

GUIDE

Surgical Services Taskforce

# Integrated Surgical Care for Older People



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INNOVATION**

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## Glossary

ACI	Agency for Clinical Innovation
ACS	American College of Surgeons
APS	Acute pain service
CNC	Clinical nurse consultant
COPS	Care of Older People in Surgery
CriSTAL	Criteria for Screening and Triaging to Appropriate aLternative care
eMR	Electronic medical record
ERAS	Enhanced Recovery After Surgery
FIB	Fascia Iliaca Block
GP	General practitioner
ICU	Intensive care unit
LHD	Local Health District
NELA	National Emergency Laparotomy Audit
NSQIP	National Surgical Quality Improvement Program
PACU	Post-anaesthetic care unit
PREMs	Patient-reported experience measures
PRMs	Patient-reported measures
PROMs	Patient-reported outcome measures
OACCP	Osteoarthritis Chronic Care Program
RFA	Request for admission

## Preface

The ACI has undertaken the Integrated Surgical Care for Older People project with a view to improving outcomes and experience for older people having surgery in NSW.

For an older person with complex health care needs and multiple co-morbidities, many challenges arise. These are not only from surgical care itself, but from the way in which individual patient care pathways are planned and coordinated across health care teams, with patients, carers and families. While there is no one typical patient journey for surgical care, it is important to find ways to support our health services to provide tools to identify the needs of individual patients and the resources to respond to these to deliver the best health outcomes possible.

The Guide to Integrated Surgical Care for Older People has been a joint effort between several ACI networks. In particular, the Guide addresses priority topics for the Surgical Services Taskforce, Anaesthesia and Perioperative Care and Aged Health networks.

The Guide supports clinical teams to deliver appropriate, efficient and timely surgical care for complex and co-morbid patients, focusing on early and effective communication, proactive approaches to managing clinical risk and regular review of processes for ongoing improvement. Sharing common challenges, and innovative solutions enables different services to learn from one another and provides a platform to collaborate on joint initiatives to improve care. This is closely aligned with ongoing and emerging state-wide care quality improvement activities such as:

- ACI Perioperative Toolkit, facilitating high-quality, patient-centred anaesthetic and perioperative care,
- NSW Leading Better Value Care program, a statewide approach to delivering value based healthcare centred on what matters most to patients, creating positive change and better outcomes
- NSW Integrated Care Strategy, which aims to provide seamless, effective and efficient health care, reflective of holistic patient needs

The work underpinning the Guide has been undertaken in collaboration with a number of health service clinical, managerial and administrative staff to find out directly where the key challenges are and what is already being done to ensure best outcomes for older people having surgery across the state.

I would like to thank the services, teams and individuals who have contributed to this work. Their capacity to identify opportunity for innovation, dedication to exemplary patient care and enduring commitment to improving NSW health services provides the foundations on which to further integrate and embed patient-centred surgical care into the future.

Dr Sarah Dalton

Clinical Executive Director, Preserving and Restoring through Interventions in Surgery and Medicine

## Steering Committee Chairperson

I am very pleased to have chaired the Steering Committee for Integrated Surgical Care for Older People – a project that brings focus to the care needs of frail older patients undergoing surgery.

The compelling challenges of these vulnerable patients emphasise the importance of greater integration of the disciplines of surgery, anaesthetics and medicine, as well as greater integration of health services. **Only together can we redress the morbidity and mortality of the older surgical patient and provide high-quality perioperative care that meets patient needs.**

This guide has been written as an aid for clinicians to develop and improve local perioperative services as well as for health service managers to guide service and local health district strategy. **The guide includes a breadth of material and we encourage clinicians and health service managers to use the sections most relevant to the local settings and challenges.**

The Integrated Surgical Care for Older People project brought together many dedicated and insightful clinicians, all of whom have individually recognised the need to improve perioperative care. It was striking to see how many clinicians and teams have undertaken work in this area, often with limited resources and in heroic isolation. A rewarding camaraderie between clinicians from different backgrounds has been readily apparent during the site visits and workshop undertaken during this project, and we encourage you to contact the innovative individuals we have referenced. Enabling these pockets of innovation to come together and be mutually supportive will continue to be a priority for the ACI.

Measurement and data will be crucial to the successful implementation of strategies to improve surgical and broader health outcomes for older people. We need data to support the case for change and to measure whether changes are having an impact. We advise services to build measurement and evaluation into all quality improvement activities and projects undertaken and encourage collaboration across the state to prove the need for investment in the care of older surgical patients.

This project took on a life of its own as we discovered many pockets of innovation and dedicated clinicians around NSW, and I would like to sincerely thank all those involved with the site visits, workshop and the development of this guide.

I would like to extend my warm thanks to the Steering Committee for their expertise and unwavering support. I am forever grateful to Gavin, Ellen, Crystal, Kelli and all the ACI staff, and consultants, Alison and Kath, for their unyielding commitment to this work.

Dr Ming Loh

Chair, Integrated Surgical Care for Older People Steering Committee

## Executive summary

The Integrated Surgical Care for Older People project was undertaken to highlight opportunities to improve outcomes for older people with complex needs in NSW.

This guide highlights common challenges experienced across the NSW health system and suggests ideas for change that may help to support a more integrated and holistic approach to the care we provide to older people who require surgery.

The guide has been informed by health professionals and health service executives from metropolitan and regional health services in NSW. This multidisciplinary input reflects the core driver for this piece of work: that delivery of best practice care for older people requiring surgery in NSW requires an integrated approach which considers the needs of the patient and not simply the requirements for safe delivery of a surgical procedure.

Key principles of integrated, patient-centred care underpinning the ideas, tools and resources presented in this report include:

- ✓ the importance of hospital-wide collaboration, supported at an Executive level, that breaks down silos and provides a holistic and coordinated approach to patient care
- ✓ the value of a multidisciplinary team, comprising input from surgical, anaesthetic, nursing, geriatric, perioperative, intensive care and allied health specialties in providing an integrated approach to care
- ✓ the importance of trust and mutual respect between surgical and geriatric specialties, building an environment that facilitates a shared care model with input tailored according to individual patient need
- ✓ the critical importance for older patients of identifying and managing the risk, underlying causes and symptoms of delirium
- ✓ the need to ensure clear flows of information across the surgical care pathway from the point of pre-admission onwards, to ensure that approaches to care take account of and respond to individual patient needs and co-morbidities
- ✓ the role of the pre-admission clinic as a central mechanism for collecting and communicating information, not only for planning anaesthetic management but for the entire team of health professionals involved in the patient's care
- ✓ the need for open and transparent communication with older patients and their families and carers about the likely outcomes of surgery to support informed decision making, put the patient at the centre of care discussions and manage expectations for rehabilitation and discharge planning
- ✓ the need for clear referral pathways and transfer of information between hospital-based and community-based care
- ✓ the importance of a service-wide commitment to ongoing data-driven quality improvement with health professionals and health service executives working together to identify areas of variation and opportunities to improve care.

***'A model of shared responsibility and accountability between the surgeon and physician in the care of complex older people is better for the patient and the health system.'***

Professor Jacqui Close  
Geriatrician, Prince of  
Wales Hospital

***'We have evidence that variance in practice leads to variance in patient outcomes, particularly where practice is not evidence based. Standardisation of surgical practice will affect pre-operative decision-making, patient pathways and improve post-operative care and outcomes for the elderly.'***

Professor Michael Cox  
Surgeon, Nepean Hospital

# Contents

<b>Introduction</b> .....	<b>1</b>
About the Integrated Surgical Care for Older People project.....	1
The surgical care pathway in NSW: addressing challenges for older people .....	3
<b>Overarching themes</b> .....	<b>4</b>
Multidisciplinary care.....	4
Patient-centred care.....	6
<b>Pathway themes</b> .....	<b>9</b>
Appropriateness of surgery .....	9
Pre-admission clinics .....	12
Optimising recovery and rehabilitation .....	16
Discharge planning and follow-up care .....	20
<b>Clinical themes</b> .....	<b>23</b>
Managing patients with co-morbidities .....	23
Management of delirium .....	26
Management of pain .....	29
De-conditioning .....	31
<b>Overarching themes</b> .....	<b>33</b>
Protocolisation and standardisation .....	33
Data collection and review .....	34
Communication and transfer of information.....	37
Quality improvement.....	39
<b>Next steps</b> .....	<b>40</b>
<b>References</b> .....	<b>41</b>

# Introduction

## About the Integrated Surgical Care for Older People project

The Integrated Surgical Care for Older People project was undertaken in response to known challenges in surgical care for older people.

The aims of the project were to:

- highlight current challenges in the delivery of emergency (unplanned) and elective surgical care for older people
- profile examples of innovations through local case studies
- highlight tools and resources relevant to surgical care for older people
- identify opportunities and ideas for change that could be delivered at a local or statewide level.

The Integrated Surgical Care for Older People project was overseen by a multidisciplinary Steering Committee and involved a statewide consultation process that gathered input from over 260 health professionals and health service administrators involved in the surgical care of older people in NSW.

A series of eight one-day site visits were made to hospitals across NSW during 2017. Group and individual discussions were held with surgeons, anaesthetists, intensivists, geriatricians, nurses, allied health professionals and hospital administrators to explore challenges and innovations in the delivery of surgical care for older people.

A one-day forum in November 2017 brought together 115 people from services across NSW to profile some of the key issues and innovations identified during the site visits, and to discuss opportunities for system-level and local-level improvement.

This guide brings together key findings from the Integrated Surgical Care for Older People project and reflects information gathered through the consultation process. This will enable clinicians and local health districts (LHDs) to review and improve their own service. It does not represent all challenges, innovations, tools or resources available to drive change and improvement in health services.

*'Clinicians can work together to improve both the work that they do individually, and the linkages and coordination of the whole team looking after older patients across the surgical pathway. This can deliver major improvements in patient outcomes and system efficiency. Developing the 'Whole of Hospital' culture of teamwork is the key to achieving this.'*

A/Professor Ross Kerridge,  
Anaesthetist, John Hunter  
Hospital

### NSW Health Services participating in site visits

- Coffs Harbour Health Campus
- John Hunter Hospital
- Lismore Base Hospital
- Port Macquarie Base Hospital
- Liverpool Hospital
- Prince of Wales Hospital
- Nepean Hospital
- Westmead Hospital



Dr Ming Loh presents the key themes and challenges associated with surgical care for older and complex patients at the Integrated Surgical Care Forum



Panellists Mr David Gray, Mr Matt Jennings, Professor Jacqui Close and Professor Ken Hillman discuss appropriateness of surgical decision making, with facilitator Professor Michael Cox

