

# **Expanding Day Surgery Report**

OFFICIAL

To receive this publication in an accessible format phone 03 9096 1384, using the National Relay Service 13 36 77 if required, or <u>email Safer Care Victoria</u> <info@safercare.vic.gov.au>

Authorised and published by the Victorian Government, 1 Treasury Place, Melbourne.

© State of Victoria, Australia, Safer Care Victoria, March 2023

ISBN/ISSN 978-1-76131-574-9

Available at the Safer Care Victoria website <a href="https://www.safercare.vic.gov.au">https://www.safercare.vic.gov.au</a>





### Contents

Context	3
Report	3
What are the benefits and risks to patients in expanding same-day models of surgical care?	3
What same-day models of surgical care already exist in the Victorian health system?	5
Which surgical procedures, currently delivered as multi-stay, are suitable to be delivered as	
same-day models?	8
Which surgical procedures should be majority same-day but are often multi-stay?	10
Which surgical procedures should be prioritised as same-day models, in terms of patient	
outcomes and improving system efficiencies?	10
From a clinical and system perspective, what are the current challenges in expanding	
same-day models of surgical care?	11
What are the key implementation risks in expanding same-day models of surgical care, and	
how can they be mitigated?	13
What new measures, if any, are required from VAHI to effectively measure day surgery rates going forward?	15
Conclusion	16
References	18



### Context

On 3 April 2022, the Victorian Government announced a \$1.5 billion Surgery Recovery and Reform Plan (The Plan) to boost surgical activity across the state.

A key component of the Strategy is the need to systemically reform the way that the health system delivers surgical services in Victoria, on an enduring basis.

Within this funding, Safer Care Victoria (SCV) has been resourced to assist the Surgery Recovery and Reform Branch in the Department of Health to progress its reform agenda. SCV has established the Perioperative Learning Health Network (PLHN) and Advisory Group, being led by Professor David Watters to assist with this work. The Advisory Group is a diverse and multidisciplinary committee, including consumers, academics, researchers, and clinicians. This group act in the best interests of consumers, health services workforce and the wider Victorian community and provide a mechanism to more broad consultation with the sector.

The first request for the PLHN, is to provide clinical advice to guide the expansion of 'same-day' models of surgical care. The Advisory Group have provided expert advice addressing the 8 key areas requested and outlined these in the following report.

### Report

#### 1. What are the benefits and risks to patients in expanding same-day models of surgical care?

#### Benefits:

The benefits of same-day models of surgical care are clear for well selected patients, and include:

- Supporting **patient engagement in their care decisions** and empower them in their own recovery through facilitating return to their familiar environment for **context-specific recovery**.
- Reducing risks of hospital acquired complications.
- Promoting early mobilisation and faster return to baseline performance in activities of daily living.

Same-day models of surgical care also optimise use of health system resources, decrease hospital length of stay (LOS), reduce surgical ward round duration, improve patient flow (service wide), minimise hospital-initiated postponements (HIPs) secondary to bed blockages, increase theatre utilisation and reduce surgical waitlists.

Same-day models of care, even if only applicable to a small proportion of patients undergoing a particular procedure, may have additional indirect benefits of shortening LOS for other current multi-day stay patients undergoing the same procedure (e.g. total knee arthroplasty).



It is also likely that successful implementation of same-day models of surgery may positively impact upon staff workloads, staff satisfaction and morale, leading to greater compassion and quality of care provision, improved outcomes and enhanced experience of patients and carers.

#### **Risks:**

The potential risks that same-day surgical care may pose to patients can be mitigated through careful consideration of patient suitability for day surgery pathway, through multidisciplinary implementation of focused pathways and protocols including provision of clear and consistent expectations and education to the patient and carer throughout, and re-assessment of suitability for pathway and/or escalation of care if required. Potential risks include:

- **Patient/Carer anxiety:** In-depth discussion to address patient and carer concerns by clearly outlining the safety and health-related wellbeing benefits of same-day discharge and ensuring patient and carer preparedness.
- **Clinician resistance:** Clinicians may experience feelings of fear and uncertainty in relation to practice change, concern for patient safety if not reviewed by the surgical team prior to discharge (criteria led discharge), and a perceived loss of control. Focussed engagement with clinicians to reduce concerns around change in practice should be undertaken, including education on the safety measures in place and benefits to patients, staff and services. This will increase staff confidence and improve their buy-in to the practice change.
- Perception that same day models of care offer a lesser standard of care than overnight or multi-day stay care: There is a need to address potential public misconception that same-day discharges benefit the health service only. A focus on patient safety, consumer empowerment and shared decision-making, enhanced experience, and improved recovery will likely greatly increase the confidence of patients and carers in the process. For procedures deemed suitable, *day surgery should be perceived as the norm and overnight stays the exception that needs to be justified.*
- Patient safety and well-being (if patients are not appropriately selected): To ensure sameday surgery is provided safely, suitable patient selection and early involvement of a planned designated carer is essential. A patient's suitability for same-day discharge will likely require reassessment prior to the procedure date to assess if the patient is still suitable to remain on the same-day model of surgical care pathway (a patient's condition may change whilst on the waiting list for surgery). Further assessment is also warranted on the day of surgery to re-assess suitability of same-day discharge, especially considering any interoperative changes to condition that may change the patient's expected postoperative recovery.
- Inappropriate selection of patients: Patient selection for same-day surgery requires a comprehensive baseline assessment of their perioperative risk and home circumstances. Patients selected for day surgery should not have significant comorbidities, should have



