Implementing the Comprehensive Care Standard

Approaches to person-centred screening

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Background

This paper is part of a series of resources developed by the Australian Commission on Safety and Quality in Health Care (the Commission) describing the conceptual basis, organisational support and key elements of comprehensive care delivery in the context of the National Safety and Quality Health Service (NSQHS) Standards (second edition).[1]

The National Safety and Quality Health Service Standards

One of the key drivers for safety and quality improvement in Australia are the NSQHS Standards.[1,2] The NSQHS Standards were developed by the Commission in collaboration with the Australian Government, states and territories, the private sector, clinical experts, patients and carers. The primary aims of the NSQHS Standards are to protect the public from harm and to improve the quality of healthcare provision. They provide a quality assurance mechanism that tests whether relevant systems are in place to ensure expected standards of safety and quality are met.

The second edition of the NSQHS Standards1 includes the following eight standards:
- Clinical Governance Standard
- Partnering with Consumers Standard
- Preventing and Controlling Healthcare-Associated Infection Standard
- Medication Safety Standard
- Comprehensive Care Standard
- Communicating for Safety Standard
- Blood Management Standard
- Recognising and Responding to Acute Deterioration Standard.

One of these standards, the Comprehensive Care Standard, relates to the delivery of comprehensive care for patients within a health service organisation.

The Comprehensive Care Standard

The intent of the Comprehensive Care Standard is to ensure that patients receive comprehensive care — that is, coordinated delivery of the total health care required or requested by a patient. This care is aligned with the patient's expressed goals of care and healthcare needs, considers the impact of the patient's health issues on their life and wellbeing, and is clinically appropriate. In addition, the Comprehensive Care Standard aims to ensure that risks of harm for patients during health care are prevented and managed. Clinicians identify patients at risk of specific harm during health care by applying the screening and assessment processes required in this Standard.

To date, the Commission has developed two papers describing the type of organisational supports that may be required, and practical elements that contribute to the delivery of comprehensive care. These are described below.

A conceptual model for supporting the delivery of comprehensive care

To improve understanding of what comprehensive care looks like, the Commission has developed a conceptual model describing the key organisational requirements for supporting the delivery of comprehensive care in health services. The organisational requirements in this conceptual model are grouped into three domains:[3]

1. **A focus on patient experience**: having an organisation-wide commitment to the delivery of care that is person-centred, and working to improve the experience of patients by engaging them in their own care and sharing decisions

2. **Systems, processes and protocols to deliver comprehensive care**: having systems, processes and protocols to guide and support healthcare providers to deliver comprehensive care consistently and effectively in the areas of teamwork, collaboration, risk identification and mitigation, goal setting, care planning and review, and care coordination

3. **Organisational culture and governance to support a comprehensive care approach**: having organisation-wide governance, leadership and systems that embed the delivery of high-quality person-centred comprehensive care as the organisational standard.

This model is described in *Implementing the Comprehensive Care Standard: A conceptual model for delivering comprehensive care.*[3]

Essential elements for comprehensive care delivery

The Commission has identified a set of six essential elements for comprehensive care delivery, which represent different stages or processes that a patient may experience when clinical care is delivered. Whereas the conceptual model provides an organisational perspective of comprehensive care, the essential elements for comprehensive care delivery integrate these organisational pre-requisites with the clinical processes required to care for individual patients. The essential elements are:

- Element 1: Clinical assessment and diagnosis
- Element 2: Identify goals of care
- Element 3: Risk screening and assessment
- Element 4: Develop a single comprehensive care plan
- Element 5: Deliver comprehensive care
- Element 6: Review and improve comprehensive care delivery.

Figure 1 provides an illustration of how these six elements interact. The figure describes where the patient is likely to come into contact with the elements along their healthcare journey.

The elements are described in detail in *Implementing the Comprehensive Care Standard: Essential elements for delivering comprehensive care.*[4]