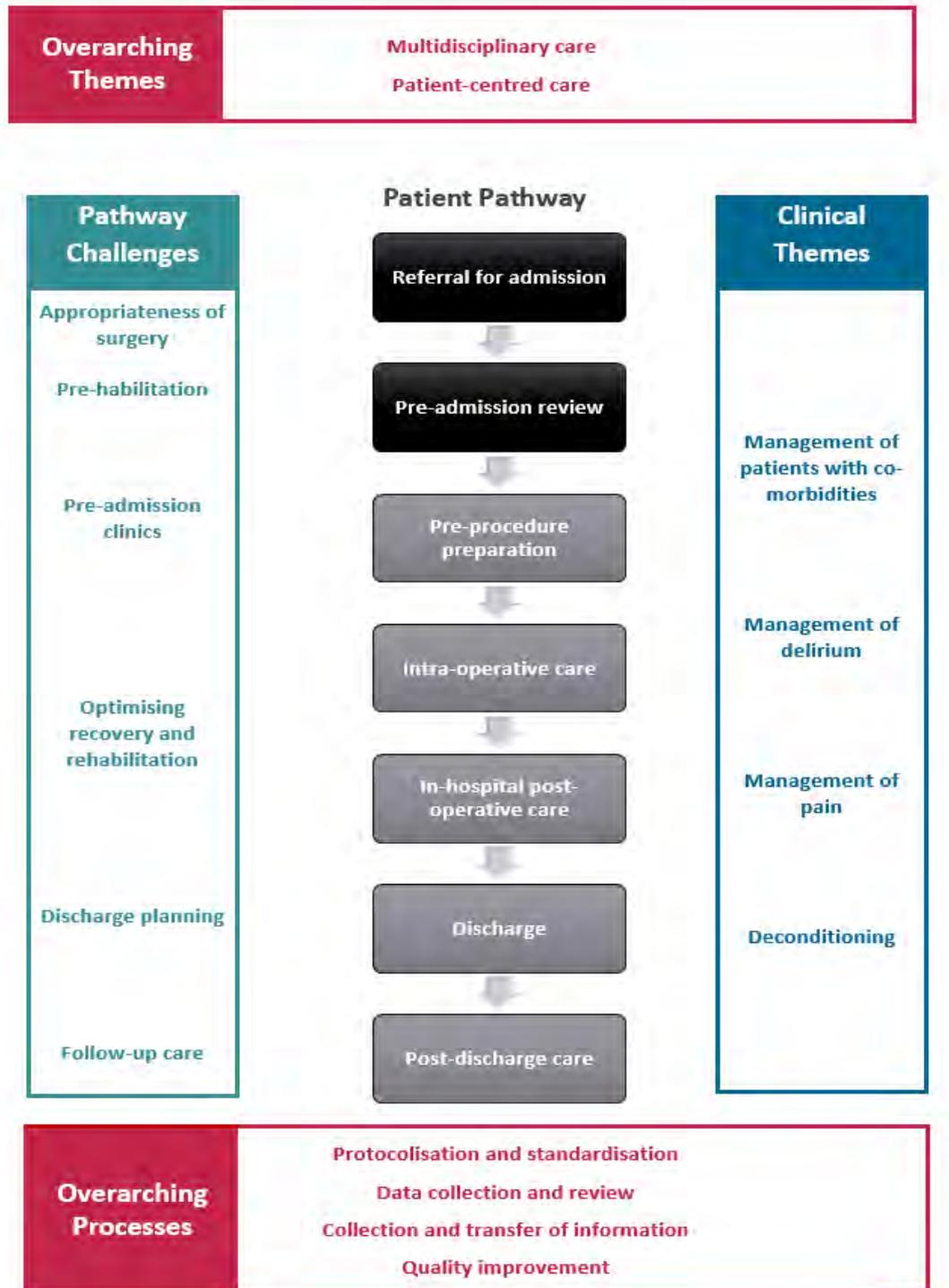
***‘For allied health staff, the principles outlined in the Integrated Surgical Care Clinical Guide will help us to deliver consistent, multidisciplinary evidence-based care that optimises patient outcomes and supports the patient, family and carer experience.***

***By working together, we can better identify the supports required at pre-admission, communicate and plan input from the relevant team members and ultimately provide the most appropriate post-operative care for each individual. It is about understanding what is the best care, measuring what you are doing and aiming to always do better.’***

Matt Jennings, Director Allied Health Liverpool Hospital

# The surgical care pathway in NSW: addressing challenges for older people

This guide is designed to allow you to reference issues related to surgical care for older people relevant to your service. Information is presented around the surgical care pathway. Some of the challenges and innovations identified are specific to one part of the pathway (pathway challenges), some relate to a clinical issue that has implications for various parts of the pathway (clinical themes) and some are overarching issues relating to how services are delivered and planned (overarching themes and processes). Hyperlinks in the list of tools and case studies provide access to more information.



Elective procedures
  Elective and emergency procedures

# Overarching themes

## Multidisciplinary care

Multidisciplinary care, integrated care and shared care are core principles underpinning surgical care for older people with complex needs. Involvement of a geriatrician in the multidisciplinary team is an important way of identifying and addressing the range of co-morbidities that an older patient may experience. However, many services are challenged by how to embed a truly multidisciplinary approach into their care pathway.

*‘Open and effective team communication is crucial – not just for coordination of care, but because a shared understanding improves the quality of decision making.’*

Dr Christina Norris, Consultant Geriatrician, Prince of Wales Hospital

## Current challenges

Challenges	Detail
<b>System level barriers to multidisciplinary and shared care</b>	<b>Delivery of surgical care by discipline-specific silos</b> is the norm for many services. The challenge of how to work in a more integrated way is exacerbated in some services by having services housed in separate buildings or on different sites.
	In some services, the visiting medical officer model does not lend itself to team-based care.
	Use of different cost codes and service models can be a financial barrier to delivery of a multidisciplinary model of care.
<b>Resource availability</b>	Shared care models (for example where care is shared between a surgeon and geriatrician) are <b>resource intensive</b> . It is important to be clear that the resource is used where it can add greatest value.

## Ideas for change

Ideas	What services can do
<b>Identify leaders</b>	Multidisciplinary care requires <b>strong leadership</b> from the different discipline groups involved in the delivery of surgical care. Forums that encourage leaders to work together to explore and address common challenges can provide a foundation from which models of integrated care can be developed. Leaders who will champion the concept of multidisciplinary care are critical, modelling behaviours and gaining and maintaining support from other team members and from service administrators.
<b>Establish mutual respect</b>	Successful examples of multidisciplinary teams delivering integrated care have a foundation of <b>relationships based on mutual respect</b> . Opportunities for consultation, discussion and communication are all important elements in building a sense of team.
<b>Defining a common purpose</b>	Teams work best when <b>built around a common purpose</b> . Bringing together a range of disciplines to jointly explore and work to address a common issue, such as development of a shared protocol, review of local data, or shared professional development activities can be an effective means from which to establish the foundations of the team.
<b>Resourcing team activity</b>	Multidisciplinary care requires a <b>level of resource</b> to facilitate team meetings, communicate recommendations and develop shared protocols. Defining how such support will be provided or shared across the team is important.
<b>Learn from others</b>	Models of integrated care and multidisciplinary care exist across different areas of healthcare. Examples include orthopaedics, cancer care and mental health. Time spent finding out how teams work together, core principles that facilitate successful models of

integrated care and practical advice about how to bring teams together can be a useful investment.

## Tools and case studies



### Care of the Older Person in Surgery: a shared care model

A shared care approach to the management of older people having surgery is at the heart of the **Care of Older People in Surgery (COPS) model** being evaluated at Prince of Wales Hospital.

The model builds on a highly successful shared care approach in orthopaedics and is evaluating the involvement of a geriatrician in the emergency surgical setting.

A geriatrician screens all patients aged 75 years and older with an unplanned admission for acute surgery, colorectal surgery, upper gastrointestinal surgery, surgical oncology or endocrine surgery.

For those undergoing surgery or those identified as being frail, all will have comprehensive geriatric assessment and an individualised management plan. The assessment identifies comorbidities that may require additional care or support and is a trigger for patient and clinician education, allied health referral and provision of written pre-operative advice.

Involvement of a physiotherapist as part of the COPS team is a critical part of the model, with patients receiving twice daily physiotherapy.

Early evaluation data indicate clinical improvements for patients and staff and patient satisfaction with the model.

*For more information, contact: Christina Norris, Geriatrician, Prince of Wales Hospital*



### Tools

Under the COPS model, the [Clinical Frailty Scale<sup>1</sup>](#) is used to identify which patients are most likely to benefit from the shared care approach.

All older acute surgical admissions are screened. Those scoring four or more on the Clinical Frailty Scale, regardless of surgical intervention, and all those undergoing a surgical intervention undergo Comprehensive Geriatric Assessment and tailored intervention.

The benefit of the COPS model is that it facilitates early bedside access by a geriatrician for those patients who could benefit from their input.

Early allied health involvement is critical to ensure that care is provided in parallel rather than in series.

Cancer Australia has developed a number of [tools and resources<sup>2</sup>](#) designed to support multidisciplinary team working within the cancer care sector.

The Agency for Clinical Innovation (ACI) [Building Partnerships: A Framework for Integrating Care for Older People with Complex Health Needs](#) describes service redesign principles to encourage integrated care across tertiary, primary and community-based health services.

## Enablers for multidisciplinary or integrated care

- ✓ **Clinical leadership** including modelling behaviour for trainees to embed multidisciplinary care as part of standard practice.
- ✓ **Mutual respect and long-standing relationships** – this can take time and respect needs to be earned. Opportunities to build relationships should be started at the junior medical officer or intern level through shared approaches to education and training.
- ✓ **Shared decision making** through forums that encourage input from all team members.
- ✓ **Supported team working**, such as co-location of teams and services to avoid silos of care.

## Ideas for further exploration

- Continue to [evaluate shared care models](#) to build the evidence base. Where possible use similar or comparable evaluation measures.

## Patient-centred care

A patient's experience of care and their outcomes can be influenced by a range of factors. Communication and coordination of care can have a significant impact on a patient's decisions about care and their understanding about what to expect.

Patient-reported measures (PRMs) capture outcomes that matter to patients. They include patient-reported outcome measures (PROMs) and patient-reported experience measures (PREMs). PRMs provide a means of identifying what is important for a patient and their carers. As an emerging field, education and support is needed to embed their use in practice.

*'Focusing on and understanding what matters most to patients, including their health and care goals, enables surgical services to provide holistic, meaningful, respectful and responsive care. It creates a strong foundation for person-centred care, informs clinical decision making, shared care planning and supporting positive patient experiences and outcomes.'*

Mel Tinsley, Health Outcomes Program Manager, ACI

## Current challenges

Challenges	Detail
<b>Communication</b>	<p>Patient-centred care requires health professionals to <b>talk to patients not only about what is recommended but about what is important for the patient and their carers.</b></p> <p>For older people, preferences for what is important can differ between the patient and their family members, which can present challenges for communication.</p>
<b>Shared decision making</b>	<p>Shared decision making is a core principle of patient-centred care. It recognises that health professionals, the patient and their family bring important considerations that will influence the approach to treatment and care. However, some older people have an <b>established view that the doctor knows best</b>, and will be looking to the healthcare team to decide on the most appropriate treatment or approach.</p> <p>It is also important to consider the cognitive capacity of older people to give informed consent and the implications for people responsible for decision-making under these conditions.</p>
<b>Coordination of care</b>	<p>The health system is complex, with confusing hospital processes, tests and appointments in different departments and pathways requiring repeated tests or requests for information.</p> <p><b>Older people may find the complexities of the health system particularly confusing.</b></p> <p>Clear and consistent information is essential.</p> <p>Challenges identified by services include:</p> <ul style="list-style-type: none"> <li>• the absence of an overall 'coordinator' throughout the surgical pathway</li> <li>• the challenge of postponed or delayed surgery, which can be more confusing for older patients</li> <li>• inconsistent information provided by different specialists or teams can make it difficult to manage expectations.</li> </ul>
<b>Cultural variation</b>	<p>The approach to providing patient-centred care can present additional challenges for people from <b>non-English speaking backgrounds</b>, where communication occurs through a translator.</p> <p>Some communities have <b>different cultural beliefs</b> that may influence expectations for health care provision and the way in which decisions about health are made.</p>

## Ideas for change

Consideration	What services can do
<b>Multidisciplinary pre-admission clinic</b>	The patient pre-admission clinic can be used to provide valuable information for patients and their families to manage expectations around outcomes from surgery and discharge plans.
<b>Personalised follow-up care</b>	Post-operative follow-up often relies on patients being given a contact number to call if they experience issues. Proactive follow-up calls post-discharge can help to provide personalised care and early intervention in response to issues.
<b>Use PROMs and PREMs</b>	<p>Build a better understanding across services about the role and value of PROMs and PREMs in facilitating delivery of patient-centred care.</p> <ul style="list-style-type: none"> <li>PROMs can help a clinician to better understand patient needs and identify what is important to a patient in their health care.</li> <li>PROM data can be used to demonstrate to a patient how a symptom or condition has altered as a result of an intervention. This may be particularly valuable if an intervention requires substantial effort from the patients (e.g. an exercise program), or if changes are unlikely to be immediate or substantive.</li> <li>PREM data can be used to capture a patient's experience and their perception of healthcare services. These perceptions can help health services determine opportunities for service improvement.</li> </ul>

## Tools and case studies



### Hunter Orthopaedic Trauma Nurse

The Hunter Orthopaedic Trauma (HOT) nurse is a care coordinator role looking after patients presenting with orthopaedic trauma requiring surgery. The HOT nurse participates in the medical team rounds each morning and identifies orthopaedic trauma patients. Decisions about time of surgery, fasting, and required pre-operative tests and procedures are planned and coordinated with the patient, their carers and family. The HOT nurse acts as a liaison across specialties and departments, ensuring pre-operative requirements for patients are optimised and patients kept informed. The involvement of patients, carers and family improves communication and reduces anxiety, which improves the patient journey. The HOT nurse communicates across patient flow and operating theatre to maximise operating theatre time and reduce lost time to theatre.

