):** SSU and rapid stay flow* (*improvement coincides with change to SSU coding)
Key enablers	1. ED leadership readiness to change the model of care 2. Executive priority and financial support 3. Alignment of improvement with feedback from clinical staff 4. Opportunity to relocate as an ideal location became available 5. Regular updates about progress, issues and change ideas for the new model of care 6. Communicating and celebrating success with staff 7. Continuous improvement methodology, using rapid cycle PDSAs to optimise their new model of care

Contact: Vanessa Raines, TECC ED Stream Lead

Chart 3: Royal Melbourne Hospital – Emergency Department non-admitted length of stay (mins) – Individuals chart

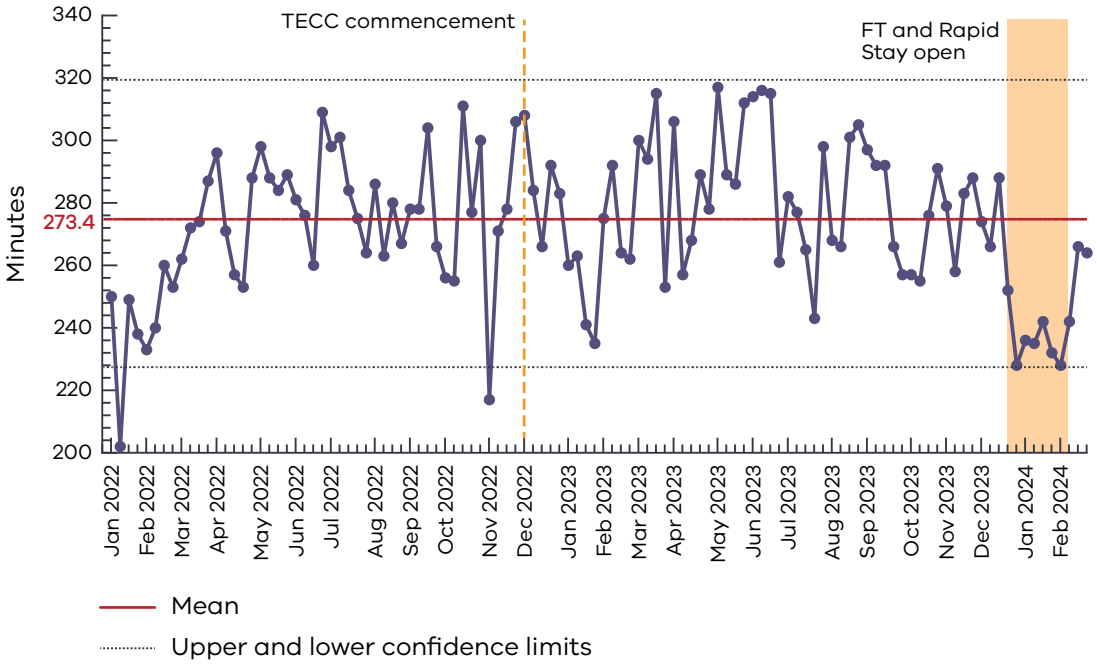
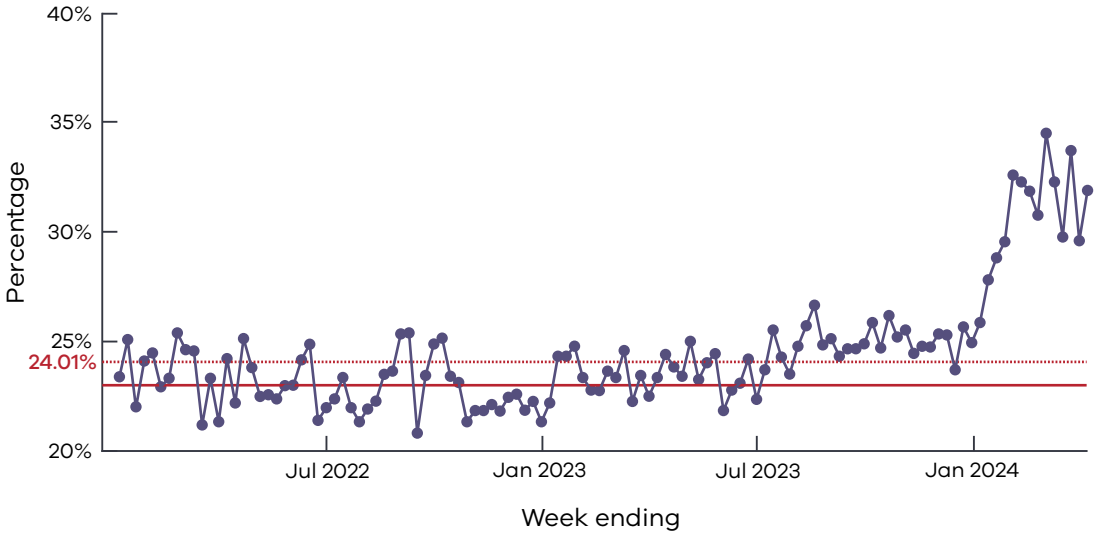