Figure 1: Essential elements of comprehensive care delivery

Element 1: Clinical assessment and diagnosis

Element 2: Identify goals of care

Element 3: Risk screening and assessment

Element 4: Develop a single comprehensive care plan

Element 5: Deliver comprehensive care

Element 6: Review and improve comprehensive care delivery

IDENTIFICATION OF CLINICAL AND PERSONAL NEEDS

DYNAMIC CARE PLANNING AND DELIVERY
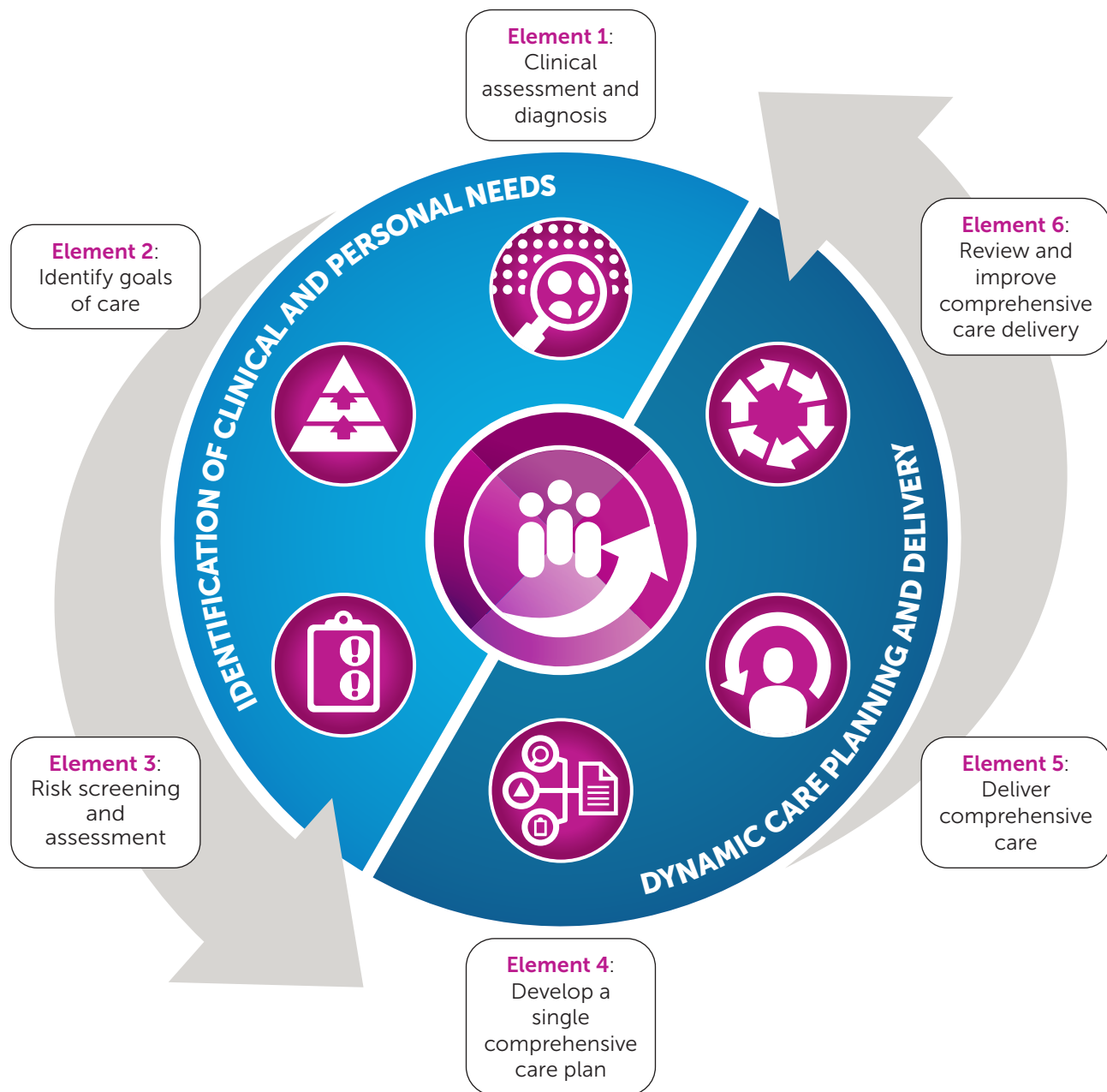
Element 3: Risk screening and assessment

Identifying patients who may be at risk of harm, and mitigating the risks for those patients is a core part of comprehensive care planning and treatment.

The Comprehensive Care Standard requires the use of screening and assessment processes with patients, families, carers and other support people. In addition to these general screening and assessment processes, the Standard highlights the need to identify specific risks of harm in the areas of falls, pressure injuries, cognitive impairment, malnutrition, self-harm and suicide, violence and aggression, and seclusion and restraint.

Risk screening and assessment are a core part of healthcare delivery and comprehensive care. As well as identifying clinical issues, they also identify the likelihood of harm, and support decision making about treatment and risk mitigation. While there is considerable variability in how the terms are used, the Commission uses the following terminology:

- **Risk screening**: a short process to identify patients who may be at risk of, or already have a disease or injury. It is not a diagnostic exercise, but rather a trigger for further assessment or action.
- **Risk assessment**: a more complex and in-depth measurement process designed to be completed when required after screening to quantify risks of harm and identify potential mitigation strategies.

The way in which risk screening and assessment processes are used varies within health service organisations, depending on a range of factors. These include:

- The hospital context, such as the size, location, type of hospital and patient population
- The available clinical workforce
- The way in which an individual patient has presented, such as through the emergency department, as an elective admission, or as a referral from outpatients, or a doctor's rooms

- The characteristics of the patient, such as their presenting problem, age, comorbidities and social circumstances
- The ward or department they are admitted to, and their treatment pathway, including whether they are a surgical, medical or subacute patient, and the particular specialty they may be under.

The specific processes for risk screening and assessment will vary depending on the combination of these factors.

This element covers both risk screening and assessment, and focuses on evaluating conditions and illnesses whilst also implementing a process to detect and mitigate risks.

Health service organisations can implement different strategies to screen, assess risk and mitigate potential risks of harm to patients. These strategies include using local data to understand and mitigate common risks, developing models of care that mitigate risks to patients in particular wards, using screening conversations to triage patients who may need further risk assessment, and using validated tools to quantify risk.

Purpose

- To gain an understanding of the degree to which a patient might be at risk of harm, or poorer outcomes
- To inform decisions about action the healthcare team needs to take immediately to address identified risks such as specific assessment processes, implementation of risk mitigation strategies, and escalation of care where needed
- To inform the development of a comprehensive care plan with the patient.

Principles

- Communication during risk screening and assessment processes is person-centred, and tailored to meet the health literacy needs of the patient
- Risk screening and assessment policy and processes value the use of clinical judgement
- Organisation-wide risk screening and assessment policies and processes are defined and consistently applied across a health service organisation
- Risk screening and assessment approaches used within a health service organisation consider the patient in a holistic way to understand the personal and clinical factors that affect their risk of experiencing harm
- Risk screening processes are short, dynamic and able to be adapted based on the patient's responses
- Risk screening processes are focused on action and closely link to comprehensive care planning and delivery
- Risk assessment processes are used to quantify risks of harm and identify and implement mitigation strategies that are incorporated into planning and delivery of care.

Consumer actions

- Patients communicate openly and honestly with their clinician about their health and wellbeing, conditions, diseases and the factors in their life that influence their potential risk of experiencing harm to the extent that they wish
- Families, carers and other support people communicate to clinicians any concerns they may have about the patient's health and care, particularly any recent changes that may increase risk of harm
- Patients, families, carers and other support people use established patient, family and carer escalation processes.