*For more information, contact Suzanne McNeil, John Hunter Hospital*



### Eye surgery clinic

At Lismore Base Hospital, the eye surgery model has been well received. This includes positive clinical outcomes, service efficiencies and patient satisfaction. Proactive approaches to communication with the patient and the patient's general practitioner (GP), as well as provision of patient information pre- and post-operatively is seen to be a significant contributor to the success of this model. An underpinning goal for the model is 'come in good, go out good, follow-up well'.

*For more information, contact David Gray, Lismore Base Hospital*



### Patient reported outcome measures

The ACI's program of work around [Patient Reported Measures](#) aims to enable patients to provide direct, timely feedback about their health-related outcomes and experiences to drive improvement and integration of health care across NSW.



### My Surgery Journey

Illawarra Shoalhaven LHD has developed a [magazine](#)<sup>3</sup> and [smartphone app](#) called 'My Surgery Journey'. The magazine and app are designed to help people prepare for surgery, providing information about pre- and post-operative care as well as what to expect in hospital.

### Facilitators of patient-centred care

- ✓ **Communication skills training** for health professionals to provide strategies to overcome established hierarchies around decision making between clinicians, patients and families.
- ✓ **Provision of question prompt lists to patients and families** to encourage questions.

### Ideas for further exploration

- Continue to **build the evidence base for how to collect and use PROMs and PREMs** as part of surgical care for older people.

# Pathway themes

## Appropriateness of surgery

A common question for many health services is how to decide whether surgery is the most appropriate option for older people with multiple co-morbidities.

Further discussion on this topic is warranted at a state and service level, given the complexity of the issue and its potential impact on individual patients, families and clinicians.

*‘As health professionals, we don’t always talk with patients and their families about the option of not having surgery because of the possible impact on quality of life. Although scoring systems will never be perfect, they provide health professionals with a common language/currency that can make discussions about options much easier.’*

Professor Jacqui Close, Geriatrician, Prince of Wales Hospital

## Current challenges

Challenges	Detail
<b>Communication about options</b>	<p><b>Open communication between health professionals, patients and families</b> about options is essential. Common communication challenges include:</p> <ul style="list-style-type: none"> <li>the way in which health professionals talk about the need for surgery can set patient and family expectations that surgery is the only option</li> <li>discussions with patients and family members about risks of surgery do not always clearly describe the possible impact on quality of life</li> <li>in the emergency setting, time imperatives reduce the time available for consideration of options</li> <li>cultural context (for patients and clinicians) can influence the approach to communication.</li> </ul> <p>Services do not have a <b>clear process or agreement about whose role it is to discuss goals of treatment</b> and options with patients and families.</p>
<b>Assessment of at risk patients</b>	Tools to help identify patients who may be at risk of poorer outcomes from surgery are not routinely used at every service.
<b>Planning for non-surgical options</b>	When teams are focused on delivery of surgical care, <b>standardised approaches for patients who do not have surgery</b> may not be in place. However, patient needs must be managed appropriately regardless of whether the patient has surgery. This may include ongoing management of surgical issues and involvement of geriatric, general medicine and palliative care teams.

## Ideas for change

Ideas	What services can do
<b>Communication guidance</b>	<p>Develop <b>guidance for communication</b> with patients for whom surgery may be an option and their families, including:</p> <ul style="list-style-type: none"> <li>how to talk about surgery as an option rather than a definite outcome</li> <li>how to talk about the possible impact of surgery in a way that supports informed decision making</li> <li>how to reach consensus between the patient and clinical team to set limits on interventions that would <b>not</b> be aligned with the patient’s goals of care. Interventions that can be discussed in this context would include appropriateness for non-invasive ventilation, inotrope support, intubation and admission to an intensive care unit.</li> </ul>

Ideas	What services can do
<b>Tools to support assessment and communication of risk</b>	Create a list of <b>commonly used risk assessment tools</b> and guidance on how to incorporate these into a process of shared decision-making about surgery.  Objective risk-assessment tools can provide a basis for discussion and decision making by identifying patients who may benefit from further discussion of the appropriateness of surgery. Risk assessment tools and scores do not replace clinical judgement and but provide a way to start the conversation with the multidisciplinary team and with the patient. Decisions should take account of what is important for patients and their families.
<b>Role definition</b>	Learn from successful shared care models to <b>create a culture that supports team members to contribute to discussions about appropriateness of surgery</b> for individual patients.  Services should consider investing in skills development in this area.
<b>Planning for non-surgical options</b>	Discuss and agree processes for how the <b>needs of non-surgical patients</b> will be identified and managed.

## Tools and case studies

 Risk-assessment tools	 End-of-life multidisciplinary forum
<p>The American College of Surgeons <a href="#">National Surgical Quality Improvement Program (ACS NSQIP®) risk calculator</a> provides a way of estimating a patient's risk of postoperative complications. Estimates are calculated using data from large numbers of patients having a particular surgical procedure.</p> <p><a href="#">P-POSSUM<sup>4</sup></a> is a surgical risk prediction scoring system for predicting mortality during surgery.</p> <p><a href="#">Criteria for Screening and Triaging to Appropriate Alternative care (CriSTAL)</a> is a screening tool that has been developed and validated in five countries, including Australia, to minimise the uncertainty of prediction of time of death to facilitate the initiation of honest conversations with dying patients and their caregivers about preferences for end of life treatment and more appropriate place of death outside acute hospitals.</p>	<p>Lismore Base Hospital holds a regular multidisciplinary forum around end of life care. These have included a focus on appropriateness of surgery. The forum provides an opportunity for the service to discuss how complex decision making occurs, based around case studies and scenarios. Input from external experts allows staff to gain advice around issues such as advance care planning and legal considerations.</p> <p><i>For more information, contact: Sue Velovski, Lismore Base Hospital</i></p>
	 High-risk clinic
	<p>Clinics for high-risk surgical patients, allow patients and their families meet with the surgeon, anaesthetist, intensivist and geriatrician to decide on the most appropriate treatment pathway for them. The discussion is about risk, goals, short term and long-term outcomes and includes 'limits of care'. This may include surgery as an option, but where no decision has been made and a request for admission (RFA) has not yet been submitted.</p>

The [Clinical Frailty Scale](#)<sup>5</sup> is a practical and efficient tool for assessing frailty.

The [Edmonton Frailty Scale](#)<sup>6</sup> is another tool that can be used to assess frailty. It consists of nine domains and eleven items.

The [National Emergency Laparotomy Audit \(NELA\)](#)<sup>7</sup> is an ongoing national clinical audit of patients having emergency bowel surgery in the UK. The NELA data have led to the development of a [bespoke emergency laparotomy risk assessment tool](#) to predict the risk of 30-day mortality.



## Last Days of Life Toolkit

The Clinical Excellence Commission [Last Days of Life Toolkit](#) provides tools and resources to ensure all dying patients are recognised early, receive optimal symptom control and have social, spiritual and cultural needs addressed. It emphasises the need for patient, families and carers to be involved in decision making, and the importance of bereavement support. This includes tools related to communication.

## Considerations for the use of risk assessment tools

- ✓ Provide a foundation for appropriateness of care discussions.
- ✓ Encourage team-building through collaborative care conversations.
- ✓ Can be used to flag high-risk patients for more comprehensive follow-up or assessment.

## Ideas for further exploration

- Work with patients to:
  - **get a better understanding of the outcomes that are important for patients and their families**, beyond the success of the operation itself
  - **understand what success and failure mean** from a patient and family perspective.
- Review the work being undertaken on **PROMs** through ACS NSQIP.
- Explore the potential for using the **CriSTAL screening tool in pre-admission clinics**.

## Pre-admission clinics

While many services have pre-admission clinics for patients undergoing elective surgery, there are inconsistencies in approach and the information collected is not used optimally to inform the patient pathway.

The pre-admission process is a critical mechanism to capture information about the requirements of older people with complex needs. It is critical not only to have a standardised approach to pre-admission but to ensure that the information collected is communicated to relevant members of the surgical care team to inform subsequent approaches to care.

***'Pre-admission clinics are a group effort and not the sole responsibility of one person or one discipline. We need a multidisciplinary system to make it happen, to ensure we can work together effectively and provide the best care possible for our patients.'***

Dr Lissa Buenaventura, Anaesthetist, Westmead Hospital

## Current challenges

Challenges	Details
<b>How to undertake a pre-admission review</b>	<p>There is <b>no clear agreement or protocol for what information should be collected and reviewed at pre-admission</b>. Information provided by GPs in the RFA and other documents is often inconsistent and incomplete.</p> <p>Considerations in determining the optimal process for pre-admission review include:</p> <ul style="list-style-type: none"> <li>• the importance of face-to-face patient contact for older patients with complex needs (telephone review does not provide sufficient opportunity to observe the patient)</li> <li>• scheduling pre-admission clinics with sufficient time ahead of surgery to allow identified issues to be acted upon</li> <li>• agreement on who should lead and participate in pre-admission clinics to ensure a comprehensive patient assessment (nurse-led vs anaesthetist-led approach).</li> </ul>
<b>Transfer of information</b>	<p>Information collected at pre-admission can be helpful both for surgery planning and for proactive consideration of discharge planning and rehabilitation needs.</p> <p><b>Challenges in effective and efficient transfer of information collected at pre-admission include:</b></p> <ul style="list-style-type: none"> <li>• inefficiencies caused by variation in eMR systems between and within health services</li> <li>• lack of embedded pathways for information transfer between teams</li> <li>• lack of embedded pathways to link patients to relevant interventions to address issues identified during pre-admission; this is a major issue in prevention of <b>delirium</b>.</li> </ul>
<b>Patient information</b>	<p>There is <b>no consistency in the information provided to patients and their carers at pre-admission</b>.</p>

## Ideas for change

Ideas	What services can do
<b>Develop guidelines for pre-admission review</b>	Consider <b>standardising some aspects of the pre-admission process</b> (e.g. consistent adoption of the patient health questionnaire as a component of the RFA).
<b>Use information technology</b>	Consider how information technology could standardise pre-admission processes: <ul style="list-style-type: none"> <li>• <b>EMR2</b> could help embed key elements of pre-admission information</li> <li>• develop an <b>electronic RFA</b></li> <li>• explore the use of <b>telehealth at a pre-admission clinic</b> to facilitate an anaesthetic consult where no anaesthetist is available on site.</li> </ul>
<b>Develop a standard patient information pack</b>	Develop a <b>standard information pack</b> for patients that can be tailored as required. Contents could include: <ul style="list-style-type: none"> <li>• tips for staying healthy and active before surgery, including smoking cessation</li> <li>• eating and fasting before surgery</li> <li>• asking questions</li> <li>• list of health professionals who may be involved in care</li> <li>• preparing for surgery</li> <li>• preparing for hospital and what to bring</li> <li>• arriving at hospital and what to expect</li> <li>• what happens when you go home</li> <li>• self-care after surgery</li> <li>• who to contact for help</li> </ul>
<b>Improve the function of the pre-admission clinic</b>	Create a local <b>forum within the LHD to share ideas</b> about how to run and resource pre-admission clinics. A pre-admission clinic should have enough space and be planned to allow enough time to support discussions with each patient. Pre-admission clinics should be multidisciplinary, ideally involving an anaesthetist, physician, allied health support (physiotherapist, dietitian, social worker), pharmacist, nurses, educators and the discharge planner.
<b>Engage with GPs</b>	The patient's GP should be part of the pre-admission planning. There are various ways of involving the GP. For example, when the RFA is received through bookings, a letter can be sent to the patient suggesting they book an appointment with their GP. Provide information to the GPs to help guide patient referrals for surgical services (locally or elsewhere if no local service is available). Information about surgical services may be linked with wait list details to facilitate redirection of less complex cases to a district facility (where appropriate), rather than to a major referral or base hospital. Working with the local primary health network (PHN) can also be helpful to increase GP awareness about information to supply with the RFA (for example specialist letters, results of recent blood tests, etc.). This will help the GP to feel part of the process and can support relationships between the LHD and PHN.