Chart 4: Royal Melbourne Hospital – Emergency Department presentations admitted to Emergency Department Short Stay Unit



Appendix 2.3: Fast track model of care

Fast Track

SCOPE (Area): EMERGENCY DEPARTMENT

SCOPE (Staff): Emergency Department medical staff

Purpose and scope

Fast Track (FT) is a triage stream for patients with largely single system problems, who do not require significant resources in terms of medical or nursing input.

The expectation is that ~85–90% of patients streamed to FT will be discharged to home either directly or after a period in the rapid stay unit.

As a discharge stream, patients entering FT need to be suitable for discharge once the presenting complain has been addressed. Any patient who:

- does not require monitoring
- has a single system disease
- does not require assistance with mobilization

can potentially be seen in the FT stream provided they don't meet one of the exclusion criteria (see Appendix 2.5).

Location

- The FT stream operates from 9 treatment spaces previously occupied by the BAU
- These consist of 4 paired spaces and a single room
  - FT 1&2 -consultant
  - FT 3&4 NP
  - FT 5&6 PP
  - FT 7&8 registrar
  - 9 single room.

Staffing / model of care

- The model of care is based on the early involvement of a senior decision-maker (i.e. ED consultant) to streamline patient care in order to:
  - improve the patient journey
  - reduce time to treatment and time to be seen
  - improve system responsiveness and safety
  - reduce the number of unnecessary tests

0800–0100 Consultant led model of care

Consultant assesses all patients triaged to the stream dividing them into

- **Immediate care <1 hr**
  For assessment and treatment by
  - Nurse practitioner 0800–2230
  - Primary physiotherapist 0900–1730
  - Registrar/consultant 1100–2030/2000-0130 (SSU consultant)

- **Subacute care >1<8 hrs**
  For planned assessment and management in the rapid stay area by the RS registrar
- **Subacute care >8 <24 hours**
  Admit to SS. Unlike other patients admitted to SS these patients will need to be handed over to the SS consultant as the FT consultant does not have the ability to leave FT to review them. Like the RS patients they will need to meet the current SS pathway inclusion and exclusion criteria
- **Inpatient care**
  Single system issue book a inpatient bed, inform EPIC and queue for cubicle. Complex care needs not suitable for FT, return to WQ inform triage coordinator