adequate cognitive function and health literacy to appropriately monitor their recovery and escalate issues as required, be ASA 1 & 2 (with some ASA 3 stable patients) and have a BMI < 35 unless the surgery is very minor and superficial. The planned procedure's known complications and type of anaesthesia to be administered, and the healthcare postoperative monitoring it requires should be considered. Considerations for safe discharge include transport, carer availability and capability, and discharge location and environment. The patient will need to stay within 30min of their nearest Health Service in an environment considered safe and appropriate for their postoperative recovery, have a designated carer capable of monitoring recovery and providing care needs, and have access to appropriate transport from the hospital. Medihotels are an option for those who do not have appropriate accommodation options close to a health service <u>Medihotels</u> (health.vic.gov.au) <a href="https://www.health.vic.gov.au/patient-care/medihotels>">https://www.health.vic.gov.au/patient-care/medihotels></a>

Failure to respond to complications and deterioration in a timely manner: To ensure safety when expanding same-day models of surgical care, an escalation process will be understood and followed in the event of complications and/or deterioration. Post procedure monitoring will be utilised to help identify early patient deterioration. In the instance that a postoperative patient deviates from the expected recovery trajectory, the patient should be reviewed to determine if they are suitable to remain on the same-day model of surgical care pathway. A facility performing day surgery should be able to initially manage complications and stabilise the patient in the event of deterioration, with a clear, demonstrable process in place for those who may need unplanned overnight admission, escalation of monitoring and care, or transfer to another health facility.

The <u>ANZCA P15 guideline</u> <https://www.anzca.edu.au/getattachment/021e4205-af5a-415d-815d-b16be1fe8b62/PG15(POM)-Guideline-for-the-perioperative-care-of-patients-selected-forday-stay-procedures> provides detailed information including considerations for patient selection, procedure, recovery and discharge arrangements. This guideline remains applicable to all decisions made about expanding same-day models of surgical care.

The risks and their mitigation are further tabulated in this report in the answer section 7.

Specialty	Procedure
GI/General Surgery	Endoscopy (gastroscopy and colonoscopy)
Urology	Cystoscopy
	Transurethral bladder tumour and other procedures
	Transurethral laser prostatectomy
	Holmium laser enucleation of the prostate (HoLEP) – laser
	prostatectomy
Paediatrics	Paediatric procedures- Grommets, OSA, tonsillectomy,
	adenoidectomy
Ophthalmology	The majority of ophthalmological procedures done as day surgery
Gynaecology	Surgical termination of pregnancy
	Hysteroscopy

#### 2. What same-day models of surgical care already exist in the Victorian health system?



	Uterine endometrial procedures
	Laparoscopic gynaecological procedures including laparoscopic tubal
	ligations, hysterectomy and tubo-ovarian procedures
General Surgery	Unilateral inguinal hernia surgery
	Laparoscopic cholecystectomy
	Haemorrhoidectomy and fistula procedures
Orthopaedics	Knee procedures including arthroscopy
	Knee arthroplasty
	Shoulder surgery including shoulder arthroscope and reconstruction
Hand	Most carpal tunnel release procedures
	Most hand and wrist procedures
Dermatology	Skin and subcutaneous procedures/excisions
Breast	Excisional breast biopsy
ENT	Nasal procedures
	Sinus procedures
	Grommets
	Middle ear/mastoid procedures
Neuro	Peripheral nerve surgery
	Muscle, nerve and temporal artery biopsies
	Simple lumbar decompression and microdiscectomies
	Simple cervical decompression
	Foraminotomies
	Anterior cervical discectomy and fusions (23hr stay)
	Skull tumours - Wholly intraosseous lesions (but not intracranial
	_tumours)
	Haemorrhoidectomy procedures
Vascular	Fistula procedures

### Additional considerations for increasing same-day models of surgical care and/or alternative options for care include:

#### • Operational considerations

- Extended day surgery operational times to facilitate afternoon day cases to be performed, and to provide adequate time for post-surgery and anaesthesia recovery
- $\circ$   $\;$  Expanding the use of the Medi hotel model to reduce LOS in acute health services  $\;$
- Expansion of specialist HITH models may be required (covered later in report)
- Provide and promote community-based rehabilitation and follow up of same-day surgical patients
- Some same-day surgery models of care may involve visiting specialists operating on well selected patients in smaller hospitals with capacity and closer to the patient's home

#### • Upskilling workforce

 Same-day models require a team of multidisciplinary clinicians with the skills, capabilities and understanding of patient requirements and ability to identify and



escalate concerns appropriately.