## Tools and case studies



### High-risk anaesthetics clinic

Westmead hospital has been trialling a **high-risk pre-admission clinic** for one year. Any patient identified as potentially high risk can be seen at the high-risk clinic, regardless of whether a date for surgery has been set.

A pre-admission hospitalist collates baseline information and results from investigations for each patient, liaising where necessary with other health professionals.

At the high-risk clinic, a comprehensive medical and anaesthetic review is undertaken. This includes a review of functional status and use of scores such as the Edmonton frailty scale and surgical risk stratification with the NSQIP tools. A discussion is held with the patient to evaluate their understanding and expectations and identify what is important to them, with alternative options discussed as needed. Following the patient review, the case is discussed with the perioperative team consisting of anaesthetists, intensivist and surgical team to allow collaborative, multidisciplinary team care to be provided for the patient.

The perioperative team follow-up post-surgery with the patient, ensuring collaborative, multidisciplinary care is provided until discharge.

*For more information, contact: Claire Kim, Westmead hospital*



### Health Pathways

Mid North Coast Local Health District have incorporated pre-operative care into HealthPathways. This includes ensuring the goals of surgery align with the patient's overall care plan, and reviewing all patients booked for moderate or major surgery to identify risks and appropriate management prior to surgery. This includes consideration of whether surgery is still necessary and appropriate.

*For more information, contact: Michael Hills, Coffs Harbour Health Campus, Mid North Coast Local Health District*



### Perioperative toolkit

The ACI **Perioperative Toolkit** includes a range of tools that may be useful during pre-admission, including a patient health questionnaire, pre-admission medical assessment form and patient information booklet that can be adapted by LHDs or other health services.



### Strong for Surgery Program

The ACS **Strong for Surgery Program**<sup>8</sup> is a quality initiative aimed at identifying and evaluating evidence-based practices to optimise the health of patients before surgery. Checklists are used to screen patients for potential risk factors that can lead to surgical complications and to provide appropriate interventions to ensure better surgical outcomes.

## Function of a pre-admission clinic

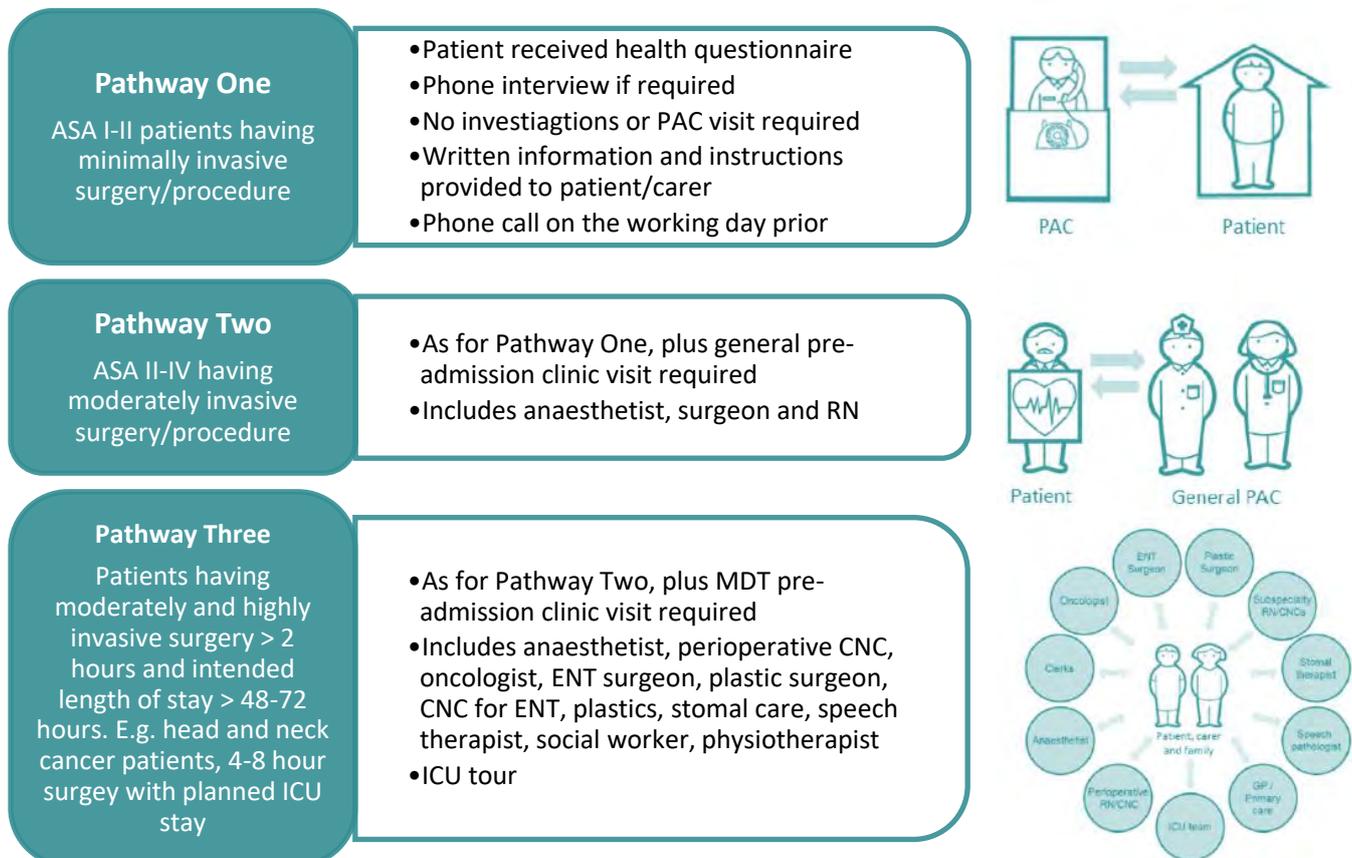
The pre-admission clinic should not be selective. It is not an anaesthetic review clinic, but should support a multidisciplinary approach that allows for:

- ✓ shared goal setting between health professionals and patients
- ✓ optimisation of co-morbidities
- ✓ smoking cessation support
- ✓ nutrition improvement (obesity and malnutrition)
- ✓ perioperative glycaemic control
- ✓ pre-admission exercise and physiotherapy
- ✓ education to help patients understand the procedure, their patient journey, set expectations of the care pathway and anticipated discharge plan
- ✓ discharge planning
- ✓ medication review specific to perioperative care; medication management planning for surgical journey.

## Ideas for further exploration

Consider using a triage care model, incorporating patient pathways based on patient risk.

**Figure 1: An example of a triage process used at a NSW teaching hospital (from the ACI Perioperative Toolkit)**



PACS: Pre-admission clinic; ASA: American Society of Anaesthesiology; RN: Registered nurse; ICU: intensive care unit; CNC: Clinical nurse consultant; ENT: Ear, nose and throat

## Optimising recovery and rehabilitation

The need for and approaches to optimising recovery and rehabilitation is a common challenge for health services. Pre-habilitation is an evolving model of care for which the evidence base is still emerging. Current examples are based mainly within orthopaedic services.

*‘Enhanced recovery is an essential component in managing the challenge of growing demands on surgical waitlists. Enhanced recovery is a patient-centred optimisation program aimed to improve recovery time and encourage safe early discharge with increased multidisciplinary support in the community.’*

Lisa Nealon, Clinical Nurse Consultant (CNC) Orthopaedics, Prince of Wales Hospital

### Current challenges

Consideration	Issues
<b>How to run a pre-habilitation program</b>	Evidence is still emerging about the most effective processes and appropriate timeframes for identifying <b>patients who will benefit most from pre-habilitation</b> , as well as how best to run a program
<b>Resource availability</b>	Resource constraints are a challenge for some services, with <b>limited places available for rehabilitation</b> . Strict criteria for access to rehabilitation support may mean that some patients cannot access support post-surgery.

### Ideas for change

Consideration	What services can do
<b>Identifying which patients could benefit from pre-habilitation</b>	Create <b>common guidance around the use of risk assessment tools and/or frailty scores</b> to identify patients who could benefit most from pre-habilitation and rehabilitation support.
<b>Building the evidence base for pre-habilitation</b>	Create a local forum within the LHD for <b>sharing ideas and learning about approaches to pre-habilitation</b> . Ensure appropriate and rigorous evaluation of pre-habilitation programs.

## Tools and case studies



### Osteoarthritis Chronic Care Program (OACCP)

To provide osteoarthritis care in NSW in line with evidence, national and international guidelines, the [OACCP model of care](#) is a multidisciplinary team intervention for people with significant osteoarthritis of the knee and/or hip. Most people accessing OACCP are on the NSW waitlist for elective hip and/or knee joint replacement. Recruitment occurs on receipt of the RFA, or via surgeon referral pre-wait-listing. GP or other medical referral is accepted in the case of hip and/or knee joint pain rating 4/10 on most days of the past month.

The program uses behaviour-change methodology over 12 months to support self-management of an individual's overall health. Clinical assessment and patient-reported measures are used to develop a care plan with agreed interventions that address individualised needs (e.g. related to social, vocational, co-morbidities, psychological and joint health specific needs). Interventions are community-based where possible or provided via hospital-based services where cost and access is an issue.

Formal individualised assessment is undertaken every 12 weeks for 12 months or until they are called up for hospital admission.

The OACCP model of care has been tested and evaluated in eight LHDs in NSW. The evaluation revealed positive patient and health system outcomes, such as:

- improved co-morbidity management so less postponements for admission at pre-admission clinic
- home modifications attended to well before surgery so smooth transition to discharge home
- improved functional capacity in some people so deferment of surgery in about 11% of those with knee arthritis and escalation up the waitlist for some whose symptoms are increasing.

The OACCP is being implemented in all major hospitals across NSW as a part of the *Leading Better Value Care* initiatives.

*For more information, contact: Julia Thompson, Manager Musculoskeletal Network, ACI*



### Advanced Recovery Orthopaedic Program

The [Advanced Recovery Orthopaedic Program](#) is a patient-centred, innovative model of care which targets a group of patients who would benefit from a fast-track orthopaedic program that includes front-loaded input and support from a physiotherapist. Advanced Recovery Orthopaedic Program is based on Enhanced Recovery After Surgery (ERAS) principles and support patients being discharged from the acute hospital setting within 24-48 hours following hip and knee replacement surgery.

A multidisciplinary approach is viewed as essential to the success of this program. A key component has been the introduction of early mobilisation and intensive physiotherapy model of care. This allows for mobilisation on the day of surgery followed by increased physiotherapy sessions to ensure safe and appropriate early discharge. Once the patient has been assessed as being safe for discharge the physiotherapist and nurse support and care for the patient in the community.

*For more information, contact: Lisa Nealon, Prince of Wales Hospital*



### ERAS

[Enhanced Recovery After Surgery](#) (ERAS) uses protocolised strategies to optimise the patient's condition for surgery and recovery (see Figure 2). Recovery time is shortened compared with traditional surgery, with attendant benefits in rapid resumption of normal activities after surgery. There is evidence that an ERAS program can reduce complication rates in orthopaedic and colorectal surgery. These advantages would be beneficial to the older surgical patient.

ERAS is underpinned by collaboration between surgical and anaesthetic teams. Protocolisation and audit activities are core elements of the ERAS approach. While elements of ERAS may vary between surgical units and hospitals, there are many common features in the preoperative, intraoperative and postoperative phases.