Clinician actions

- Clinicians use person-centred approaches to communication, and consider the patient in a holistic way to understand the personal factors that might put them at risk of harm
- Clinicians use risk screening and assessment processes as a mechanism to take action to tailor care, mitigate risks and improve patient care and outcomes
- Clinicians consistently use the risk screening and assessment approaches and processes that are agreed in their health service organisation
- Clinicians use their clinical judgement to inform decisions about potential risks of harm, and need for action to mitigate risk
- Risks of harm that are identified are acted on with the appropriate degree of urgency
- Clinicians take action immediately if there is a high risk to the patient, or their care needs to be escalated
- Clinicians use organisational processes to document and communicate the findings of risk screening and assessment processes and include actions in the comprehensive care plan.

Organisational actions

- Health service organisations foster a person-centred culture in delivering comprehensive care including supporting risk screening and assessment processes that are person-centred
- Health service organisations identify the risks of harm that are a priority across the organisation, including those specified in the NSQHS Standards
- Health service organisations define and communicate organisation-wide processes for risk screening and assessment of those priority risks, and the appropriate models of care that mitigate those risks
- Health service organisations establish a list of tools for those risks, with tools that are approved for use within the organisation
- Health service organisations describe and communicate the roles and responsibilities for risk screening and assessment in the organisation

- Health service organisations identify key points in healthcare episodes when risk screening may be required (which may include pre-admission, admission, transfer, discharge or if there is a change in the patient's condition)
- Health service organisations identify when risk assessment may be required
- Health service organisations have policies and processes for escalating care of patients who are at high risk of experiencing harm
- Health service organisations provide access to training and education to support implementation of organisational risk screening and assessment processes, risk mitigation and escalation of care
- Health service organisations provide systems to capture relevant information for comprehensive care delivery including risk screening and assessment processes including outcomes and actions
- Health service organisations develop processes for patients, families carers — and other support people to escalate care and communicate how to activate these processes to patients, families, carers and other support people.

This paper

This paper is the third in a series of resources to support implementation of the Comprehensive Care Standard. It focuses on screening and the part it plays in supporting Element 3: Risk screening and assessment.

Risk screening is a critical part of delivering comprehensive care. It helps identify patients who may be at higher risk of poorer health outcomes or adverse events, which informs comprehensive care planning and delivery. Screening should be completed with this outcome in mind — to inform a decision about whether specific risk assessment is needed, and to consequently drive changes in the comprehensive care plan and deliver interventions that reduce risk to the patient.

However, there have been growing concerns about the way in which risk screening and assessment processes are implemented; the variety and quality of tools being used; and the burden placed on clinicians and patients to repeatedly screen when there is little perceived benefit for the patient or action taken as a result of identifying risks of harm. Processes of risk screening must add value to the patient's comprehensive care plan.

Currently, risk screening and assessment is implemented in different ways within the healthcare system, using a range of different tools and approaches to variable effect. Patients are sometimes screened using in-depth risk assessment tools, are screened multiple times for the same risk, or are asked the same question for different risk screening and assessment processes, leading to duplication of effort and work, and poor patient experience. Many tools that are used for risk screening and assessment may not be reliable or may not have been sufficiently validated, and it is often unclear whether action is taken in response to the positive results of screening and assessment processes.

There are also very few examples of risk screening approaches that are tailored to the individual patient's needs and preferences, or that use person-centred communication approaches and appreciate the complexity of gathering information about a patient that is not specifically connected to the reason they are seeking care.

This paper describes the current situation with risk screening and assessment, and proposes strategies that could be adopted specifically to support improvements to screening processes and approaches within health services.

This paper has been developed for:

- Clinicians, managers and executives responsible for developing, implementing and reviewing screening and assessment processes
- Planners, program managers and policymakers responsible for the development of jurisdictional or other strategic programs dealing with the processes associated with providing comprehensive care.

It may also be relevant for clinicians involved in the delivery of care, providers of clinical education and training, research organisations and other health bodies.

Current issues for risk screening

To focus care on patients' needs, and determine the most appropriate model of care for the patient, it is important that health services identify and assess patients' risk of harm.

Risk screening processes can help to identify patients who may be at risk of harm, and may benefit from specific assessment, management strategies or models of care.[5–8]

The Commission undertook three activities to gather evidence and develop a better understanding of the issues associated with the way risk screening currently occurs within Australian hospitals. This included:

- Engaging the University of Technology Sydney to undertake a systematic review of peer reviewed and grey literature exploring the types of screening tools in use in Australian hospitals and their validity and consistency, and identifying any gaps. See Appendix A for further detail on the systematic literature review.
- Undertaking a scoping review examining the published literature on policy and practice issues surrounding risk screening and assessment. See Appendix B for further detail on the scoping review.
- Convening a series of interviews and focus groups with frontline clinicians and managers exploring different experiences of risk screening processes, and how screening works in practice in Australian hospitals. See Appendix C for further detail on the consultative process.

Some of the key findings from these activities are described in this section. For specific information about each activity refer to Appendix A, B and C.

Risk screening tools

The systematic review identified a large number of risk screening tools from the peer-reviewed and grey literature available for use in hospitals. Despite there being many risk screening and assessment tools available, the variation between the tools limits the capacity for comparison.[9] A criticism is that many tools are of questionable quality[10] and few have been validated.[11, 12] This has led to concerns about data accuracy[10, 13] and questions about which of the combined concepts within integrated tools are of benefit.[13–15]

There were few valid tools that integrated multiple risks into a single screening approach or have the capacity to consistently predict patients at risk. The systematic review highlighted a number of partially integrated tools that assessed multiple dimensions such as frailty. However, the testing of the tools to confirm their validity was variable.[16]

Some of the tools that were considered to have better predictive capacity for identifying patient outcomes such as mortality tended to be lengthy, and required training to use effectively. Some tools demonstrated promise to detect risk or reduced adverse events in specific populations, but further testing and research was required for different types of patients. In summary, no gold-standard comprehensive screening tool was identified through this review.[16] See Appendix A.