#### • Alternative pathways

 Non-surgical pathways: gynaecology pelvic pain models of care that include physiotherapy and pain clinics for same-day assessment and treatment (including nonsurgical treatment)

#### • Patient supports

- Expanding the use of Patient Support Units in the patient journey, providing timely case management support and referral to appropriate discharge pathways.
- Potential support to aid patients and their carers when undergoing surgery in a health service distant to their residence could include subsidised travel, accommodation, and parking.
- Supporting patients with early connections to Aboriginal Health and Disability Liaison programs.

#### • Digital Health

- Telehealth system for urgent review of post discharge surgical patients (similar to the virtual ED model) – potential for a state-wide, or a health service partnership virtual care support model for day surgery care and follow up.
- Nurse follow-up phone calls for same day surgical patients (additional information below)
- App-based recovery programs (some testing in Victoria currently occurring with cardiac patients). This model would require further investigation.

#### • Enhanced Recovery After Surgery (ERAS)

- The New South Wales Agency for Clinical Innovation has recently published 'Enhanced recovery after surgery: key principles for colorectal surgery' which outlines steps and processes to provide safe and effective early discharge of patients following colorectal surgery-<a href="mailto:Enhancedrecoveryafter surgery:keyprinciples for implementation">Enhanced recovery after surgery: key principles for implementation</a>

   (nsw.gov.au) <a href="mailto:</a>
   https://aci.health.nsw.gov.au/\_\_\_data/assets/pdf\_file/0004/836104/ACI-ERAS-Key-Principles-for-implementation-of-models.pdf>
- These key ERAS principles have been designed to promote early recovery after surgical procedures by maintaining preoperative organ function and reducing the profound stress response following surgery. Key elements of colorectal ERAS models include preoperative patient education, appropriate multi-modal analgesia, avoidance of nasogastric tube, early feeding, and early mobilisation.

#### • Primary Care

- Expansion of Health Pathways aligning with same-day model of care to guide referring primary care clinicians
- Health Pathways enabling appropriate referral of suitable patients (including rationale for exclusion) for day surgery
- Same-day clinical handover to Primary Care Provider to enable appropriate advice/response if sought by patient post-discharge.



### 3. Which surgical procedures, currently delivered as multi-stay, are suitable to be delivered as same-day models?

#### Inguinal and umbilical hernia repair

Currently only 26% of unilateral inguinal hernia repairs are performed as same-day procedures despite evidence suggesting at least 50% could be appropriately achieved across the sector<sup>1</sup>.

Latrobe Regional Hospital, Colac Area Health and Castlemaine Health have successful and safe high rates of same-day inguinal hernia repairs. There is an opportunity for their models to be expanded across other health services.

#### Laparoscopic cholecystectomy

Laparoscopic cholecystectomy procedures can be safely delivered as same-day procedures on select patients including those with an ASA 1 & 2 and perhaps some carefully selected ASA 3 stable patients.

A randomised controlled trial regarding same-day cholecystectomy was conducted in South Australia in 1999 and has since been implemented throughout the state<sup>2</sup>. There are already Victorian health services promoting same-day cholecystectomy for suitable cases including Warrnambool Base Hospital, St Vincent's Health Australia, Northern Health and Monash Health. University Hospital Geelong trialled 9 cases prior to the COVID-19 pandemic and has since established an agreed protocol. Monash Health plans to release a revised protocol based on the UK Day Surgery protocol in August 2022.

The Victorian Directors of Surgery are supportive of performing more day stay laparoscopic cholecystectomies in Victorian Public hospitals.

#### Acute cholecystitis

Some patients with acute cholecystitis (without acute pancreatitis) who have had a diagnostic ultrasound and appropriate pain relief could be discharged home from the emergency department and brought back the next day for their acute cholecystectomy procedure. This will have direct effects on service bed capacity by saving at least one night in hospital.

#### Surgery for pelvic pain

Surgery +/- laparoscopy for pelvic pain has been demonstrated to provide low value care with short lasting benefits (30% of patients report worse pain scores at 2 years post-surgery). The barriers to challenging surgical intervention is that vested interest in operating (surgeons once consulted may be inclined to operate) is supported by "accepted practice" and ongoing medical teaching regarding this. Other factors that drive continuation of low value procedures include patient expectations of the value of surgery and/or the cost of allied health alternative treatments to the patient.