*For more information, see the [Enhanced Recovery After Surgery Report](#)*



## Preoperative pulmonary physiotherapy

There is [evidence that pre-operative physiotherapy](#)<sup>9</sup> and patient education reduces post-operative pulmonary complications and hospital length of stay. The Preoperative pulmonary physiotherapy (PrEP) program pilot at Nepean hospital is aiming for a ~50% reduction in respiratory morbidity following major abdominal and thoracic surgery. The program is run by a skilled physiotherapist with support from the Departments of Academic Surgery, General Surgery, Thoracic Surgery and Anaesthesia.

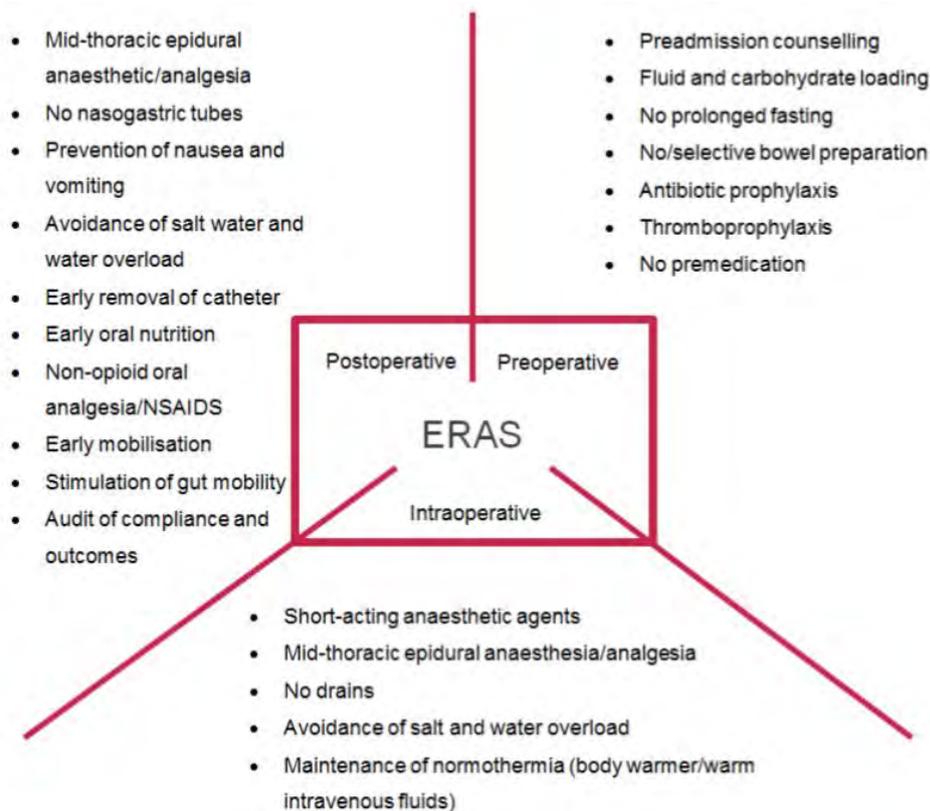
A three-month feasibility and safety pilot with 30 patients suggested the program can be run on a larger scale. Patient feedback surveys were overwhelmingly positive, with >90% finding the program very beneficial before and after surgery. Patient compliance with exercise was around 70%. More than 90% of the patients found a combination of exercise and education very useful and 100% said that they would strongly recommend this program to others.

*For more information, contact Anwar Hussein, Senior Cardiopulmonary physiotherapist, Nepean Hospital*

## Considerations for planning a pre-habilitation and rehabilitation program

- ✓ Who should coordinate the process.
- ✓ How to connect surgical services with teams that can support pre-habilitation and rehabilitation, particularly when services are in multiple locations or provided outside surgical departments.
- ✓ Criteria for access to rehabilitation support.
- ✓ The distinction between rehabilitation support and convalescence or respite care.
- ✓ How to build a case supporting the need for additional input from allied health.
- ✓ The role of the GP as well as hospital staff in supporting changes in patient behaviour and uptake of interventions to optimise recovery pre- and post-surgery.

**Figure 2: Components of enhanced recovery after surgery used across different specialties**



Melnyk M, Casey RG, Black P, Koupparis AJ. Enhanced Recovery After Surgery (ERAS) protocols: Time to change practice? Can Urol Assoc. 2011 Oct. 5 (5): 342-348

### Ideas for further exploration

- **Collaboration between services interested in pre-habilitation** to further build the evidence base.
- Further research to explore the **costs and benefits of pre-habilitation models** in terms of improved patient outcomes, service use and costs.
- Explore opportunities to **embed aspects of pre-habilitation within health pathways**.

## Discharge planning and follow-up care

Effective discharge planning requires early consideration of likely patient needs and support, and consistency in communication with patients and their carers.

The process of discharge planning starts before admission for elective patients and at the point of admission for patients undergoing emergency or unplanned surgery.

After discharge, hospitals have a responsibility to provide follow-up care. This involves working with primary care and community services and with the patient, to avoid unnecessary readmission.

*'Patients who have had surgery have a warranty period on their surgery. The hospital and surgical teams should be providing the mechanism of ongoing assessment and care of the patient for that time period.'*

*Professor Michael Cox, Surgeon, Nepean Hospital*

### Current challenges

Challenges	Detail
<b>Discharge planning process</b>	<b>Processes for planning discharge are not always clearly defined.</b> This includes processes for and early identification of home support needs, likely transport requirements at discharge and requirement for home care packages or other support. In the absence of agreed processes, identification of needs may occur after surgery, and can delay discharge.
<b>Communication</b>	In the absence of <b>clear communication</b> from health services, patients and family members may have unrealistic expectations about length of hospital stay. <b>Inconsistent messaging</b> between different health professionals can exacerbate the challenge of managing patient and family expectations. A lack of clear direction and last-minute decisions from medical teams can result in confusion or rushed processes at the point of discharge.
<b>Resource availability</b>	<b>Availability of Hospital in the Home support and/or aged care packages</b> is reported to be limited by some services. The complexity of processes for accessing home support and aged care packages can have flow-on effects to hospital length of stay and patient outcomes.
<b>Linking hospital and primary and community-based care</b>	Links between hospital services and primary and community-based care are not always well established or embedded into pathways of care.
<b>Responsibility for follow-up care</b>	<b>Shared follow-up care</b> is emerging as a way of streamlining follow-up care but requires clear mechanisms for re-entry to the hospital system and access to specialist expertise when required.
<b>Reasons for re-presentation to the emergency department and re-admissions</b>	Services do not necessarily <b>have access to, or capture the data</b> to understand why readmissions are occurring and for which patient cohorts.

## Ideas for change

Ideas	What services can do
<b>Establishment of a multidisciplinary pre-admission clinic</b>	The pre-admission clinic includes identification of issues related to discharge, discharge planning and education of patient and family around the <a href="#">discharge</a> process.
<b>Emergency discharge planning</b>	Within the <a href="#">COPS</a> program, discharge planning for older patients with an emergency surgical admission is started within 24 hours of admission.*
<b>Establishment of a prospective follow-up program post-discharge</b>	<p>A <b>post-discharge follow-up call, smartphone app or clinic</b> can be used to identify patients at risk of re-admission, or those who begin to experience post-operative complications after discharge. The process should be supported by a seven-day-a-week clinic for face-to-face review where required.</p> <p>Simple self-assessment questions about pain, signs of infection, urine output, etc. can be asked through a smartphone app or telephone interview. Responses can be used to trigger face-to-face follow-up.</p> <p>Such approaches provide an additional level of support for patients post-discharge. Patients should be informed before admission that this follow-up will occur.</p>
<b>Education about community health support</b>	<b>In-services from community health teams</b> to surgical teams can provide a mechanism to highlight the support community health can offer and what a good referral is to ensure appropriate transfer of information.

\* Up to 50% of emergency admissions in a surgical unit will not have an operation. This is specialty dependant.

## Tools and case studies

 **HealthPathways**

Partnerships between LHDs and PHNs are strengthened by collaborative efforts in developing clinical care pathways.

Integration of primary and hospital-based care is facilitated by empowering clinicians with the tools and information necessary to deliver shared care. **HealthPathways** provide guidance for assessment and management of health conditions at the point of care, providing evidence-based information relevant to the local healthcare environment.

 **Transfer of information to community care**

Coffs Harbour Health Campus have established the Yellow Envelope, which facilitates **transfer of care information for patients being admitted from residential aged care facilities** or who are returning to a residential aged care facility.

The envelope provides a checklist for transfer of care and is also a receptacle for relevant documentation. Nurses are prompted to give consistent handover information and an outreach nurse practitioner is available for follow up if required.

*For more information, contact Kerry Bartlett, Coffs Harbour Health Campus*

## Ideas for further exploration

- Develop a **list of established criteria that must be met prior to discharge**, so that the discharge process is dependent on clinical outcomes not time.
- Use the [Perioperative Toolkit Transfer of Care from Hospital Planning Questionnaire](#) to facilitate enhanced discharge planning.
- Establish a **process of scheduled patient calls following discharge** (number of days dependent on type of surgery duration of follow-up). Follow a protocol for calls aimed at establishing that the patient's wellbeing is appropriate, with referral to a follow-up clinic made as required.



## Clinical themes

### Managing patients with co-morbidities

While an integrated approach to care will likely benefit all patients, issues are exacerbated for patients with multiple co-morbidities. Integration and coordination of care between surgical teams and the medical specialties managing the patient's other health conditions is important to inform the approach to decision making and care provision.

Early identification of patients with co-morbidities and pathways for provision of additional medical input and support are important.

*'In a multidisciplinary model, physicians can identify risks and optimise the status of co-morbid conditions of frail surgical patients preoperatively. By monitoring the medical status of post-operative patients closely, to identify and treat exacerbations of co-morbid conditions early, physicians can have a significant impact in minimising both medical complications and mortality.'*

Dr Laura Ahmad, Geriatrician, Royal North Shore Hospital

*'Age-related co-morbidities are progressive and largely irreversible. We need to have ways of identifying elderly patients being considered for surgery in order to explain risks and benefits in more accurate ways.'*

Professor Ken Hillman, Professor of Intensive Care, Liverpool hospital

### Current challenges

Consideration	Issues
<b>Identifying patients at risk</b>	Services have flagged the need for a more embedded <b>approach to identifying patients at higher risk</b> of poorer surgical outcomes or complications due to co-morbidities so that closer observation can be planned prospectively and appropriate interventions undertaken pre- and post-surgery.
<b>Lack of consistent approaches</b>	The absence of a <b>common pathway or approach to identifying patients at higher risk</b> leads to variation within and across services. Some approaches and interventions are dependent on intensive care units (ICU), others are surgeon-led. For staff managing patient care, this can lead to inefficiencies, tensions and variation in practice.
<b>Management of patients with complex needs</b>	Variation is apparent in the way that services manage the needs of patients with complex or high intensity needs. This includes: <ul style="list-style-type: none"> <li>• variation in the use of <b>ICU and close observation beds<sup>i</sup></b> for management of patients with complex/high intensity needs</li> <li>• variation in approach to <b>ICU management (open vs closed ICUs)</b></li> <li>• <b>inconsistency in the level of information ICU receive</b> downstream of pre-admission in order to plan or prepare.</li> </ul> Resource constraints are a challenge for some services, in particular in relation to the number of available critical care or ICU beds.
<b>Care coordination</b>	A coordinated approach to care can be challenging when co-morbidities require input from multiple specialties.

<sup>i</sup> Previously known as high dependency units, a close observation unit is an identified adult bed or unit providing an intermediate level of patient monitoring and observation between that of a general ward and an intensive care unit. For further info, refer to NSW Health *Guide to the Role Delineation of Health Services* (2018).