0100-0800 Registrar led model of care

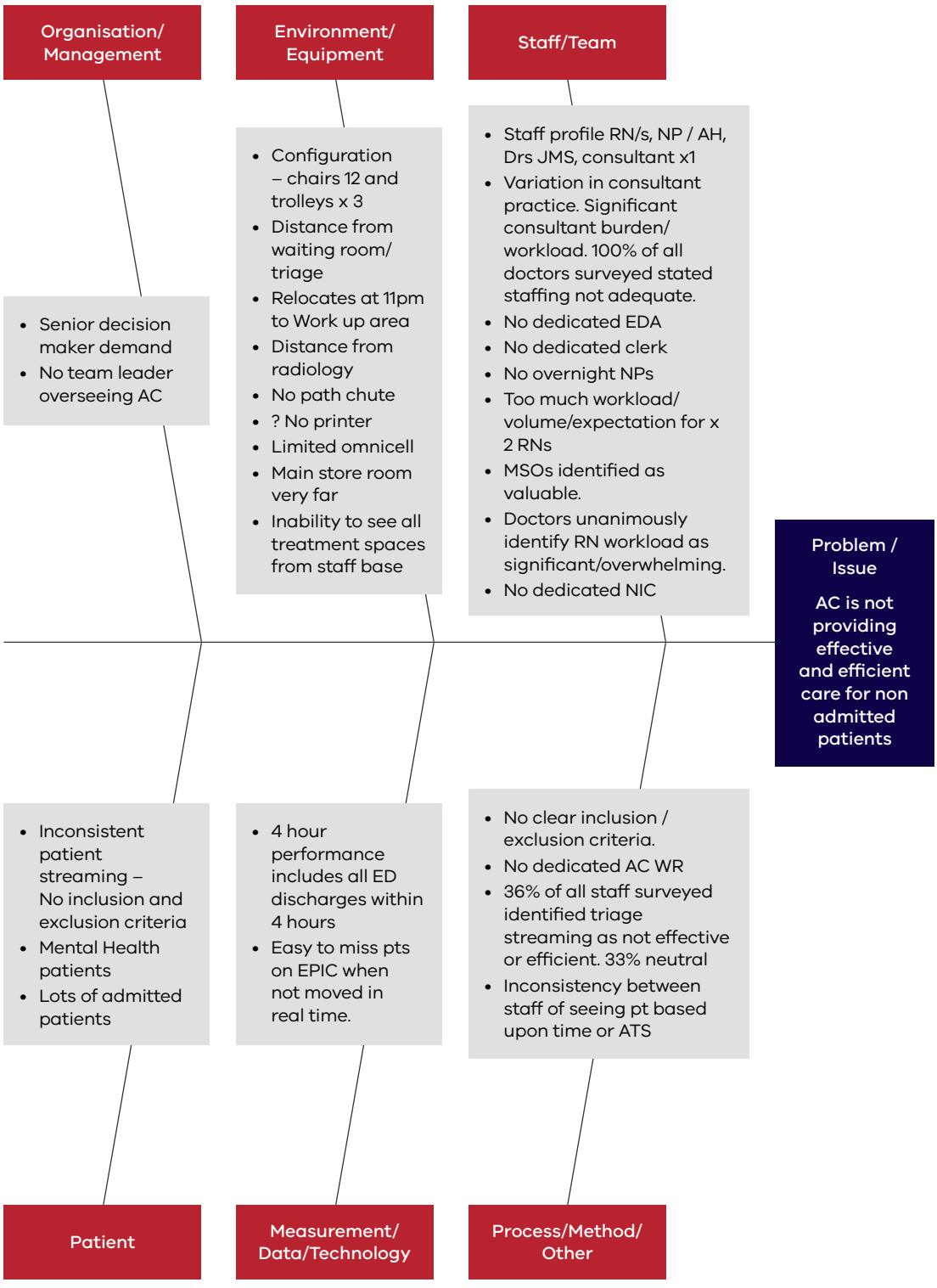
The registrar allocated for FT assesses all patients triaged to the stream for review by themselves or the resident.

The registrar allocated to short stay is expected to assist in either the FT or cubicle stream depending on demand.

Appendix 2.4: Understanding the problem

Organisation: Royal Melbourne Hospital

An Ishikawa (Fishbone) diagram developed to understand the problem.