<sup>&</sup>lt;sup>1</sup> Scarfe, A., Duncan, J., Ma, N., Cameron, A., Rankin, D., Karatassas, A., ... & Maddern, G. (2018). Day case hernia repair: weak evidence or practice gap?. *ANZ journal of surgery*, *88*(6), 547-553.

<sup>&</sup>lt;sup>2</sup> Hollington, P., Toogood, G. J., & Padbury, R. T. A. (1999). A prospective randomized trial of day-stay only versus overnight-stay laparoscopic cholecystectomy. *Australian and New Zealand Journal of Surgery*, *69*(12), 841-843.



In order to challenge accepted and routine practice, a larger focus on alternate pathways and raising awareness regarding low value care and alternative therapies e.g. pelvic floor physiotherapy, and potentially expanded use of the Intra Uterine Device (Mirena) is warranted.

#### Heavy menstrual bleeding

The Atlas of Healthcare Variation in 2017 noted hysterectomy and endometrial ablation are commonly used to treat heavy menstrual bleeding. Rates of hysterectomies in Australia have raised concerns that it may be overused to treat benign conditions. Pharmaceutical treatment is recommended as the first-line treatment for heavy menstrual bleeding, and endometrial ablation as the first surgical option, if appropriate, there are no flags for malignancy, and the woman prefers it. Improving access to some alternative treatments may help some women avoid the need for major surgery.

#### Same-day knee arthroplasty

Current trends demonstrate a reduction in readmissions or return visits for review for some common surgical procedures including knee and hip arthroplasty. The LOS for this patient cohort continues to diminish indicating that overnight and two-day stays for these procedures will be effective and safe for well selected patients.

While Victorian experience suggests that same-day arthroplasty protocols may only result in approximately 10% of patients being suitable for day surgery, flow on benefits include more available inpatient beds as a result of admitted surgical patients experiencing a shorter LOS and earlier return home or transfer to a rehabilitation facility.

To further reduce LOS and to safely introduce day surgery arthroplasty, considerable Allied Health and Nursing/Hospital in the Home (HITH) investment is required. For example, early input from an Allied Health professional (e.g. physiotherapy assessing and mobilising on the day of surgery, social work facilitating in home supports, occupational therapy ensuring appropriate equipment and safe environmental setup) will benefit all patients in their recovery and suitability to return home sooner, regardless as to whether they are scheduled for day or multi-day stays.

Current same-day models of surgical care are suitable for piloting but would require engagement and support from the Australian Orthopaedic Association and Victorian Orthopaedic Directors. Effective same-day models of surgical care have already been developed for knee arthroplasty at several Victorian health services.

In addition to total knee replacement, some total hip replacements, and uni-compartmental knee procedures are could potentially be delivered as same-day procedures.

Currently promoted in New South Wales, same-day joint replacement surgery provides an opportunity for an alternative care pathway for selected low-risk patients accessing joint replacement surgery. A *key principles* document developed, provides significant detail regarding patient selection, processes and trouble shooting. You can read more about the <u>same-day hip</u> and knee joint replacement surgery key principles here

<https://aci.health.nsw.gov.au/\_\_data/assets/pdf\_file/0009/717876/ACI-Same-day-hip-and-knee-joint-replacement-surgery-key-principles.pdf>



#### **Colorectal surgery**

Although a small number of major colorectal resection patients could be discharged same-day, enhanced recovery (ERAS) programs are more likely to achieve reductions in LOS for the majority of planned multi-day stay patients. Several Victorian health services promote ERAS throughout Victoria.

Complications following major colorectal surgery often develop between day 5-10 in the postoperative period. Investing in routine C-Reactive Protein (CRP) and white blood count blood tests on day 3 post operation (standard practice in hospital) may help early prediction of anastomotic leak and infection complications.

#### Same-day haemorrhoidectomy and fistula procedures

Same-day haemorrhoidectomy and fistula procedures can be performed with HITH support and some colorectal surgeons in Victoria already offer this model of care.

#### 4. Which surgical procedures should be majority same-day but are often multi-stay?

The procedure, the patient and the discharge destination must be suitable for safe same-day surgery.

Current rates of same-day procedures, ASA/comorbidities and social circumstances of patients who require these procedures must be considered. The data from the Victorian Agency of Health Information suggests that over 50% of patients for the procedures that may be suitable to be day-stay cases are ASA 1 & 2. Over 50% of patients for operations such as unilateral inguinal hernia, laparoscopic cholecystectomy, and tonsillectomy are ASA 1 & 2. Some ASA 3 patients are stable and may be also suitable for same-day surgery.

We expect procedures requiring local or regional anaesthesia, and those performed under sedation, are likely to be appropriate for same-day surgery and worth investigating. We anticipate 50% or more unilateral inguinal or umbilical hernia procedures, planned laparoscopic cholecystectomies, tonsillectomy and sinus procedures could be safely performed as day surgery. Many gynaecological procedures could also be provided as day stay.