## Ideas for change

Consideration	What services can do
<b>Audit and review</b>	Undertake local audit to <b>evaluate why and how ICU is being used</b> with a view to identifying other potential mechanisms for managing complex patient needs. Establish the criteria for admission and care and audit against these criteria. Use the methodology that was validated with the NELA project.
<b>Multidisciplinary team work</b>	Identification and management of co-morbidities requires a <b>multidisciplinary approach that includes medical, nursing and allied health input</b> . Input from relevant medical specialties is critical to understand the risks involved with different co-morbidities and how interventions should be planned and prioritised.
<b>Extended recovery</b>	Explore alternative models for recovery, such as extended recovery models for patients with complex needs regardless of level of current complications.
<b>Triage criteria</b>	Develop local standardised triage criteria at a hospital level to mandate admission to ICU for patients of predefined medical or surgical complexity.
<b>Critical care outreach</b>	Develop anaesthesia-led critical care outreach and acute pain service (APS) to systematically provide enhanced oversight of complex ward patients in the 24-48 hours postoperatively. <sup>ii</sup>

## Tools and case studies



### Auditing practice

John Hunter Hospital has undertaken an **audit of surgical procedures admitted to ICU**. This is a way of providing insight into what is driving requests for and access to critical care beds for people having elective major general and colorectal surgery.

The audit flagged deficits in the way in which pre-admission information is communicated to critical care. It has also led to a review of the process for identifying patients who may be at increased risk of complications following surgery and who may benefit from critical care.

*For more information, contact: Pragma Ajistaria, John Hunter Hospital*

John Hunter Hospital is undertaking a **prospective audit of emergency laparotomies**. This includes reviewing approaches to risk assessment. The audit will be used to inform common pathway elements, such as mandating when ICU might be needed post-operatively.

*For more information, contact: Jon Gani, John Hunter Hospital*



### Management of complex patients: learning from cancer teams

A high proportion of patients treated through the **gynaecological cancer service** at Westmead hospital service have multiple co-morbidities, with obesity a common issue.

For patients with complex needs, the pre-admission process starts 7-10 days prior to admission with the goal of starting pre-admission earlier rather than delaying surgery. All patients seen at pre-admission are reviewed by the team at the weekly ward meeting to prepare the team and facilitate discussions about interventions that may be needed.

A complete psychosocial and functional assessment is undertaken, with flags and possible solutions highlighted before the patient comes to hospital.

Surgical assessment is undertaken by a team including a surgical trainee, anaesthetist, and a CNC or clinical nurse specialist. Referral to a social worker or psychologist will be made if required.

*For more information, contact: Alison Brand, Westmead hospital*

<sup>ii</sup> Story DA et al. Effect of an anaesthesia department led critical care outreach and acute pain service on postoperative serious adverse events. *Anaesthesia* 2006; 61(1); 24–28.

## Ideas for further exploration

- Develop policies and procedures at a local level to clarify appropriate management of patients being kept in Recovery or Post-Anaesthetic Care Unit (PACU) for prolonged periods after surgery.<sup>iii</sup>
- Formalise procedures and practices for keeping patients in recovery overnight rather than going to surgical wards.<sup>10</sup> This concept is being trialled at Lismore and in Adelaide.
- It is recognised internationally that strategies are needed to manage complex patients with multiple co-morbidities in the perioperative setting. These strategies include co-management models of care between surgeons, physicians and anaesthetists, augmented APS rounds and protocolised extended stay periods in recovery.<sup>11</sup> Clinicians are encouraged to develop local models using local assets and advantages.
- Given that elderly patients have an inherent risk of rapid deterioration in the perioperative setting, a robust and clear communication strategy for escalation of care is particularly important (e.g. modified *Between the Flags* criteria and guidance specifically for PACU). Such a strategy should be accessible to both junior medical and nursing staff and could also incorporate carer observations and concerns. Accessibility to consultant level review is a critical component of perioperative care.

The need to develop improved systems to provide appropriate care for the complex post-operative patient who is not sick enough for intensive care is being recognised as a challenge internationally. A variety of different models have been proposed and trialled, although formally published reports and studies are somewhat limited.

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<sup>iii</sup> Current project at Gosford Hospital in collaboration with the ACI.

## Management of delirium

Delirium is a common issue experienced by older people receiving surgery and can present challenges for patients, family members and staff.

Assessment of cognition is a core part of surgical planning and care for older people.

Services have expressed a view that the number of people experiencing delirium is increasing.

*'Delirium kills. People need to assess and treat the brain in the same way that they assess and treat the heart and lungs.'*

Professor Jacqui Close, Geriatrician, Prince of Wales Hospital

*'With delirium, prevention really is better than cure. Delirium prevention strategies have been found to significantly reduce the onset of delirium in older people who are acutely unwell. Simple and cost-effective measures can have a major impact on improving the health outcomes and experience for older people in hospital and should be considered part of fundamental care.'*

Kimberley Thomsett, NUM Aged Care, Rehabilitation and Medicine, Sutherland Hospital and Janine Masso, CNC Dementia Prince of Wales Hospital

### Current challenges

Challenges	Detail
<b>Identifying patients at risk of delirium</b>	<p>Although tools exist to identify people at risk of delirium, <b>pre-operative risk assessment does not always occur</b>. Assessment of cognition is often seen as an add-on rather than a core element of surgical assessment.</p> <p>If the risk is not identified and/or information about risk is not communicated across teams, preventive interventions may not be implemented.</p> <p>If risk of delirium is not adequately assessed before surgery, this reduces the likelihood of preventive strategies being applied.</p>
<b>Approaches to preventing delirium</b>	<p>A range of approaches can be useful in preventing delirium. However, <b>strategies for prevention of delirium are not consistently applied</b>.</p> <p>Routine movement of patients between wards, often at night, can add to patient confusion.</p>
<b>Approaches to managing delirium</b>	<p>The evidence base around the <b>impact of anaesthetics on delirium</b> and data on the effectiveness and appropriate dosing of <b>anti-psychotic</b> medications is evolving and awareness of newer evidence may not be widespread.</p> <p>The consultation process identified the <b>widespread use of nursing specials</b>.<sup>iv</sup> These are often quite junior staff and often have limited support and no common guidance on approach.</p>
<b>Patient and family communication</b>	<p>The <b>risk of delirium may not be explained to the patient or their family</b> before surgery. If delirium occurs, this can be upsetting for families and carers.</p>
<b>Resource availability</b>	<p>The availability of and integration of <b>specialist geriatric support</b> to assist in identifying risk and managing delirium appropriately varies between services.</p>

<sup>iv</sup> A nurse special refers to a clinician with skills to provide one-on-one observation, supportive and clinical care to one patient who may have clinical and behavioural disturbance. This additional level of care aims to enhance patient safety and provide quality care to ensure the best outcome for the patient, family and carer.

## Ideas for change

Ideas	What services can do
<b>Risk assessment</b>	<b>Assessment of delirium risk</b> should be undertaken at the pre-admission clinic, with information provided about how to mitigate risk in the pre-admission phase.
<b>Preventive strategies</b>	<p>Services should establish should <b>incorporate routine preventative strategies into clinical practice</b>.</p> <p>This includes:</p> <ul style="list-style-type: none"> <li>• talking to families and carers about cognitive impairment or history of poor anaesthetic tolerance to help identify delirium risk</li> <li>• anaesthetic approaches to minimise the risk of delirium (see <i>Care of Confused Hospitalised Older Persons</i> program) and use of regional anaesthesia promoted where clinically appropriate<sup>12</sup></li> <li>• balancing the risk of analgesic impact on delirium with pain management; the multidisciplinary team should routinely look for medical causes of pain and unstable co-morbidities and coordinate clinical approaches accordingly.</li> </ul> <p>Use <b>tools to create a low-risk environment for delirium</b> such as:</p> <ul style="list-style-type: none"> <li>• facilitating access to family members (particularly for patients from culturally and linguistically diverse communities who are at higher risk of delirium)</li> <li>• access to physiotherapy (mobilisation can have an impact on delirium).</li> </ul>
<b>Preparation of family members</b>	<p><b>Preparation of family members and carers</b> about what to expect can be helpful, as their presence can help orientate a confused patient following surgery. This includes:</p> <ul style="list-style-type: none"> <li>• informing family members about the risk of delirium pre-operatively</li> <li>• engaging the family to assist with care of the delirious patient.</li> </ul> <p><b>Family education</b> may include provision of information packs to family members about hospital and home-based strategies for minimising and managing delirium.</p>
<b>Multidisciplinary team support</b>	<b>Embed the use of resources to facilitate management of delirium</b> into the surgical care pathway. This includes clear identification of the multidisciplinary team members available to support the prevention and management of delirium. A geriatric liaison service can be a significant support to surgical and anaesthetic teams in the management of delirium and should be integrated as part of a surgical unit.
<b>Staff education</b>	<p>Run <b>education sessions</b> for surgical teams on the identification of patients at risk of delirium, appropriate mechanisms to prevent delirium, how to identify delirium early and how to manage delirium if it occurs.</p> <p>Many <b>nursing strategies</b> are available that can be used before opting for a special approach. Where nurse specials are used, support and training should be provided for staff.</p>

## Tools and case studies



### Care of Confused Hospitalised Older Persons Program

#### Care of Confused Hospitalised Older Persons

program is a collaboration between the ACI and the National Health and Medical Research Council Cognitive Decline Partnership Centre. Objectives are to:

- design and prioritise principles for best practice care for older confused people in hospital
- tailor implementation to the needs of the older person, carers, families and the hospital teams
- share achievements, innovation and knowledge and embed systems into practice to sustain and spread improvements in the care of older confused people in hospital.



### Top 5

Top 5 is a process developed by Central Coast Local Health District and adapted by the Clinical Excellence Commission that encourages health professionals to engage with carers of people with dementia or cognitive impairment to gain valuable non-clinical information to help personalise care.



### Delirium Care Standard

The Australian Commission for Safety and Quality in Health Care Delirium Clinical Care Standard and accompanying resources provide guidance to consumers, clinicians and health services on delivering appropriate care to people at risk of, or with, delirium.



### Hospital Elder Life Program (HELP)

The Hospital Elder Life Program (HELP) is a patient-care program designed to ensure optimal care for older adults in the hospital by preventing delirium and loss of functioning. The Care of Confused Hospitalised Older Persons program draws from the HELP program.

## Strategies for the prevention and management of delirium

Many clinical approaches to prevention of delirium are part of fundamental nursing care. They include:

- ✓ maintaining fluid balance
- ✓ identifying and managing pain
- ✓ bowel management
- ✓ removal of urinary catheters as soon as possible
- ✓ early mobilisation
- ✓ addressing environmental factors, such as providing a quiet environment and access to family, to reduce agitation
- ✓ cues to assist orientation.

These issues may need to be included on a surgical pathway to identify them as important in preventing delirium.

## Ideas for further exploration

- Develop consensus **guidance on use of nursing specials.**

## Management of pain

Consistent and coordinated pain management was identified as an issue for older people by some services. Integration of the acute pain service as part of the multidisciplinary surgical team, with appropriate tailoring of approaches to frail older patients, is likely to be beneficial.

*'Effective pain management is based on self-reported and observed indicators. It can be classified as a pain score of three out of ten or less at rest, and (early) mobilisation, while maintaining a normal sleep pattern.'* This is not easily achieved in older patients with complex co-morbidities. The acute pain service can help as part of a multidisciplinary approach to the management of older people, providing expertise in pain assessment, multimodal analgesia, regional nerve blocks, minimising opioid use and increasing function, and preventing transition of acute to chronic pain.'

Dr Su-Jen Yap, Anaesthetist, Prince of Wales Hospital

### Current challenges

Challenges	Detail
Awareness of guidelines	A <b>lack of awareness by some health professionals of relevant pain management guidelines</b> can contribute to variation in approaches to management of pain.
Inconsistent approaches	<b>Different approaches to pain management and anaesthetic care</b> during surgery and at pain clinics may be provided by different anaesthetists. These may lead to inconsistencies in the application of pain management guidelines.
Tailoring of guidelines to older people	<b>Management of pain is not a 'one size fits all' approach.</b> If guidelines are not tailored to the needs of older people, this can result in increased risk of delirium.
Subjectivity of pain scales	Traditional pain scales use a <b>subjective 1-10 rating for self-assessment of pain.</b> This may not provide a clear picture of the pain experienced by the patient.