Consistency of risk screening approach

The scoping review and interviews indicated that patients are often screened for multiple risks, at multiple times along the patient journey using different tools that may not be applicable or relevant for every patient. This has led to duplication of process, questioning, and data that has contributed to clinicians' workload, and can be a burden for patients, their families, carers and other support people.

One of the key findings of the scoping review and interviews was there seemed to be confusion about the scope and definition of risk 'screening' and 'assessment' with the terms often used interchangeably.[17] The 'screening' referred to in the literature ranged from very short tools to more complex risk assessment processes. This blurring of the two terms and processes may have contributed to workload, as some services may be undertaking multiple complex risk assessment processes for more patients than is necessary.

The systematic review team also concluded that there was little evidence to demonstrate that risk screening and assessment was undertaken in a consistent and systematic manner, as demonstrated by the multiplicity of tools in use.

Patient experience of risk screening processes

The scoping review and interviews indicated that patients often experienced multiple screening processes for different risks, and questions often overlapped or were duplicated. Processes appeared to be focused on the needs of the health service organisation or the clinician, rather than being responsive to the patients' needs and preferences.

Issues such as identifying the patients' needs and preferences, and tailoring processes to patient health literacy needs were not apparent, and the screening tools and processes described did not appear to be particularly person-centred. Repeated questioning was recognised as being tiring for elderly patients,[18] and contributing to poorer experiences for patients.

Confidence in risk screening processes

The interviews identified that the perceptions of clinicians about the value of risk screening varied according to their role. For example:

- Nurses and other clinicians who were responsible for screening did not perceive that risk screening and assessment aided their work. They perceived screening to be a time-consuming, legal requirement that limited their professional judgement.
- Doctors, allied health clinicians and nurse managers who did not routinely screen patients, but benefited from the information garnered from screening, believed that screening was a way to triage patients and detect clinical changes.
- Nurse managers were of the opinion that screening improved patient outcomes and reduced the number of critical incidents; however, they could not readily demonstrate evidence of this.

Patient factors and risk screening

Screening processes have been introduced to reduce avoidable harm to patients, and this includes gathering sometimes sensitive information about a patient that is not specifically connected to the reason they are seeking care. Screening is often completed assuming implied consent. This may mean that some patients do not wish to participate in screening processes or may choose not to answer screening questions truthfully.

Impact on patient outcomes

One of the concerns identified in interviews, and through both reviews, was the perception that the process of risk screening had become more important than the purpose or outcome. It was viewed that the act of completing the screening tool was often seen as the goal, rather than the identification and mitigation of risk for the patient.

Summary

The purpose of risk screening is clearly of value, but the three activities informing this paper have identified a range of concerns regarding the validity and reliability of the processes and tools being used to risk screen and assess patients in hospitals, including whether these tools are efficient, effective and contribute to better patient outcomes. Key issues associated with screening and assessment tools and processes identified by the Commission are summarised in Boxes 1 and 2.

Box 1: Key issues with risk screening and assessment tools

- There is some confusion about the difference between risk screening and risk assessment, and the terms are often used interchangeably
- There are multiple tools available for screening and assessing specific types of risk, such as falls, pressure injuries, and cognitive function. However, there is no gold-standard tool for any of these risks and many of the tools for assessing specific risks have not been validated or require further validation for use in different populations
- There are a small number of risk screening tools available that integrate multiple risks to some degree. However, the validity and feasibility of the tools is considered to be limited, and they have largely been tested in older populations
- Many screening tools require specific training for accurate use; however, training and education among clinicians is variable.

Box 2: Key issues with risk screening and assessment processes

- There is wide variability in how risk screening is undertaken, who undertakes it and what tools are used, even within different areas of the same hospital
- There is little delineation between risk screening and assessment processes, and as a consequence, in many cases patients may be 'screened' using complex and lengthy assessment tools
- Clinician confidence in risk screening processes is variable, which results in some clinicians preferring to forgo screening tools and use clinical judgement alone
- Current risk screening processes and practice are resulting in duplication of effort and additional workload for clinicians
- Repeated screening and duplication contributes to poorer experiences, confusion and frustration for patients and their carers
- There is concern that there is disconnection between the screening process and subsequent action on care planning and delivery
- There was limited evidence identified that risk screening processes, in their current form, improve patient outcomes.

Opportunities to improve risk screening processes

Given the importance of risk screening to the delivery of safe, high-quality and effective health care, it is critical that strategies are identified that may assist clinicians, health service organisations and the healthcare system to improve the efficiency and effectiveness of risk screening and assessment processes.

Within a health service organisation, improvements to risk screening could be made by developing an organisation-wide approach that could include:

- Using local data to understand common risks of harm for consumers who use the organisation's services
- Developing or adopting models of care that mitigate against those common risks of harm
- Establishing an agreed approach to screening across the organisation
- Endorsing core assessment tools for use within the organisation
- Defining roles, responsibilities and accountability for screening and assessment within the organisation
- Implementing processes for monitoring delivery and outcomes of screening and assessment within the service
- Providing access to training and education for the workforce.

Taking an organisation-wide approach will require consideration of a range of context issues that will influence how and when risk screening and assessment takes place.

This section firstly describes strategies that could be applied at an organisational level to support effective and consistent screening within a health service organisation. It then follows with a detailed discussion of different approaches to person-centred screening.

Taking an organisation-wide approach to risk screening

The scoping interviews indicated that there is considerable variability in the way risk screening is undertaken across and between hospitals. Some health service organisations have taken a coordinated and systematic approach by identifying processes and protocols for screening, and using quality improvement principles. However, most health services appear to use multiple tools for different purposes, resulting in duplication of effort, confusion, and unnecessary screening and workload.

A first step in reducing this confusion and the unnecessary burden on clinicians and consumers is to develop a coordinated and systematic framework for screening within the health service organisation. Developing an organisation-wide framework or policy could help clarify expectations and roles and responsibilities, and improve consistency of processes within the service, while at the same time providing a level of accountability, visibility and governance.