Appendix 2.5: Fast track exclusion criteria

Organisation: Royal Melbourne Hospital

Airway:

- Any airway concerns

Respiratory:

- SOB with abnormal vitals / work of breathing

Cardiac:

- Moderate – high risk cardiac chest pain (any age)
- Requires cardiac monitoring

Neurological:

- Syncope/presyncope
- Suspected stroke/TIA
- Migraines with neurology
- GCS <15
- Seizure as presenting complaint
- Dizziness > 50 y.o. or abnormal neurology

Trauma:

- Trauma Alert/Call or high risk mechanism
- Suspected spinal injuries
- Head injury with concerning or ongoing neurological features.

Gastrointestinal:

- Abdominal pain >40 years old or within MET call criteria

Febrile Illness:

- Immunocompromised
- Suspected/confirmed sepsis
- Needs airborne isolation precautions
- Fever with rash

Mental health / behavioural / toxicology:

- Moderate - high risk mental health presentations
- Under the Mental Health Act
- Toxicology presentations
- Alcohol/drug Intoxication & GCS <15

General:

- Likely medical or surgical admission
- Allergic reactions requiring/had adrenaline
- Usually non-ambulant (and requiring assistance)
- Meeting MET Call criteria
- Back pain >50 years old or with bladder/ bowel dysfunction or unable to walk
- Significant co-morbidites
- Uncontrolled epistaxis
- Burns other than superficial
- Poses a safety risk to staff
- Complex social presentations
- Ongoing IV analgesia requirements

Appendix 2.6: Rapid stay model of care

Organisation: Royal Melbourne Hospital

Rapid Stay

Rapid Stay has been instituted as part of our 2023–24 Timely Emergency Care Collaborative (TECC) innovations to drive improved flow in the cohort of patients who are eventually discharged home from ED.

What is Rapid Stay?

Rapid Stay (RS) is an 8-bed extension of the current short stay unit. Its purpose is to improve flow through the Fast track (FT) (previously known as ambulatory care) stream by diverting patients with long time low acuity demands away from the rest of the patients. Unlike traditional short stay patients, these are patients who have low to moderate care needs and do not require significant allied health input and are expected to have LOS <8 hrs, rather than 24 hrs

Location/staffing

Hours of operation: 0900-0130, 7 days a week

Physical space

- 8 treatment spaces in the area off the corridor from the ED waiting room to the main foyer of the hospital (which has been Ambulatory Care in 2021-2023, the Covid Screening Clinic in 2020-2021, and was Transit Lounge previously.
- Spaces are numbered as an extension of the current SSU (of which RS is an annex)

Staffing:

- 2 nurses (0900 – 0130)
- ED registrar 0800 – 2330
- SSU registrar covers the patients remaining in this space from 2330 - 0100
- ED HMO/intern
- SSU HMO/intern covers the patients remaining in this space from 2330 – 0100
- FT consultant has medical oversight of all patients in RS
- SSU FC has nursing oversight of all patients

Model of care

Patients admitted to Rapid Stay may come from several sources:

- Referral from Fast Track
- Direct from Triage
- Referral from the Cubicle Stream

