5. Improving patient flow: Optimising ward rounding

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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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'.

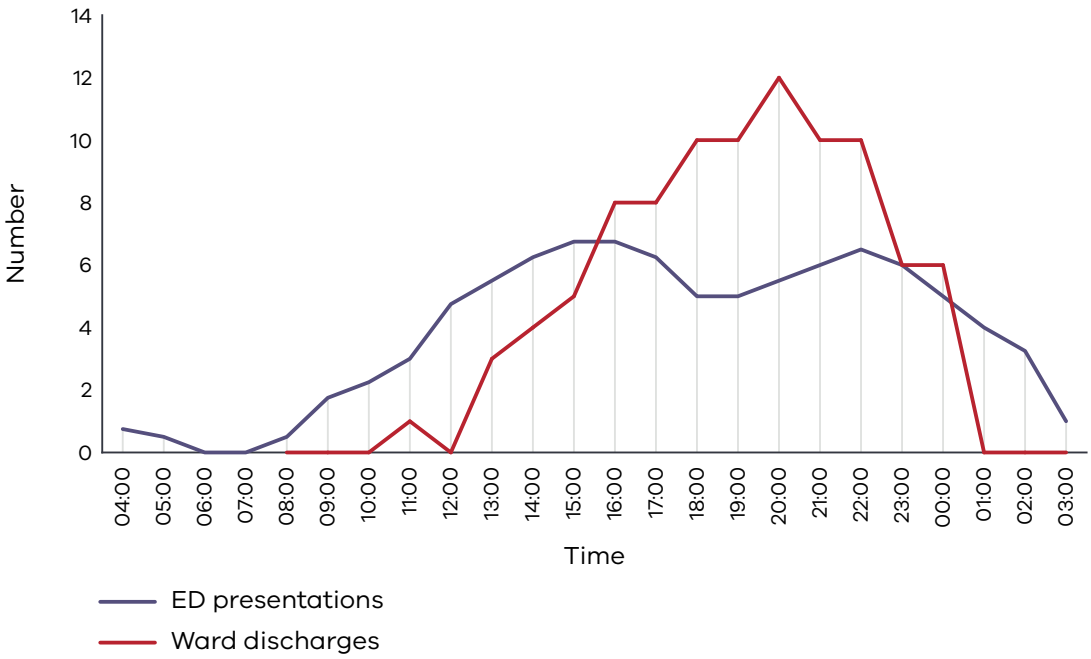
This guide is one of a series outlining each of these high-impact change ideas. All guides are available from Emergency care <https://www.health.vic.gov.au/patient-care/emergency-care> or by contacting TEC2@health.vic.gov.au. A summary of the overall change theory from the TECC can also be found on the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

Presentations to emergency departments (EDs) typically follow a predictable pattern. Decisions to admit patients then follow, ideally within 4 hours of a patient presenting. However, discharges of patients from inpatient wards tend to be low in the morning and increase across the day peaking in the late afternoon (Figure 5.1).

Figure 5.1: Typical pattern of emergency department presentations versus ward discharges



Discharges don't match the emergency demand. Even if the number of discharges is the same as the number of admissions, the mismatch between when beds become available. This mismatch leads to pressure on the ED. The response is either to then leave the pressure to grow in the ED (and on the hospital ramp for patients arriving by ambulance) or to mitigate the problem by admitting patients to wherever there is an available bed. This results in patients being transferred to the wrong specialty or care group or ward, leading to:

- clinical teams doing 'safari' ward rounds (where rounding teams go all over hospital)
- patients being seen less frequently
- day-to-day care being provided by staff trained in different specialties.

The consequences of this affect the entire hospital (and beyond), leading to:

- longer inpatient stays
- poor care and outcomes
- staff feeling 'unsafe' (operating outside their area of expertise and knowledge)
- staff frustration and low morale.

Addressing the mismatch between admission demand and inpatient discharges is a core change concept for improving hospital-wide patient flow. Key to this is shifting the time of discharge to earlier in the day.