### 5. Which surgical procedures should be prioritised as same-day models, in terms of patient outcomes and improving system efficiencies?

Prioritisation of procedures needs to consider the volume and complexity of the procedure. Procedures that are uncomplicated, likely to be highly successful within same-day models of care, and undertaken in high volume should be prioritised first, as these will enable services to gain quick wins, build confidence and observe beneficial process efficiencies and outcomes to the organisation, services/staff and patients/carers. This will motivate and enable further implementation of same-day models.



The table below shows procedures where there may be benefit in promoting (in bold) with clinical craft groups and for which there are potential specialty champions and/or health service successful models in Victoria.

Procedure	Comments
lens procedures	already occurring
surgical termination of pregnancy	already offered
inguinal hernia repair	needs to be promoted
umbilical hernia repair	needs to be promoted
laparoscopic cholecystectomy	needs to be promoted
knee procedures including arthroscopy	already the standard
knee arthroplasty and osteotomy	within enhanced recovery program
some shoulder procedures	within enhanced recovery program
most carpal tunnel release	already occurring
hand procedures	already occurring
skin and subcutaneous	already occurring
procedures/excisions	
breast biopsy	some variability in practice and more patients
	could be done as a day case
peripheral nerve surgery	decompression/rhizolysis, lesion resection,
	transpositions
muscle, nerve and temporal artery biopsies	Already occurring in suitable patients
simple lumbar decompression and	Potential based on advice from neurosurgery
microdiscectomies	
simple cervical decompression and foraminotomies	Potential based on advice from neurosurgery
anterior cervical discectomy and fusions	23-hr stay achievable
skull tumours and other wholly	Potential for simple cases
intraosseous lesions	
ENT biopsies	already occurring
nasal procedures, fractured nose	Can be promoted
manipulation, rhinoplasty, septoplasty	
sinus procedures	there is variability in day surgery rates and could be promoted
tonsillectomy/adenoidectomy	occurring in some centres (e.g. Kilmore District Health)
paediatric OSA, grommets, and some middle ear/mastoid procedures	Occurring in some centres

## 6. From a clinical and system perspective, what are the current challenges in expanding same-day models of surgical care?



Sufficient resources, staffing and workforce capability to provide same-day models of surgical care safely and effectively are paramount. We acknowledge that not all services are resourced the same, so some may require more focussed planning. For example, rural hospitals may not have the workforce and capability required to expand safely and appropriately.

Successful intervention would require executive sponsorship and key participants (nurses, surgeons, anaesthetists, allied health, waiting list managers, patients, executive sponsors, policy makers) to understand and be willing to change their behaviours and decision making in the healthcare system.

#### **Before Surgery:**

- Preoperative admission should only occur on a case-by-case basis for specific indication/s. Changing the 'norm' (within the sector and community) of patients being admitted the night before day surgery is important.
- Suitable patient and carer's expectations need to be set during the initial consultation, when placed on the waiting list, and should be reinforced throughout the patient journey.
- Consultation should involve patient/carer led goals, concerns, and requests to enable shared decision-making, preparedness, and empowerment in their own recovery.
- Potential concerns around not being in the care of clinicians during patient recovery should be addressed and patients/carers reassured about their ability to seek advice/escalate issues any time after discharge.
- Education of referring clinicians on same-day procedures, as well as the process for patient selection, promotes timely appropriate patient selection (through GP referral templates), improved communication and preparedness for return to primary care post patient discharge.
- For procedures deemed suitable, day surgery should become perceived as the norm and overnight stays, become the exception that needs to be justified.
- Clinical review (telehealth or telephone) of patients with extended wait times will ensure the patient remains suitable for same-day surgery.

#### Day of surgery:

- Significant Allied Health (physiotherapy, occupational therapy, social work, radiology and pathology), pharmacy and HITH support promotes safe same-day models of care.
- Specialty nurses (e.g. the urology or colonoscopy liaison nurse) provide considerable perioperative support and triage symptoms for potential complications and suitability for discharge.
- Increased investment in funding is required to resource evening Allied Health and nursing support to staff systems required to promote successful and safe same-day models of surgical care.
- The return on investment is anticipated to be far greater than the actual costs of the extra resources required.

#### After surgery:



- Introduction of new processes (e.g. criteria led discharge) will likely increase the number of safe same-day discharges.
- Medical and surgical review are not always necessary prior to discharge. Pathways and escalation processes can greatly improve the patients journey and lead to timely safe discharge of same-day surgical patients.
- Incorporating a multidisciplinary approach (nursing, allied health and pharmacy) into sameday discharge planning is likely to expediate a safe discharge. This includes suitable treatment of post anaesthetic nausea and vomiting, monitoring of recovery and management of pain and early mobilisation.
- A comprehensive discharge plan should be provided to the patient and GP (day of discharge) with clear information including the procedure performed, what is to be expected during recovery and what symptoms should prompt timely review, and who to contact if concerns arise.
- The discharge plan should also clearly articulate how and when postoperative follow up will occur and who is responsible. This will ensure a patient does not get lost in the system and there are multiple ways to make certain ongoing care is provided (i.e. via the health service, GP or patient themselves).
- The comprehensive discharge plan and medical advice should be provided at the time the operation note is written.
- Some patients require medical review prior to discharge, others may be suitable for nurseinitiated discharge.
- Access to early follow-up appointments may need to be addressed and planned for by the health service.