Potential components of an organisation-wide framework or policy are described below.

Using local data to identify common risks of harm

Health service organisations have a wealth of administrative and clinical data about their patient population. This data can be analysed and used to identify common risks or complications experienced by patients at the organisational and ward level. Some of the common risks nationally are those identified in the hospital-acquired complications (HAC) list, which includes 16 serious complications that clinicians can respond to, and put in place clinical risk mitigation strategies to reduce their occurrence.

The information gleaned from such data can be used to inform decisions about the types of assessment processes that would be more frequently required within the organisation, and the types of strategies that would be needed to minimise commonly experienced risks.

For example, if a health service organisation identifies that their patient profile includes a high proportion of frail elderly patients, then the organisation could strengthen the types of screening approaches, assessment tools and baseline interventions needed to mitigate risks of harm from falls, pressure injuries, cognitive impairment and malnutrition.

Models of care for providing baseline mitigation for the usual population

Analysing data to better understand the commonly experienced risks within the organisation, and the ward, can also contribute to service planning and development of models of care that meet the needs of the patients who use the organisation's services. By determining where there are common risks within an organisation or ward, and developing a model (or models) of care that automatically mitigates those risks, the organisation can reduce the need for risk screening for the mitigated risks for patients within that ward.

For example, if a health service organisation has determined that it has a ward which predominantly manages geriatric medical patients, the organisation may want to consider developing a model of care for that ward which provides baseline mitigation for risks such as falls, pressure injuries, cognitive impairment and delirium.

Establishing an agreed approach to screening within the organisation

Given the apparent confusion between risk screening and assessment, it may be beneficial for health service organisations to provide clarity and guidance about how screening will be approached across the health service, including the type of tools or methods to be used for screening patients.

There are different ways for risk screening to occur, which can range from simple questionnaires, to purposeful conversations and observations during other assessments. A health service organisation should determine the most appropriate screening approach for its usual patient cohort.

Health service organisations can create improved consistency of approach, and potentially a reduction in duplication if an agreed organisation-wide approach to screening is put in place. Three examples of different approaches to screening include: use of a validated integrated screening tool; use of single risk assessment tools where the range of risks are clearly known; and use of purposive person-centred conversations to identify the need for assessment for specific risks. These three approaches are discussed in more detail later in this section.

Endorsing core assessment tools for use within the organisation

Once a patient is identified through a risk screening approach as being potentially at risk of experiencing harm, the patient should be assessed using a validated risk assessment tool. The activities undertaken as part of this project identified a large number of screening and assessment tools available for specific risks, including for falls, pressure injuries, malnutrition, cognitive function, self-harm and medication harm, as well as general tools for frailty and functional decline. The number of possible tools and lack of clarity about whether many tools are validated has resulted in significant variability in the approaches taken to screening, even within a single organisation or ward.

Health service organisations can create greater consistency of approach, and potentially reduce duplication by identifying and agreeing to a core set of assessment tools to be used for the most common risks experienced by the organisation's patient cohort. Validated risk assessment tools are preferable where they exist, but consideration should be given to the organisational context to determine what is most appropriate. Having a uniform approach to risk assessment across the organisation would help to reduce data duplication, enhance communication between services, and assist organisations with implementing tailored training and education programs for risk screening and assessment.

Defining roles, responsibilities and accountability for screening and assessment within the organisation

One of the issues identified, particularly through the scoping interviews, was the lack of clarity about roles and responsibilities for the process of risk screening and assessment, integration of the findings into care planning, and quality improvement processes.

Lack of clarity about roles and responsibility for screening makes it difficult to ensure appropriate screening is undertaken and acted on. Health service organisations should provide greater clarity and guidance about roles and responsibilities, including expectations and scope of practice for screening and assessment within organisational policies and processes, position descriptions, functional charts or training and education. This could contribute to greater understanding and accountability for risk screening and assessment processes and action.

Implementing processes for monitoring delivery and outcomes of risk screening and assessment within the service

The NSQHS Standards require health service organisations to take a quality improvement approach to the development and implementation of policies and processes within the organisation.

Given there is currently limited evidence of the impact of current screening and assessment processes on patient outcomes, it is important that health service organisations monitor the implementation of their screening and assessment processes to ensure that the approach taken achieves the intended goals. These goals include that patients receive a comprehensive care plan that includes the intended risk mitigation strategies; and that opportunities for improvement are identified and acted on.

Health service organisations should monitor and review implementation and impact of risk screening and assessment processes by examining how screening is delivered, who it is delivered by, the type of tools used to identify risk, whether the findings of screening are integrated into care plans, workforce and patient experience of screening processes, and whether there are reductions in harm experienced by patients.

Providing access to training and education for the workforce

Feedback from the scoping reviews and evidence from the literature indicated that, for some screening and assessment tools and approaches, training and education were critical requirement for effective use. However, this does not appear to be always provided to the workforce, and lack of training and education can lead to compromised implementation for some risk screening and assessment tools.

Health service organisations can support delivery of improved risk screening and assessment by providing training and education about screening, the screening policy, the governance, roles and responsibility, and the tools and approach taken by the organisation to screening and assessment.

Implementing the Comprehensive Care Standard

Approaches to person-centred risk screening

Once a health service organisation has identified the common risks within their service, and developed models of care and strategies that mitigate those common risks, the service should develop an approach to screening for other risks of harm that are not mitigated by those models and strategies.

There are three main types of approaches that could be taken to identify patients who may be at risk of harm, and inform a decision about whether an assessment process is required for a specific risk. These include using:

- A validated short integrated screening tool to identify potential risks of harm for a patient
- Validated single risk assessment tools where key risks are known
- Screening conversations to identify potential risks of harm for a patient.