Overview of the change idea

Increasing discharges earlier in the day relies on a series of multidisciplinary team activities to streamline discharge decision making and communication. These key activities, used collectively, improve patient flow at both the ward and system levels. Recommended activities include:

- implementing afternoon discharge planning huddles
- involving patients and carers in planning and preparing for discharge
- optimising daily ward rounds to prioritise patients for discharge
- providing alternatives to a ward bed for patients who are ready for discharge and are waiting for transport (for example, discharge lounges).

This chapter focuses on the third change idea – *Optimising ward rounds*.

For a comprehensive understanding of all ward rounding processes, team roles, patient engagement practices and more, refer to the joint publication: Royal College of Physicians & Royal College of Nursing (2021). *Modern ward rounds: Good practice for multidisciplinary inpatient review*.

Why focus on ward rounds?

Ward rounds are typically the most common process by which patients are identified as being ready for discharge. How ward rounds are planned and conducted therefore has a significant impact on how early in the day patients are identified for discharge, and the progression of tasks to complete the discharge process.

Ward rounds that support hospital-wide flow

Two key concepts underpin ward rounds that support improved hospital flow:

- prioritising reviews of patients who are expected to be ready for discharge
- progressing discharge paperwork and other tasks.

Prioritising patients for discharge

The SORT acronym is a helpful mnemonic developed by the Royal College of Physicians (2021) for prioritising the review and discharge of patients. It focuses on at-risk patients first, then on patients expected to be discharged. In this way it balances the safety of patients on the ward as well as those who are waiting for a hospital bed. The acronym prioritises the review of patients as follows:

Sick: The most unwell patients who, owing to the acuity or severity of their condition, should be seen first to prevent their deterioration.

Out today: Confirmed discharges (when medical review remains necessary) and all patients who could be potentially discharged today.

Rest: The remaining patients of the rounding unit or team.

To come in: Patients awaiting admission to the ward in the emergency department.

A number of other acronyms are in use, and in some hospitals it may make sense to review patients in the ED ('To come in') ahead of the 'Rest'. This can further improve patient flow. The decision on how to prioritise these last 2 groups will depend on the local context (for example, the size of the hospital and how teams are organised).

Progressing discharge tasks

Prioritising patients for discharge alone will not necessarily improve patient flow. Depending on the make-up and capacity of your rounding team, allocating a role that 'peels off' to progress discharge tasks is one approach to support this.

Creating structured ward rounds

Ward round approaches can vary significantly between consultants. To ensure ward rounds are completed within a timeframe to support flow and to have consistency across teams the following guidance is recommended.

Modern ward rounds – best practice (RCP, 2021)

- Begin by assigning roles and setting expectations of learning.
- Confirm diagnoses and problems.
- Address patients' questions and concerns.
- Review patients' progress against plans.
- Confirm or revise escalation plans.
- Check safety measures, including medication review.
- Summarise a revised plan, goals and actions with the team.
- Progress actions during ward round when possible.
- Teach and learn.
- Revise plans with patients.
- Communicate and document reviews and plans, assigning key actions.

How to test this change idea

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

Understand your current state

It can be helpful to understand your current discharge performance and ward rounding processes. Some suggested ways to do this are as follows:

1. Data analysis: review data from the past few weeks to determine the time of discharges, the percentage that occur before 10:00 am and 12:00 pm, as well as the percentage of predicted versus actual discharges. Analysing by ward or specialty can provide insight into different processes/models that are used in different parts of the hospital.
2. Observe current processes that are part of discharging a patient – for example, morning handovers, ward rounds, huddles, multidisciplinary meetings and discharge planning meetings.
3. Complete a self-assessment of your current rounding practices by completing the 'Modern ward rounds self-assessment' (refer to chapter references and further reading).
4. Meet with a group of registrars to ask about their experience of ward rounds.
5. Assess practices in planning for discharges by evaluating key indicators such as whether patients consistently have an estimated date of discharge (EDD), clinical criteria for discharge (CCD) and if there is a countdown to discharge (CTD).
6. Speak with patients and carers to find out how much they have been involved in the planning and preparation for discharge.