It is important to generate confidence in the health system during this time of change to promote the long-term benefits and overall strategy for expanding same-day models of surgical care.

### 7. What are the key implementation risks in expanding same-day models of surgical care, and how can they be mitigated?

Risk	Mitigation
Patient may be discharged home and follow up plans overlooked or missed	<ul> <li>A comprehensive discharge plan will provide ongoing monitoring, advice and care including patient/carer guidance on how to appropriately respond</li> <li>This may include review (i.e. telehealth) by the surgical team, specialist nurse, a HITH visit, patient accessed App that flags concerning symptoms, GP, ED or health service contact +/- visit</li> </ul>
Missed complications and delayed recognition and response to deterioration may result in patient harm	<ul> <li>An escalation process included in criteria led discharge pathways will utilise post procedure monitoring to help early identification of patient deterioration.</li> <li>If the postoperative patient deviates from expected recovery trajectory, they should be reviewed to determine if suitable to remain on the same-day model pathway</li> </ul>



Poor pathways of communication (particularly after hours)	<ul> <li>Suitable patient selection and a clear same-day model of surgical care, with the escalation process clearly embedded, would greatly reduce this risk</li> <li>A call from someone in the perioperative team (or equivalent) who is aware of the individual and general patient risks and complications</li> </ul>
Potential for patient to be sent home prior to necessary handover being provided to primary care/community- based providers	<ul> <li>Criteria-led discharge will ensure that a patient cannot be sent home until the required handover (copy of operation notes and comprehensive discharge plan) is completed and sent to relevant community-based providers and given to the patient/carer</li> </ul>
Potential for patients to be sent home who are at risk of falling	<ul> <li>Appropriate patient selection and post operative discussion with carer and patient, including education regarding potential risks at home and how to manage them</li> <li>Provision of Allied Health assessment and intervention to reduce falls risk prior to discharge (e.g. equipment prescription, transfer practice and education)</li> </ul>
Medications a patient is sent home with (drugs of addiction, reaction, patient understanding)	<ul> <li>Clear education before surgery and potentially seeing a pharmacist</li> <li>Clear instructions on when to seek clinical consultation</li> </ul>
A lack of capacity or access to planned follow-up assessments	<ul> <li>Include in the patient selection criteria to make certain we are setting the patient up for successful recovery</li> <li>Planned follow-up should be established prior to the procedure to allow time to organise and trouble shoot any issues that could potentially arise</li> <li>Digital solutions such as telehealth and Apps can support monitoring and guide appropriate escalation</li> </ul>
Potential for increased "unplanned" emergency services utilised by same- day patients including a rise in calls to Ambulance Victoria and re- presentations to Urgent Care Centres and EDs	<ul> <li>Liaise with emergency services before implementing changes to give them time to plan for changes in practices and potential changes in activity</li> <li>A virtual ED system for post discharge surgical patients is one possible solution and could involve a night surgical registrar or senior nurse on-call with an escalation pathway to the on-call surgical fellow and/or consultant.</li> <li>After day surgery unit hours, the nursing coordinator can triage phone calls to decide whether the patient requires advice or needs to return to emergency</li> <li>The capacity for timely system-wide monitoring for emergency care system representations should also be augmented during this time of transition</li> </ul>



Patient may go to an ED at a different health service from where their procedure occurred	• The patient having their comprehensive discharge plan should provide all relevant information required for anyone treating the patient for post operative complications (ED/urgent care, GPs, pharmacy, on call surgical team, etc)
Re-presentation at ED may not be responded to and prioritised urgently	<ul> <li>A clear protocol regarding communication pathways should be established to ensure that the ED likely to receive the patient is aware of their pending arrival and need for urgent care</li> <li>The person responding to out-of-hours phone calls, deciding on escalation of care and advising patient to re-present to ED should contact the ED for provision of timely handover</li> </ul>
Patients receiving postoperative review from clinicians without in- depth understanding of the patient or procedure performed	<ul> <li>Establishment of dedicated 24 hour post operative telehealth teams (to service multiple facilities or regions) is one option to provide a safe and streamlines process to monitor, contact or receive calls from concerned patients within the first 24-48 hours of same-day surgery</li> <li>This will likely greatly reduce requirements for unplanned emergency services and after-hour GP contact and will provide quick assessment and appropriate triage of patients</li> </ul>
A diversion of care for post-operative symptoms and/or complications to other parts of the health system (EDs, GPs)	<ul> <li>Patients can show their comprehensive discharge plan to show anyone who they see relating to their surgery (planned or unplanned)</li> <li>Appropriate guidance should be made available to other parts of the health system (e.g. Health Pathways available for GPs)</li> </ul>
Some same-day procedures offer low value to the patient if not performed for the correct indications. In Victoria, these indications have been published as part of the " <u>Best Care</u> " work. Currently, a proportion of same-day surgery lists consist of low value procedures such as endoscopy, colonoscopy, knee arthroscopy, hysterectomy and inguinal hernia that is clinically inapparent or minimally symptomatic	<ul> <li>The risk of performing low value procedures can be minimised by ensuring best care advice is followed by health services and providers</li> <li>We would seek the addition of an indication for surgery or procedure to the waiting for surgery information system (ESIS)</li> </ul>