Health service organisations should consider the type of approach that is most appropriate for their patient cohort, the types of risks commonly experienced in their service, and care pathways and models of care relevant for the organisation.

Using person-centred principles

Person-centred healthcare is respectful of, and responsive to, the preferences, needs and values of patients, their families and the community. Regardless of the approach taken to screen a patient, it is critically important that the process is person-centred. The need for, and value of, person-centred care has been well established. It leads to better patient experience and outcomes, as well as better staff experience and improved efficiency and effectiveness of health care.[19]

Ensuring that a patient's needs and preferences are met, and that care is tailored to their individual circumstances requires a level of interaction and discussion that is dynamic, tailored and fluid. The patient needs to be engaged in discussions about their current circumstances, what is important to them and what their goals are so that care aligns with their needs and expectations. Screening for some risks involves gathering sensitive information that a patient may not have consented to, or be expecting or willing to discuss truthfully.

Feedback from the scoping interviews indicated that in some cases risk screening and assessment have become a formality, or structured and rigid process that do not consider the patient's individual circumstances, goals, preferences or even the extent to which they have already undergone screening within the service. In some cases, it appears that there is a checklist approach taken which may not consider the person or their individual needs. There also appears to be concern that the output of screening is not always used to inform care planning and delivery. This indicates a move away from person-centred care towards a more process-based approach.

Short integrated screening tools

The systematic review[16] identified that there were no clear gold-standard short integrated screening tools tested and validated for a universal patient population. However, there are a small number of short screening tools that are partially integrated and validated.

These types of tools generally include a short set of questions designed to indicate potential risk or vulnerability. Many of these tools focus on frailty or functional decline, and they have been largely tested in patients over 65 years old.

The tools identified in the review as being validated to some degree include the frailty among emergency department visitors (FRESH), Identification of Seniors At Risk (ISAR) and Identification Seniors At Risk Hospitalised Patients (ISAR-HP) tools. These tools have largely been accepted for, and tested with, older populations, and so may not be applicable for screening all patients.

The types of questions included in these tools include mostly closed questions requiring a 'yes' or 'no' answer such as:

- Do you get tired when taking a short (15–20 minute) walk outside?
- Have you suffered any general fatigue or tiredness over the last three months?
- Have you fallen these last three months?

There may be other short integrated screening tools that have been validated for other contexts, and some health services may have developed and tested their own integrated screening tools to meet the needs of their patient cohort. Where possible, if a health service organisation wishes to use a short integrated screening tool efforts should be made to use tools that are validated for the population who use the organisation's services.

Single risk assessment tools

There are a large number of single risk assessment tools available and broadly used in Australian hospitals. These types of tools include more detailed questions than the short integrated screening tools and focus on a specific risk such as pressure injury, malnutrition, falls or cognitive impairment.

The UTS systematic review identified some of the single risk assessment tools that have been validated for specific issues, and these are presented in **Table 1**.[16] It should be noted, however, that due to the timeframe available the systematic review did not capture all of the common risk tools in use in Australian hospitals.

The use of single risk assessment tools may be appropriate for a health service organisation if there are a small number of known common risks experienced by the patient cohort. However, consideration needs to be given as to the number of risks that may need to be assessed for each patient, and the potential for duplication should multiple risk assessments be required.

Table 1: Examples of validated single risk assessment tools[16]

Type	Name
Cognitive function in acute care	interRAI Acute Care (CPS2 form)
	Recognizing Acute Delirium As part of your Routine (RADAR)
Cognitive function in the emergency department	Emergency Department Nurse Screening for Delirium (EDNSD)20
Functional assessment in acute care	Balance Outcome Measure for Elder Rehabilitation (BOOMER)
	Vulnerable Elders Survey (VES-13)
Falls risk in acute care	St. Thomas's Risk Assessment Tool in Falling Elderly Inpatients (STRATIFY)
Pressure injury in acute care	Braden
	National Health Institute of Spain (INSALUD) Norton-MI
	interRAI Pressure Ulcer Risk Screening (PURS)
Malnutrition in acute care	Graz Malnutrition Screening (GMS)
Self-harm in the emergency department	Columbia-Suicide Severity Rating Scale (C-SSRS)
	Patient Safety Screener (PSS3)

Person-centred risk screening conversations

An individualised approach to screening could be used to engage patients (and their carers and family where appropriate) in a purposeful discussion about their circumstances to determine their baseline situation and identify common flags for potential risk. This in itself is a screening process and could be conducted during other assessments and activities such as at admission, handover or other care transitions.

Talking with the patient using a semi-structured format would help to distinguish those patients with no functional issues or inherent risks, those patients with some functional issues, and those who could be considered vulnerable.

Screening conversations could be guided by a short series of open-ended questions adapted by the clinician as the conversation progresses. The types of questions in a screening conversation could include questions about why they have come to the hospital; what they hope to achieve; what their current physical, cognitive and emotional state is like; and if they (or their carers and family where appropriate) have noticed any changes.

Approaching screening in this way is person-centred as it engages with the patient (and their support people) in a dynamic and tailored way that considers the patient's current context and what is important to them, as well as providing meaningful information to the clinician about the patient's physical, social and emotional state. It is important to consider the sensitive nature of some of the risks that are screened for and the likelihood that some people may choose not to share important information about their circumstances.

Using a person-centred screening conversation can help to give an indication of whether a patient would be likely to fall into one of three groups:

- Patients who are clearly at low risk, and whose only risk relates to their presenting problem for an episode of care. An example of this kind of patient may be a 21 year old healthy woman with no co-morbidities or complexity who is undergoing wisdom tooth extraction as a same-day procedure.

- Patients who clearly are at immediate or high risk and need urgent action and intervention. An example of this type of patient may be a 78 year old woman with a history of dementia and previous falls who is undergoing a repair of a fractured femur.

- Patients who may be at risk of harm, but require further investigation or structured assessment. An example of this type of patient may be a 62 year old man who is requiring admission for cholecystitis.