Decide where to begin testing a new ward round approach

Start with a single consultant and rounding team so the ward round approach can be tested without needing to engage a large number of senior doctors. This allows one team to test the approach, gather data, make adaptations and improve the approach before spreading it to other teams.

It is important to start with a consultant who is engaged and motivated to test this change. They will be the ones to lead the design, planning and testing of the change and so should believe in the purpose of changing the ward round approach. Importantly, this person will also be a key change champion for engaging other senior doctors when it is time to spread the idea to new teams and specialty areas.

Engage others in planning

Meet with the staff who are key to the success of a new ward rounding practice. Provide the rationale for how a change to ward rounds will improve patient flow. Changing ward rounding practices can feel 'inconvenient' because teams will have to see patients out of their numerical bed order (the round won't occur sequentially from bed 1 to the final bed on the ward). So, it is important to convey the benefits for both patients *and* staff in taking this approach.

For patients – convey how discharging one patient earlier can help other patients who are waiting for a bed can be helpful.

For staff – improving patient flow through the hospital will reduce patients being placed on the 'wrong' ward. Over time, and in conjunction with other changes, this then reduces the need for specialty teams to round on patients in different parts of the hospital. It also means that ward-based staff are caring for patients who are within their designated specialty area.

The team testing the change should then agree on the approach to running the ward round including:

- meetings before the ward round to plan the review of patients (sometimes known as a 'board' round)
- ward round roles and tasks, including who will progress discharge tasks during the round.

Plan

Decide when to run your first ward round test

Once engagement is complete, communicate the day that the new ward round approach will be tested.

Each round is its own 'test of change' and should be reviewed daily for opportunities to refine and improve how it is working. It can be helpful to think of each day as a new PDSA cycle. Then a more detailed review of the approach can be completed when that team has enough data to understand the impact of the round on discharging patients earlier in the day.

Plan for data collection

Establish a plan for collecting data before testing the new ward rounding approach. 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 important to also plan to regularly get feedback from staff involved in the rounds. Simply take a few minutes at the end of the round to reflect on how it went, and again at the start of the next day to check how the progression of discharges had gone the day before. This feedback is key to quickly adapting the ward rounding model and discharge tasks.

Communicate to others

Ensure other staff who may be impacted by the change are aware of the test of change. This includes staff who interact with the rounding team on a daily basis who may not be part of the round.

Do

Start testing

Run the round according to the plan.

Close the round with a check-in for any observations or feedback about how it went and opportunities for improvement.

Collect data and feedback

During the huddle capture data about predicted discharges, who attended the huddle (versus expected) and how long the huddle took to complete.

Capture feedback provided about the huddle and areas for improvement.

Ensure other data related to the test of change is being captured as required (for example, discharge time of day, actions completed versus planned).

Study

For each round, identify any changes that can be made immediately to improve the ward round for the next day.

At the beginning of the next day, review how discharges went the day before. This can be done as a rapid review by:

- checking what time patients were discharged
- identifying the reasons for any delays
- identifying opportunities to improve how discharge tasks are progressed and patients and carers are involved in the discharge process
- capturing any system barriers that prevented a patient discharge.

At the end of the full testing cycle (for example, end of the week), 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 discharge planning for the next day.

Act

Decide whether to continue testing and if any adjustments should be made to the ward rounding model. Begin the next PDSA cycle accordingly.

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

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

Once the ward round approach is felt to be working well with one team, identify an opportunity to spread it to another team and consultant. Communicate success and learning to build support for the new approach and to engage others for spreading this idea to other areas.

How to measure if the change is leading to improvement

The following measures could help you understand if the afternoon discharge planning huddle is improving discharges earlier in the day. Many of these measures may need collecting manually for a short period while refining the huddle model. Outcome measure 1 and balancing measure 1 should be monitored continuously.