### Ideas for change

Ideas	What services can do
Increase awareness of guidelines	Run <b>education sessions for surgical teams</b> on current pain management guidelines.
Multidisciplinary care	<b>Incorporate the APS input into care pathways.</b> APS input should not be limited to post-operative care but should be integrated as part of a multidisciplinary approach. Proactive engagement of the APS pre-operatively can be beneficial.
Tailor approaches to pain management for older people	<b>Encourage use of non-systemic opiates</b> (regional blocks and neuroaxial anaesthesia) where clinically appropriate to minimise follow-on impact on delirium, using evidence-based approaches with due consideration for non-pharmacological interventions.
Standardise or protocolise approaches	Reduce variability in practice through <b>introduction and application of local protocols</b> for pain management to increase clinician proficiency in pain management, increase consistency of practice and facilitate better research and audit capabilities.
Consider self-reported and observed indicators	It is important to be aware of <b>patient behaviour as well as reviewing self-reported pain indicators.</b> Tools are available in addition to pain scores to provide more comprehensive assessment.
Recognise the specific issues of	While protocols are important, processes also need to be in place to <b>allow patients with chronic pain to bypass protocolised care and access specialist tailored advice</b> and

∨ Numerical pain score where 0/10 is no pain and 10/10 is the worst pain ever.

Ideas	What services can do
people with chronic pain	input from a multidisciplinary team with pain management expertise. Clear guidance must be available for staff about how to seek expert input if concerned about a patient.

## Tools and case studies

 **Fascia Iliaca Block**

The use of [Fascia Iliaca Block \(FIB\)](#) in patients with a hip fracture can reduce adverse outcomes, reduce the risk of delirium, reduce length of stay and improve patient experience and staff satisfaction. The ACI Pain Management and Aged Health Networks and the St Vincent's Health Network have produced a suite of resources to support the introduction or increased use of FIB in NSW hospitals. Evaluation of the FIB resources demonstrate strong uptake of FIB tools and training with 73% of Level 4<sup>vi</sup> and above EDs using FIBs for pain management in hip fracture patients presenting to ED.<sup>13</sup>

 **Guidelines**

Australian and New Zealand College of Anaesthetists and Faculty of Pain Management [Acute Pain Management: Scientific Evidence](#) (Fourth Edition) 2015<sup>14</sup>

 **Other resources**

[ACI Pain Management Network](#) brings together consumers and clinicians to promote equity of access to pain management services for patients with chronic pain and determine priorities for action.<sup>15</sup>

The ACI website lists a number of [Pain Assessment tools](#) and resources for health professionals and consumers.<sup>16</sup>

The Australian Pain Society has a number of pain resources for people from [Culturally and Linguistically Diverse communities](#).<sup>17</sup>

## Ideas for further exploration

- Develop [systems to mitigate staff uncertainty about clinical decision making in the management of pain](#). This could include clarity about pathways for escalation and advice outside established guidelines.
- Ongoing research suggests that [asking about the level of patient comfort](#) may provide a clearer view of the need for intervention than asking patients to rate pain on a 10-point scale.
- Develop a [local framework for personalised pain plans](#), incorporating:
  - screening to identify the possibility of pain and promote awareness
  - assessment of pain using clinically appropriate, validated tools
  - differentiation of acute and chronic pain to inform management plans
  - pain management strategies, including non-pharmacological interventions, based on severity, duration and patient needs
  - communication of the plan to the care team, patient and family, including plans for further re-assessment.

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<sup>vi</sup> Emergency departments with a role delineation of Level 4 and above manage a full range of emergency presentations. They provide a 24-hour clinical triage service and definitive care for most emergency presentations, including invasive monitoring where required.

## De-conditioning

De-conditioning is a risk for patients across the surgical pathway. It can occur in the lead-up to surgery and in hospital before surgery or while awaiting discharge. See also *Optimising Recovery* section.

*'De-conditioning means loss of functioning due to inactivity and bedrest. As a result, non-frail older people are converted to frail older people. Facilitating as much upright time as possible should be the goal for all older people in hospital.'*  
 Professor Ian Cameron, Consultant Physician in Rehabilitation Medicine, John Walsh Centre for Rehabilitation, The University of Sydney

### Current challenges

Challenges	Detail
Pre-operative information and support	A patient's condition can <b>deteriorate while waiting for surgery</b> , particularly if the patient is not informed and supported to take steps that can be helpful to optimise outcomes.
Delays in surgery	While in hospital awaiting surgery, <b>de-conditioning can occur as a result of repeat fasting</b> due to delays and changes in surgery lists.
Delays in discharge	While in hospital and awaiting discharge, <b>de-conditioning can occur if there is a delay in access to a nursing home, rehabilitation service or if home care cannot be organised.</b>

### Ideas for change

Ideas	What services can do
Patient education	Pre-admission clinics provide the forum to <b>provide patients and their families with information about steps to take before surgery to optimise health.</b> Tools such as the Illawarra Shoalhaven LHD My Surgery Journey booklet and smartphone app encourage people to keep active and healthy in the lead-up to surgery. <sup>18</sup> Messaging could be tailored for older people.
Planning to minimise the impact of delays for older people	Services should <b>review common reasons for cancellation of surgery and/or delayed discharge and implement strategies to avoid or minimise cancellation.</b> Ideas may include: <ul style="list-style-type: none"> <li>not booking major surgeries towards the end of the day when a cancellation may require repeat fasting and an additional overnight stay</li> <li>ensuring in advance that a patient will have support at home when they are discharged</li> <li>early planning of likely rehabilitation or respite requirements, with the timing of surgery planned accordingly to avoid discharge being delayed.</li> </ul>
Proactive approaches to rehabilitation	<b>Rehabilitation activity should start before surgery (pre-habilitation)</b> to optimise the likelihood and time required for post-operative recovery and to minimise the risk of <b>de-conditioning.</b>

## Tools and case studies



### Fasting clock

A Fasting Clock is a mechanism to help clinical staff measure periods of fasting. Wollongong Hospital has developed [Fasting Clock Guidelines](#)<sup>19</sup> to ensure that patient fasting is kept between 6 to 9 hours, with maximum fasting no more than 12 hours.<sup>20</sup>

For more information, contact James Brinton  
Wollongong Hospital

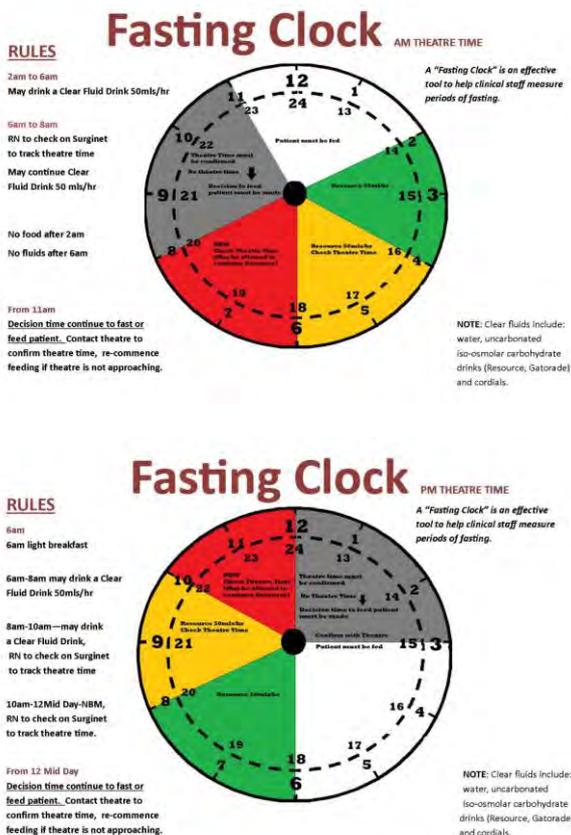


Figure 3. Fasting clock (am and pm theatre time)

### Ideas for further exploration

- The evidence base for **maintenance of fluid and caloric intake by giving calorie-dense fluids preoperatively** continues to develop. Preliminary research indicates reduced preoperative hunger and thirst in older patients given calorie-dense fluids preoperatively compared to standard fasting routines. Postoperatively, patients have a reduced risk of malnutrition as dehydration and fasting has been minimised.<sup>21</sup>
- Give **suggestions for increasing upright time**, e.g. walk to toilet, walk with family or visitors, sit out of bed and walk each hour, mobilise on day 0 for surgical patients.

## Overarching processes

### Protocolisation and standardisation

Protocols and guidelines can be helpful to achieve consistency in approach when establishing a new service or team, and to reduce variation in practice. However, for older patients with complex needs, nuanced and individualised care is important. Guidelines and protocols need to allow for flexibility based on local context and individual patient need.

*'The more we standardise practice the more efficient we become.'*  
*Dr Lissa Buenaventura, Anaesthetist, Westmead Hospital*

#### Current challenges

Challenges	Detail
<b>Clinician-level barriers to consistency of care</b>	The consultation process highlighted a view that <b>variation in approaches between individual clinicians can result in variation in how care is managed</b> , and this variation may influence patient outcomes.
	<b>Inconsistent approaches make it challenging for planning</b> by other members of the healthcare team. This can lead to inefficiencies but can also put safety at risk.
	Where guidelines and protocols do exist, they are often too long or too inaccessible to be useful to ward clinicians. Embedding protocols into hospital settings is often challenging given the restrictions of the current information technology infrastructure in NSW hospitals.
	The issue of variation or inconsistency in approach was noted as a particular issue in services and departments with a high rotation of both registrar and resident medical officers.
<b>Challenge of providing individualised care</b>	<b>Strict adherence to protocols and guidelines may sometimes be inappropriate when managing the care of frail older patients with complex needs.</b> Protocols should be used with strong clinical support and applicability reviewed for each individual patient. Protocols and pathways should not be used as surrogates for clinician-led comprehensive care.

#### Ideas for change

Consideration	What services can do
<b>Local protocols and guidelines</b>	<b>Evidence-based protocols</b> support consistency and can be a driver for change. They can be referred to when building a case for a new model or additional resource. The process for developing protocols can be valuable in itself, to encourage collaboration and provide a focus for multidisciplinary team working. Written protocols provide an important focus for communication, allowing the rationale for variation in practice to be considered and providing a tool to allow decisions based on personal preference to be challenged.
<b>Make protocols useful</b>	Develop <b>short one-page summaries of protocols and/or visual prompts</b> that can be put onto noticeboards and referenced easily.
<b>Ensure clear team communication</b>	The need to tailor care to individual needs while ensuring a consistent approach relies on <b>good communication</b> and <b>strong leadership</b> . This allows the optimal approach to be discussed, challenged and documented to ensure all relevant team members are aware of the recommended management plan for the patient.
<b>Support from relevant agencies</b>	<b>Support from agencies such as the ACI</b> can be helpful to raise awareness of the need for standardisation, bring together multidisciplinary expertise to achieve consensus on a standardised approach, and to develop and share protocols.

## Tools and case studies



### Protocols

The Australian Commission for Safety and Quality in Healthcare has developed a [Hip Fracture Clinical Care Standard](#) to improve the assessment and management of patients with a hip fracture, to optimise outcomes and reduce their risk of another fracture.<sup>22</sup>

## Data collection and review

Accurate, timely and relevant data are critical to measure outcomes, identify variance and demonstrate the need for change. However, approaches to collection and review of data differ between and within services.