Triaging patients in this way can help in identifying who requires immediate action, who may require structured risk assessment, and who is likely to be at low risk of harm and protected by standard models of care for the ward or hospital.

Focused risk screening and assessment supports comprehensive care planning and person-centred care. Reducing the need to screen more able patients provides clinicians with more time to focus on patients with higher care needs and may help to restore clinicians' faith in the screening process. Furthermore, the targeted approach helps to reduce repeated patient questioning and data duplication.

The person-centred screening conversation supports and encourages clinicians to use and develop their professional judgement and cognitive skills to identify patients at risk of harm. Considering that nurses' professional judgement was found to be comparable to that of recognised screening tools in detecting patients' at risk of pressure injury[21], the likelihood of some patients with functional issues being incorrectly categorised is low.

Table 2 provides principles to prompt questions that could be used in a person-centred screening conversation. A health service organisation could use, or adapt this list as a guide for clinicians in screening conversations.

Table 2: Principles of a person-centred screening conversation

Preparation:
- Is an interpreter required and organised?
- Who is conducting the screen?
- Have introductions been made?
- What is the appropriate sequence of questions?
- Which questions require corroboration with a carer?
- Is there consent to obtain information that may be beyond the person's presenting problem?

Principles	Related NSQHS actions
Identify a person as an Aboriginal or Torres strait Islander Explore: social circumstances	5.8
Find out why a person has presented to hospital Explore: mental, physical and behavioural conditions, cognition	5.10, 5.13
Explore what's going on now for person now Explore: mental, physical and behavioural conditions, cognition	5.10, 5.13
Explore how well the person was before arriving Possible risks to consider: pressure injury, falls, nutrition and hydration, delirium, cognitive impairment	5.10, 5.21, 5.24, 5.28, 5.29
Find out what the person's best hopes and — preferred outcomes for this admission Explore: patient and carer goals, concerns and expectations	5.13
Find out about usual living arrangements Explore: social and other circumstances	5.10, 5.13
Determine how far a person can walk (e.g. around the block, mailbox, bathroom) Possible risks to consider: pressure injury, falls, cognitive impairment	5.10, 5.21, 5.24, 5.29
Find out if the person has capacity to self-manage finances, bills etc. Possible risks to consider: delirium, dementia, cognitive impairment	5.29
Determine what a person is eating and drinking and if they need help with nutritional intake Risks: pressure injury, falls, nutrition, hydration , cognitive impairment	5.28, 5.29
Ask about the number of medications a person is taking and what they are Possible risks to consider: falls, cognitive impairment, delirium, dementia, suicide and self-harm	5.10, 5.31, 5.33
Ask about alcohol, tobacco, recreational drug, herbal and alternate medicines history Possible risks to consider: falls, cognitive impairment, delirium, dementia, aggression and violence	5.10, 5.31, 5.33
Ask about issues at home that may be worrying a person and how they are feeling Possible risks to consider: self-harm and suicide, aggression and violence, cognitive impairment, delirium, dementia	5.10, 5.31, 5.33
Ask about any infections during hospital admission in the past Risk: healthcare-associated infections	3.6

Conclusion

Risk screening is a process to identify patients who might be at risk of harm, and should be completed with the outcome in mind — which is to inform decisions about whether specific assessment or action is needed, and to inform the development and delivery of a comprehensive care plan.

The Commission's research indicates that risk screening is being interpreted and implemented in disparate ways, which are sometimes at odds with the needs of the patient, and the clinical team. There is a level of confusion, duplication and disconnection that adds to clinician workload, poor consumer experience and removes clinicians from direct patient care.

Risk screening is an important element of comprehensive care planning and delivery, it can provide valuable information to identify and mitigate potential risks of harm for a patient. However, to fully realise the value of screening and improve effectiveness for the patient and the system, a different approach to screening needs to be taken.

Improvements to screening processes could be made by health service organisations taking an organisation-wide approach to risk screening that is based on person-centred principles. Some of the strategies a health service organisation might consider employing to develop an organisation-wide approach are identified in **Table 3**.

The Commission will be developing more detailed supportive resources and case studies describing what the different approaches to person-centred screening might look like in practice.

Table 3: Examples of strategies to foster an organisation-wide approach to person-centred risk screening

Component	Examples of strategies
Using local data to understand common risks of harm for consumers who use the organisations services	Using administrative and clinical data to: • Identify the most frequently experienced risks of harm to patients across the organisation. • Identify the most frequently experienced risks of harm to patients at the ward level. • Identify if there are particularly high-risk wards or patient groups.
Developing or adopting models of care that mitigate against those common risks of harm	Review current models of care to identify whether they address the most frequently experienced risks of harm, at the organisational and ward level. Modify, develop or adopt new models of care if risks are not being met.
Establishing an agreed approach to screening across the organisation	Develop and gain agreement on an organisation-wide policy that identifies an agreed screening approach including: • The type of screening approach to be used such as using specific tools, screening conversations or other methods • The key points in healthcare episodes when screening may be required (which may include pre-admission, admission, transfer, discharge or if there is a change in the patient condition). Specify and communicate the practical steps involved in the agreed screening approach.
Endorsing core assessment tools for use within the organisation	Identify within the organisation-wide policy which screening and assessment tools are endorsed for use within the health service organisation, if they are part of the agreed screening approach. Communicate the expectation about consistency of approach.
Defining roles, responsibilities and accountability for screening and assessment within the organisation	Identify within the organisation-wide policy the roles and responsibilities of members of the multidisciplinary team, and consumers in the screening process. Communicate the expectation about roles and responsibility and accountability mechanisms.
Implementing processes for monitoring delivery and outcomes of screening and assessment within the service	Use administrative and clinical data to identify the changes and impact of changes in screening processes. Talk to staff and patients about their experience of screening processes to identify issues and opportunities for refinement and improvement.
Providing access to training and education for the workforce	Communicate with the workforce about the agreed approach to screening, and provide access to training and education that is required for the type of screening and tools that are agreed for use within the organisation.