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	Percentage of discharges that occur before 12:00 pm	Percentage of total daily discharges that occurred between 12:00 am and 10:00 am	The aim of the ward round approach is to increase the proportion of discharges that occur earlier in the day. This measure should be monitored continuously.
Outcome measure 2	Time of patient discharge	The time a patient was discharged from the inpatient ward	Tracking the time of discharge is a more sensitive measure to understand if the ward rounding approach is leading to patients being discharged earlier.
Process measure 1	Count of ward rounds that were completed as planned	Count of ward rounds that were completed to the planned order using a prioritised discharge approach	A tally of ward rounds completed will track if the test of change is being carried out as planned. It should be partnered with qualitative insights about why there were any discrepancies (for example, interruptions that took the team 'off task') so these can be addressed for future rounds.
Process measure 2	Time taken from confirmed decision to discharge to discharge tasks being started	As per metric	Identify any significant delays between the decision to discharge and the progression of discharge tasks.
Balance measure 1	Readmissions	The percentage of discharged patients who are readmitted to the discharging service within 28 days of discharge	Monitor to ensure there is no negative impact on patient care.
Balance measure 2	Inpatient length of stay	Length of stay from time of admission to discharge	Monitor for the unintended consequence of patients being 'held' to the next day to increase morning discharges. This should be monitored continuously.

Case study: Mildura Base Public Hospital

Organisation	Mildura Base Public Hospital
Service type	Sub-regional hospital
Problem	Ward rounding did not consistently prioritise reviewing discharges early in the round, leading to delays in discharge time and increased length of stay.
Change idea	Complete ward rounds in a structured way (Sick, Out today, Rest, To come in) to prioritise early discharges.
Changes	• Ward rounding order was decided ahead of the round beginning to identify and allocate patients to the categories of SORT (Sick, Out today, Rest and To come in) at a brief huddle attended by the medical team. • Following the huddle, ward rounding was conducted according to the predetermined order. • Where possible, the resident left the ward round to complete the discharge tasks following the review of the patients for discharge and returned to the ward round thereafter.
Measures	**Outcome measure (see Chart 1):** Number of discharges by 10:00 am • 10:00 am discharges increased from an average of 17 to 27 (59% increase) **Process measure (see Chart 2):** Number of discharges by hour of the day • Peak discharge time moved forward by 2 hours
Key enablers	• Executive sponsor and medical lead support • Medical consultant willing to test and champion the change • Inpatient care coordinators to support the medical team daily with SORT rounding • Data analyst to provide dashboards to easily and rapidly measure the success of the change idea • Project team to lead and support all key enablers and share data outcomes for further improvement and motivation

Contact: Debbie Cole, NUM Access and Flow, dcole@mbph.org.au

Acknowledgement

The Department of Health thanks Mildura Base Public Hospital, who have contributed their improvement strategies and data to show the impact of SORT ward rounding in the Victorian context.