*“Only high-quality clinical data can lead to developments in perioperative strategies and technique. This will shift the perioperative movement from being seen as an optional approach led by dedicated individuals working in isolation, to an irrefutable, systematised standard of care” Dr Ming Loh, Geriatrician, Westmead Hospital*

## Current challenges

Challenges	Detail
<b>What data to review</b>	<p>The consultation highlighted a view that <b>better data could be used to inform improvement activity</b>.</p> <p>While data on length of stay and 30-day mortality provide broad measures of surgical outcomes, it is also important to review measures such as return to function and quality of life as foundations for improvement activities.</p> <p>Services are not yet <b>routinely collecting or reviewing patient-reported outcome and experience measures</b> and have identified the need for further education around how to measure what is important to patients.</p>
<b>Variations in data collection and review</b>	<p>Approaches to collection and review of data differ between and within services. In the absence of agreed approaches, there is a risk of <b>reinventing data collection and evaluation processes</b>.</p> <p>Benchmarking becomes more difficult when different processes are used to collect and analyse data.</p>
<b>Making data collection and review part of standard care</b>	<p><b>Data collection and review are seen as an add-on</b> rather than part of standard health service delivery.</p> <p>While individual clinicians are interested in reviewing data about their practice benchmarked against other services, this is not routine.</p>
<b>Using data to inform change</b>	<p>Services identified a need to <b>better plan and measure improvement activities in order to collect an evidence base to support a case for change</b>.</p>
<b>System-level barriers to data collection and review</b>	<p><b>Routine and timely access to clinically relevant data is challenging</b>. Benchmarking requires a consistent approach to analysis within and between hospitals and LHDs. Linked data is critical to looking at outcomes beyond the acute surgical admission, and is challenging to access.</p> <p>Challenges in how to interrogate and interpret administrative and clinical data sets were also identified through the project.</p>

## Ideas for change

Ideas	What services can do
<b>Decide what data to review</b>	<b>Learn from NSQIP pilot sites</b> about clinical data that are most useful to inform surgical care for older people as outcomes become available.
<b>Address variations in data collection and review</b>	Advocate for the <b>same data to be available across NSW</b> to support comparison and benchmarking.
	<b>Provide training for relevant staff in data collection and analysis</b> , ensuring data are collected appropriately risk adjusted.
	<b>Provide training for teams in the collection of patient-reported outcome and experience measures.</b>
<b>Make data collection and review part of standard care</b>	Build the <b>collection of relevant clinical data into admission processes</b> . This will require resourcing for trained data collectors and data analysts with clinical experience to ensure the quality of data. Ensure access to and use of existing data sets to inform quality care.
<b>Continue to implement and share work on PRMs</b>	Evidence suggests that PRMs can contribute to improved clinical care for patients, with corresponding health benefits including, potentially, a reduction in unnecessary hospital presentations. Continuing to <b>embed and incorporate PRMs into routine clinical practice</b> will support integration of care within and between care providers.

## Tools and case studies

 **Current data sources<sup>vii</sup>**

Services are using a range of data sources to review practice and inform decisions around quality of surgical care for older people in NSW.

- [NSQIP® data](#)
- [ANZICS registry data](#)
- [Health Roundtable](#) data
- Site-level audits
- Root cause analysis summaries
- The Clinical Excellence Commission [Collaborating Hospitals' Audit of Surgical Mortality \(CHASM\)](#) data
- SurgiNet data
- Data from [Patient Flow Portal](#)
- [ANZHFR Hip Fracture Registry](#)

 **NSQIP**

The ACS [National Surgical Quality Improvement Program \(NSQIP®\)](#) is a hospital-based quality improvement program that allows hospitals to measure and compare risk-adjusted 30-day patient outcomes following surgery.

The program has been running at Westmead, Nepean, Coffs Harbour and Port Macquarie hospitals since 2015, with additional hospitals in NSW continuing to join the program.

*For more information, contact Crystal Burgess  
NSW ACI*

 **PROMS**

The [ACI Patient-Reported Measures program](#) aims to support patients and clinicians, and add value to their interactions by enabling patients to provide direct, timely feedback about their health related outcomes and experiences.

<sup>vii</sup> Of the sources highlighted, only two are administrative data sets.

### Ideas for further exploration

- Continue work to **develop and measure PROMs and PREMs** in the surgical setting.
- **Extend timeframes** for collection of clinical and functional outcome measures (beyond 30 days).
- Consider the role of **discipline-specific databases and registries** in identifying variation and information areas for improvement.

### Access to data about surgical care for older people.

Services identified a range of data items they would like to be able to review in order to review the quality of surgical care for older people.

- ✓ Individual and service-level performance (benchmarked)
- ✓ A system that allows the entire patient journey to be visualised
- ✓ Outcomes data
  - length of stay (hospital and ICU)
  - mortality and morbidity data (not limited to in-hospital data: 30-, 60- and 90-day)
  - data specific to different types of surgery common in older people (e.g. total hip joint replacement, major gastro-intestinal resections, emergency laparotomies, neck-of-femur)
  - post-discharge functional outcome data
  - quality of life data
  - data to provide evidence of specific complications, e.g. is delirium increasing and for which patients
  - data related to emergency surgery (including out-of-hours surgery)
  - unplanned emergency department attendances
  - unplanned re-admissions
- ✓ What happens to patients after they leave unit or service? Do we actually make a difference?
- ✓ What difference it makes when patients and family members are more prepared, provided with information and/or involved in decision making
- ✓ Data on reasons for cancellation of surgery
- ✓ Data on involvement of allied health, as well as timeliness of involvement and what difference it makes to outcomes
- ✓ Better transparency of Medicare data to track readmissions across districts.

## Communication and transfer of information

Key information about a patient should be documented and reviewed before the person receives critical interventions. However, mechanisms for collecting, documenting and transferring information between and across teams and services are inefficient, with multiple different systems in operation.

*‘Hospitals must have systems in place to document patient information in such a way that minimises duplication and maximises utility for clinical decision making. Information gathered from GP summaries, My Health Record, specialists and other health providers, needs to be collated and summarised by the hospital clinicians, and validated with the patient or family, to be a reference ‘source of truth’.*

Associate Professor Ross Kerridge, Anaesthetist, John Hunter Hospital

*“Integrated surgical care in older people in the rural setting is quite a challenge given current limitations to gerontologist access, even with telehealth appointments and periodical clinics. The benefits of coordinating care for older people in surgery are clear, but how do we replicate them in the rural setting?”*

Teresa Luczak, CNC Perioperative Services Orange Health Service

### Current challenges

Challenges	Detail
<b>System-level barriers to information transfer and sharing</b>	Health services use <b>multiple different software systems</b> that cannot be accessed universally across the service. This includes incompatibility between primary care and hospital systems as well as differences between hospital departments.
	Staffing capacity may mean that <b>medical staff are not available to complete pre-operative medication summaries</b> , with an associated risk of incomplete or inaccurate summaries being used for prescribing.
<b>Clinician-level barriers to information transfer and sharing</b>	<b>Clinicians within a service may have differing and inconsistent views</b> about what information is important and to whom.
	<b>Information provided by a GP may not be visible to the treating specialist</b> and/or will often require validation.
	Doctors are <b>trained to work as independent practitioners and to ask patients for information</b> . This training becomes a habit so that patients are bemused, confused, or even distressed by being asked the same questions repeatedly. A <b>lack of trust in the information collected by others</b> can also result in repetitive collection of the same information.
	Health professionals <b>vary in the way in which they ask for information from patients</b> and their carers, which can then result in differences in interpretation. This contributes to patient frustration about repeated unnecessary communication.

## Ideas for change

Ideas	What services can do
<p><b>Addressing system-level barriers</b></p>	<p>Agree on a <b>standard patient record format</b> that is recorded and checked at the time of admission (or before admission), can be trusted as the 'source of truth' and can be accessed by all departments and services relevant to the delivery of surgical care.</p> <p>As My Health Record becomes better established it is likely to improve standardisation of health records within the health system.</p> <hr/> <p>Continue to review how to achieve <b>greater intra-operability of primary care and hospital-based information systems</b> to allow a two-way transfer of information.</p> <p><b>Discharge summaries</b> to GPs or to other hospitals and care services must be checked for accuracy and comprehensiveness by the senior members of the care team. High-quality discharge summaries should be regarded as the marker of good patient care.</p> <hr/> <p>Develop <b>protocols for what information should be collected and the level of expertise required to collect and document the information</b> before the patient receives critical interventions.</p> <p>Protocols should also specify what information should be transferred between health professionals at key handover points in the pathway.</p>
<p><b>Addressing clinician-level barriers</b></p>	<p><b>Training for all health professionals to:</b></p> <ul style="list-style-type: none"> <li>• <b>check that the advice they give is consistent with that given by other members of the multidisciplinary team; patients should not receive inconsistent advice</b></li> <li>• develop communication skills that ensure information is gathered from existing records first, with questions only for new information, or to validate existing information (rather than re-collecting information).</li> </ul> <p><b>Training for junior health professionals</b> in how to read and use information from patient records.</p> <p><b>Pharmacy accreditation of junior medical officers</b> in how to review and prescribe medications.</p>

## Tools and case studies



### My Health Record

**My Health Record** is an electronic health summary established by the Australian Government.

It contains key health information drawn from the existing electronic records of multiple healthcare providers involved in a patient's care, including their GP. The patient can control what information goes into it and which organisations and people have access to their record.

Where a patient has a My Health Record, NSW Health clinicians will be able to view their My Health Record information in the [HealthNet Clinical Portal](#).

## Quality improvement

A range of challenges and enablers exist in relation to the review and improvement of approaches to surgical care for older people. Many of these are system-wide challenges related to quality improvement and integrated care.

### Current challenges

Challenges	Detail
<b>Resource limitations</b>	Limited resources were flagged as an issue across all sites consulted and included: <ul style="list-style-type: none"> <li>• <b>specific gaps in allied health and geriatrics</b> (in hospital) and in rehabilitation and respite care (community-based – especially for regional services)</li> <li>• challenges around <b>different clinical shift timeframes</b> that does not work when planning and managing care for this patient group</li> <li>• <b>limitations of clinic space, theatre space and beds.</b></li> </ul>
<b>ehealth</b>	While eMR viewed as an enabler, there are <b>challenges around multiple medical software packages with inability to access and share information across systems.</b>
<b>LHD engagement</b>	The challenge of <b>how best to communicate needs to policy makers and decision makers</b> was noted. Clinical teams flagged frustration around priorities being directed without opportunity for discussion.

### Ideas for change

Ideas	What services can do
<b>Management or leadership engagement</b>	<b>Learning from other successful initiatives</b> can help to identify how best to frame needs and gaps. Framing recommendations in a way that demonstrates the value of new approaches (in terms of resource use, capacity, cost, patient outcomes) is likely to be beneficial.
<b>Start small and measure change</b>	‘Test and learn’ approaches can be helpful to <b>demonstrate the benefit of a new approach before planning to scale-up.</b> Incorporating robust approaches to measurement, including baseline data, is critical to demonstrate need and monitor improvements.
<b>Invest in education and training</b>	New initiatives inevitably require additional training and education. <b>Interdisciplinary training</b> can be a beneficial way to encourage integration and a shared understanding of roles.
<b>Project support</b>	Improvement initiatives need more than just clinical input. <b>Project support resource</b> is important to take ideas and turn them into something useful and measure outcomes.

### Tools and case studies

 **Tools**

Clinical Excellence Commission provides a [range of tools](#) and resources to support NSW Health staff to improve the quality of patient care.

 **Tools**

The ACI [Make it Happen](#) website provides tools and resources to support the design and promotion of better healthcare in NSW. [My Health Learning](#) include resources related to change management, project management and clinical redesign.

## Next steps

This report summarises a large number of strategies, initiatives and innovative practices to support the delivery of high quality, patient-centred integrated surgical care in NSW hospitals and health facilities.

In addition, a number of statewide programs are also in place to enhance integration of surgical patient care, including the Leading Better Value Care program, Integrated Care strategy and eHealth clinical program ecosystem.

These resources aim to support clinicians to develop and improve local perioperative services, as well as to guide health service managers in the development of service and district strategy. They provide a foundation to reflect on current care models and an opportunity to identify how services could be enhanced to improve care delivery and patient outcomes in the future.

To review a perioperative service and consider where improvement efforts may be best applied, clinicians and managers are encouraged to explore root causes and issues contributing to challenges in their local environment.

This may include:

- auditing patient cohorts to better understand the local environment
- convening a forum to discuss challenges and priorities
- speaking with patients, carers and families to better understand what is important to the community, and how the health service can help meet these needs
- mapping and analysing clinical and administrative processes
- developing partnerships with clinical governance and performance management units to enable assessment and exploration of local data.

A detailed understanding of these aspects will support the development of solutions tailored to the local environment and contribute to the implementation of the core principles of integrated surgical care for older people in NSW.

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