Patient Selection

Inclusion criteria

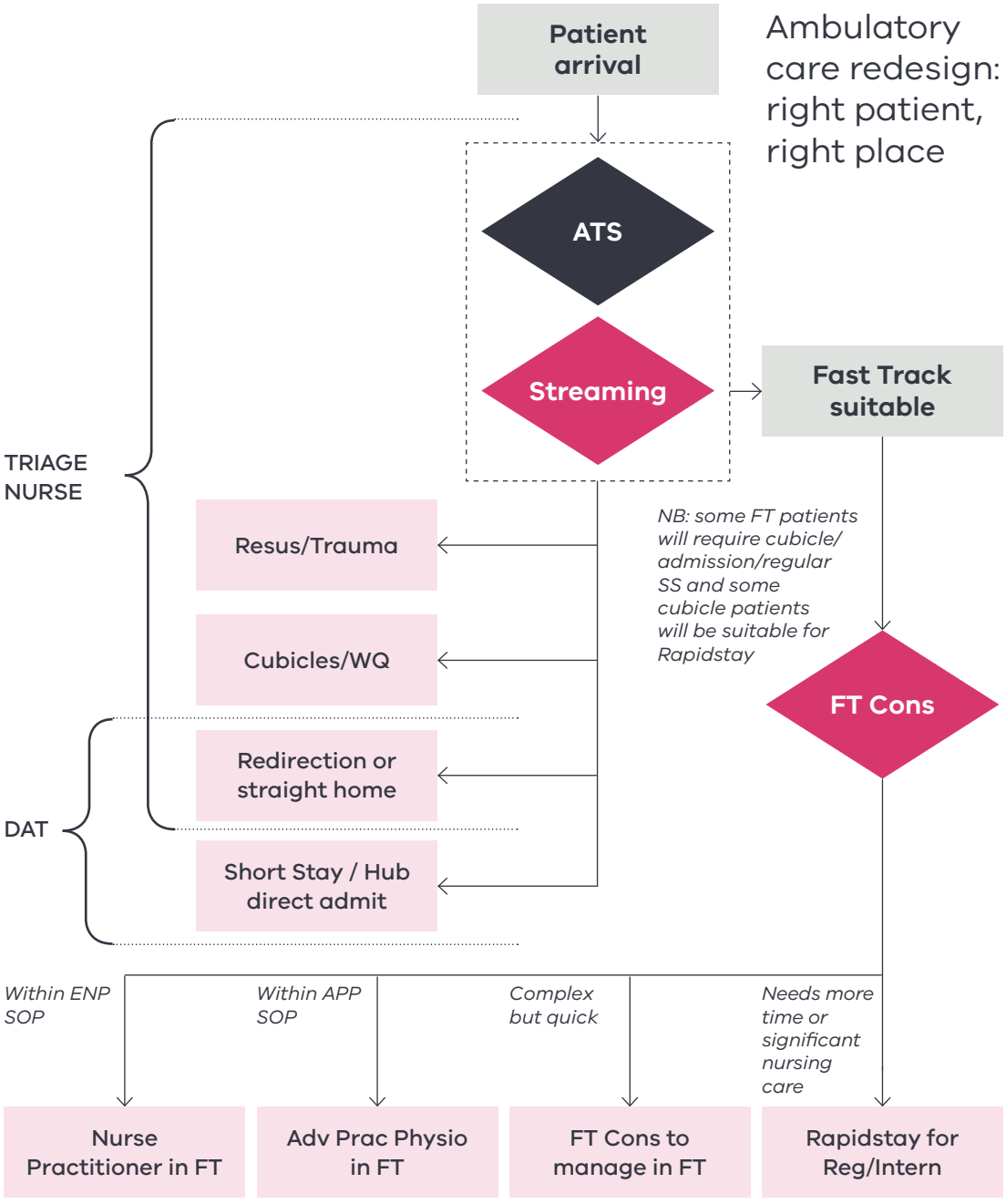
- Normal vital signs
- Expected LOS 1-8 hours
- Defined condition, or simple clinical question to be answered
- Expected to go home
- Have a completed clinical pathway or management plan

Exclusion Criteria

- Require cardiac monitoring
- Require infection isolation (no facility in current location)
- Require significant nursing resource
- Non-ambulant and requiring assistance
- Needs allied health assistance to enable discharge

Appendix 2.7: Streaming algorithm

Organisation: Royal Melbourne Hospital



Fast Track

- 9 Bed space in the old BAU, 1 nurse 24/7, consultant AM/PM, Adv Prac Physio AM, NP AM/PM, Registrar/HMO overnight
- Rapid consultation, simple procedures and discharge home. Complex patients excluded, anything time consuming should be moved to Rapid Stay

Rapid Stay

- 8 Bed Streamlined short stay space in the "old transit lounge"/"current ambulatory care", 2 nurses 0900-0130, Registrar and intern AM/PM, closed overnight.
- High turnover, rapid access short stay unit for self-caring patients requiring a brief assessment, awaiting results, or needing a procedure completed.

Acknowledgement

The Department of Health thanks The Royal Melbourne Hospital, who have contributed their improvement strategies and data to show the impact of a fast track model of care in the Victorian context.

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