Chart 1: Count of discharges by 10am – Individuals chart

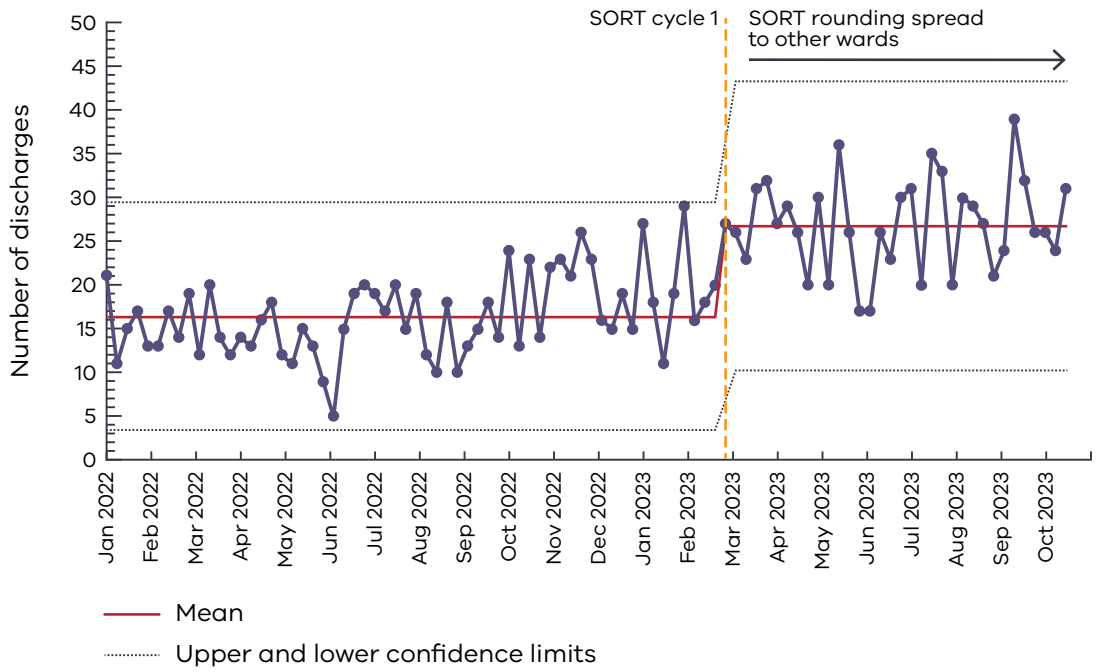
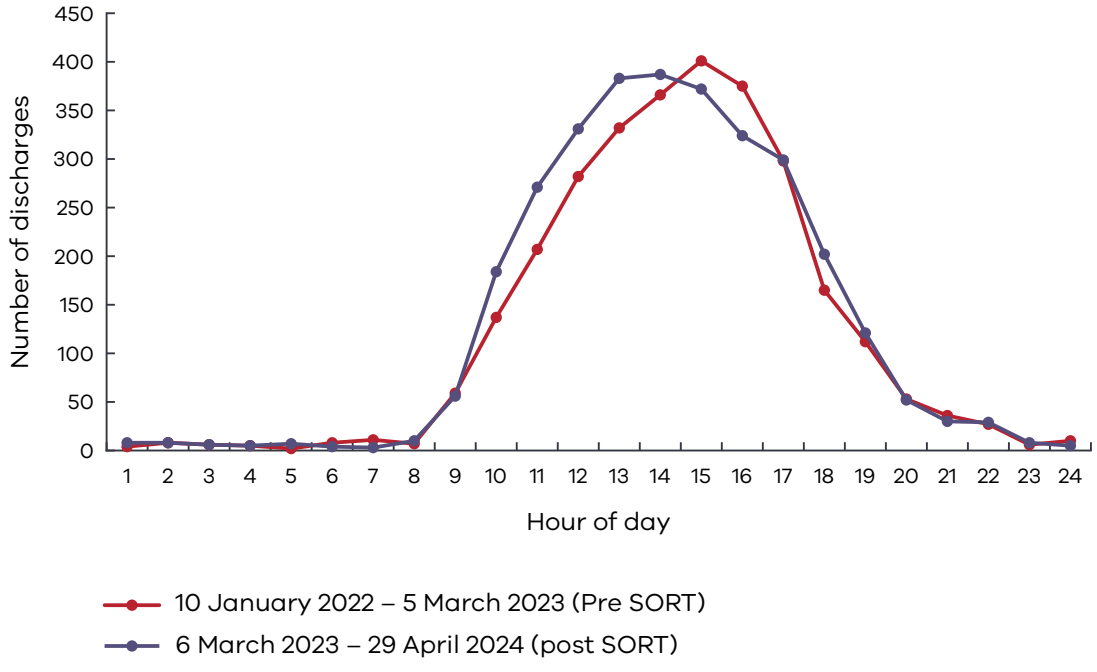


Chart 2: Discharge by hour of the day



Chapter references and further reading

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