# 8. What new measures, if any, are required from VAHI to effectively measure day surgery rates going forward?



Most measures required from VAHI have been requested as of 7 July 2022 and the data is available to inform day surgery reports. VEMD Data results are pending.

Measures not specific to "day surgery rates" but focussing on the potential sequelae can be monitored and reported to provide fundamental data to see the progress of increasing same-day models of surgical care. This includes the ability to link data to track day surgery post-operative "unplanned" representations to the emergency care system and/or cases requiring hospital readmission. For this to be effective, we also need to consider the varied durations considered as 'readmission' for different procedures.

Since the drafting of this report, there has been a Planned Surgery Reform Dashboard developed which highlights opportunities for health services to increase their number of day surgery procedures as well as monitoring actual same day surgeries completed.

- 8.1 Unplanned overnight admission in a patient expected to be discharged same-day (Rate)
- 8.2 Unplanned representation to Emergency Department or readmission to same or different hospital within 48 hours (Rate)
- 8.3 Proportion of potential day procedures performed as day procedures in patients with suitable selection criteria (e.g., ASA 1 & 2) reported by health service and/or campus. For example, report planned day surgery unilateral inguinal hernia and laparoscopic cholecystectomy rates
- 8.4 Present variation between health services in funnel plots or the equivalent
- 8.5 Present HAC rate by HAC and procedure for individual health services/campus (currently HAC rate reported om aggregate for whole health service) by day surgery procedure also comparing with overnight and multiday procedures
- 8.6 Patient facing measures including PROMS/PREMS data

For any surgical procedure, a field within the ESIS system and VAED for the indication for surgery and available prompts for extra information for potentially low value procedures would be valuable. To mitigate against low value procedures, it would be ideal to include decision-making and clarification prompts to data collection. This additional data would help identify trends in exceptions to best care advice and indications requiring further investigation.

Some clinician and coder education may be required at the health service level and would be incentivised by reporting as health services will respond to the information generated by reports on performance.

The SCV Perioperative Learning Health Network Data Group will be established and would welcome and encourage a member of DH and VAHI to join to promote and align actions from this group.

#### Conclusion

There are opportunities to safely expand same-day surgical care across Victorian Health Services. There are exemplar models that currently exist within the sector which we can learn from and use the guiding principles to expand to other procedures.



The true success of these models is the understanding of the full patient journey looking at before, during and after care. Models in use are successful because they include the whole care team, including primary care, allied health, nursing staff and of course the patients' carers.

Wrap around services and supports make for patient centred, safe and quality care delivery, allowing patients to be discharged home safely within the same day of surgery. Clear communication and care pathways set these models up for success by establishing early expectations of care and supportive follow up, including escalation points. These services and pathways help mitigate some of the risks associated with these models of care and should form a foundation for future models.



#### References

Aubusson, K. (2022, Aug 12). More home care after surgery may ease backlog. The Age.

Australian Commission on Safety and Quality in Health Care (2015). *The First Australian Atlas of Healthcare Variation*. <u>https://www.safetyandquality.gov.au/our-work/healthcare-variation/atlas-</u> 2015

Australian Commission on Safety and Quality in Health Care (2017). *The Second Australian Atlas of Healthcare Variation*. <u>https://www.safetyandquality.gov.au/our-work/healthcare-variation/atlas-2017</u>

Australian Commission on Safety and Quality in Health Care (2017). *The Second Australian Atlas of Healthcare Variation, Women's Health and Maternity*. <u>https://www.safetyandquality.gov.au/our-work/healthcare-variation/atlas-2017/atlas-2017-3-womens-health-and-maternity</u>

Australian Commission on Safety and Quality in Health Care (2018). *The Third Australian Atlas of Healthcare Variation*. <u>https://www.safetyandquality.gov.au/our-work/healthcare-variation/third-atlas-2018</u>

Australian Commission on Safety and Quality in Health Care (2021). The Fourth Australian Atlas of Healthcare Variation. https://www.safetyandquality.gov.au/our-work/healthcare-variation/fourth-atlas-2021

The Australian and New Zealand College of Anaesthetists (2018). *Guideline for the perioperative care of patients selected for day stay procedures, PG155 (POM)*.

https://www.anzca.edu.au/getattachment/021e4205-af5a-415d-815d-b16be1fe8b62/PG15(POM)-Guideline-for-the-perioperative-care-of-patients-selected-for-day-stay-procedures-(PS15)

Bailey, C.R., Ahuja, M., Bartholomew, K., Bew, S., Forbes, L., Lipp, A., Montgomery, J., Russon, K., Potparic, O. and Stocker, M., (2019). Guidelines for day-case surgery 2019: Guidelines from the Association of Anaesthetists and the British Association of Day Surgery. Anaesthesia, 74(6), pp.778-792.

Campbell, M., Ng, D., Albatat, B., Lowen, D., Bird, D., & Hodgson, R. (2021). Quality of recovery assessment of day case and multiday stay patients undergoing elective laparoscopic cholecystectomy. *Turkish Journal of Surgery*, *37*(4), 355.

Chittleborough, T. (2022, August 03). Royal Melbourne Hospital Surgical Grand Round.

Dahlberg, K., Philipsson, A., Hagberg, L., Jaensson, M., Hälleberg-Nyman, M. and Nilsson, U., (2017). Cost-effectiveness of a systematic e-assessed follow-up of postoperative recovery after day surgery: a multicentre randomized trial. BJA: British Journal of Anaesthesia, 119(5), pp.1039-1046.

Hollington, P., Toogood, G.J. and Padbury, R.T.A., (1999). A prospective randomized trial of day-stay only versus overnight-stay laparoscopic cholecystectomy. Australian and New Zealand Journal of Surgery, 69(12), pp.841-843.

Jaensson, M., Dahlberg, K., Eriksson, M. and Nilsson, U., (2017). Evaluation of postoperative recovery in day surgery patients using a mobile phone application: a multicentre randomized trial. BJA: British Journal of Anaesthesia, 119(5), pp.1030-1038.



Joshi, G.P., Kehlet, H., Beloeil, H., Bonnet, F., Fischer, B., Hill, A., Lavandhomme, P.M., Lirk, P., Pogatzki-Zhan, E.M., Raeder, J. and Rawal, N., (2017). Guidelines for perioperative pain management: need for re-evaluation. *British Journal of Anaesthesia*, *119*(4), pp.720-722.

KPMG (2022) Medibank facilitated a sustainable healthcare system: The economic case of Medibank's short-stay, no-gap program. Medibank Newsroom. https://www.medibank.com.au/livebetter/newsroom/post/latest-report-reveals-a-solution-tostretched-healthcare-system

Mills, J. M., Luscombe, G. M., & Hugh, T. J. (2022). Same-day inguinal hernia repair in Australia, 2000–19. *The Medical Journal of Australia*, *216*(6), 303-304.

Northern Health (n.d) *Draft Procedure: Day surgery for laparoscopic cholecystectomy.* 

NSW Agency of Clinical Innovation (2022 Mar). *Same-day hip and knee joint replacement surgery key principles.* https://aci.health.nsw.gov.au/\_\_data/assets/pdf\_file/0009/717876/ACI-Same-day-hip-and-knee-joint-replacement-surgery-key-principles.pdf

Ross, A. (2022, August 12). *Latest report reveals a solution to stretched healthcare system*. Medibank Media Releases. https://www.medibank.com.au/livebetter/newsroom/post/latest-report-reveals-a-solution-to-stretched-healthcare-system

Ross, J., Santhirapala, R., MacEwen, C. and Coulter, A., (2018). *Helping patients choose wisely*. BMI, *361*.

Safer Care Victoria (2022, Sep 22). *Best Care: Guidance for non-urgent elective surgery*. https://aci.health.nsw.gov.au/\_\_data/assets/pdf\_file/0009/717876/ACI-Same-day-hip-and-kneejoint-replacement-surgery-key-principles.pdf

Scarfe, A., Duncan, J., Ma, N., Cameron, A., Rankin, D., Karatassas, A., Fletcher, D., Watters, D. and Maddern, G., (2018). Day case hernia repair: weak evidence or practice gap? *ANZ journal of surgery*, *88*(6), pp.547-553.

St Vincent's Hospital Melbourne (May 2022). *Day of Surgery Discharge and Transfer to Hospital in the Home (HITH) Policy*.

Vandepitte, C., Van Pachtenbeke, L., Van Herreweghe, I., Gupta, R.K. and Elkassabany, N.M., (2022). Same Day Joint Replacement Surgery: Patient Selection and Perioperative Management. Anesthesiology Clinics.