Appendix A: Systematic literature review on screening tools

Method

The University of Technology Sydney (UTS) was contracted by the Commission to undertake a systematic literature review to determine the use, scope and application of risk screening and assessment tools in the peer-reviewed and grey literature.
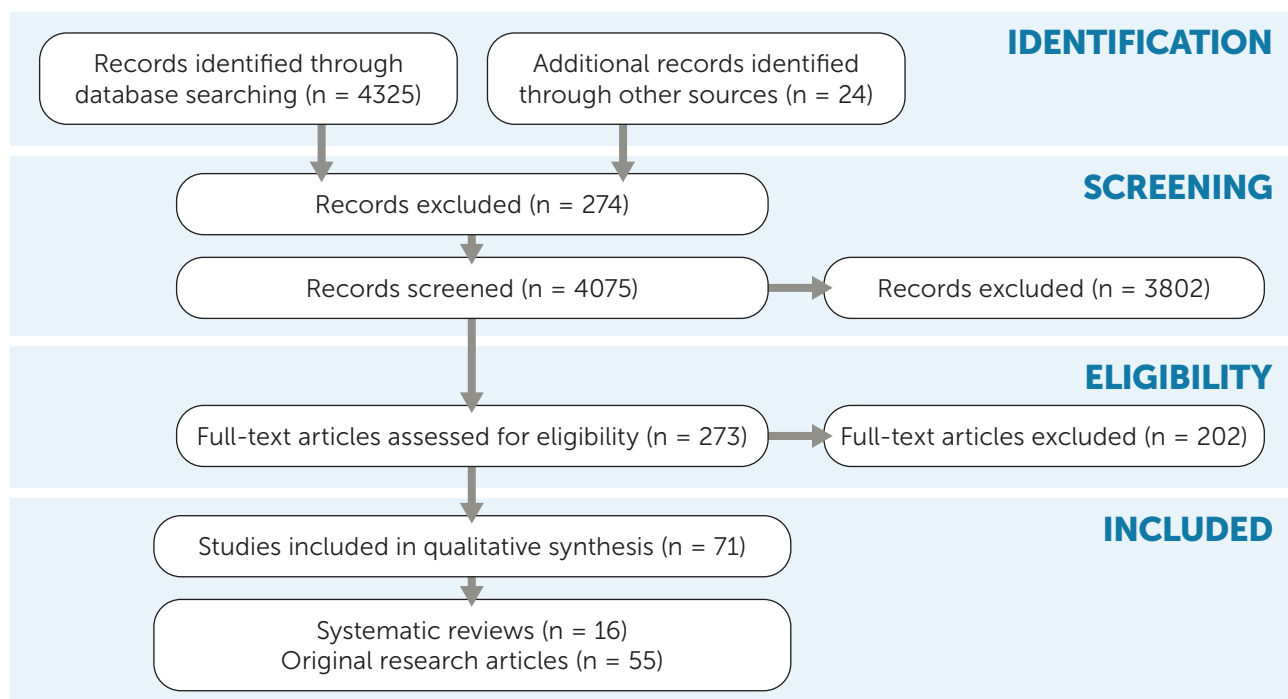
Secondary objectives were:

- To examine the validity and reliability of tools in use
- To identify tools that used an integrated or interdisciplinary approach

- To identify the commonly used measures
- To identify evidence of outcomes associated with the use of screening tools.

Search criteria was explicitly described and focused on general risk screening tools for adults in acute hospital settings. The search included articles published in the English language from 2011–16, and initially 4344 peer-reviewed articles were identified. The search was then narrowed down by excluding duplications, theses, case studies, conference abstracts and commentaries. A PRISMA flow diagram[22] detailing the search is shown in **Figure 2**.

Figure 2: PRISMA flow diagram: Search for risk screening and assessment literature

IDENTIFICATION

- Records identified through database searching (n = 4325)
- Additional records identified through other sources (n = 24)

SCREENING

- Records excluded (n = 274)
- Records screened (n = 4075) → Records excluded (n = 3802)

ELIGIBILITY

- Full-text articles assessed for eligibility (n = 273) → Full-text articles excluded (n = 202)

INCLUDED

- Studies included in qualitative synthesis (n = 71)
- Systematic reviews (n = 16) Original research articles (n = 55)

The review included 55 original studies and 16 systematic reviews. Eight broad themes were identified: cognitive function, frailty, functional assessment, falls, pressure injuries, malnutrition, medications, and self-harm. Some tools were considered in multiple themes. The researchers also identified and analysed a range of policy documents related to screening and assessment through the grey literature.

Key findings

The systematic review identified a large number of risk screening tools from the peer-reviewed and grey literature available for use in hospitals.

There were few valid tools that integrated multiple risks into a single screening approach or had the capacity to consistently predict patients at risk. There were a number of partially integrated tools that assessed multiple dimensions such as frailty. The identified tools appeared to have better predictive capacity for identifying patient outcomes, such as mortality but some were lengthy and required training to use the tool effectively. Some tools demonstrated promise to detect risk or reduced adverse events in specific populations but further testing and research was required. In summary, no gold-standard comprehensive screening tool was identified for use in hospitals.

The review also concluded that there was little evidence to demonstrate that screening and assessment was undertaken in a consistent and systematic manner, as demonstrated by the multiplicity of tools in use.

Additional results are summarised in this section for the eight broad themes.

Cognitive function

Four review papers including two systematic reviews and 12 original studies were identified, describing or reviewing more than 30 different tools for screening for cognitive function with many related to detecting delirium. The most widely researched tool was the Confusion Assessment Method (CAM) and its derivatives. The researchers noted that the shorter and simpler instruments identified required further validation for use, particularly in culturally and linguistically diverse (CALD) populations. No preferred tool was identified for screening for cognitive impairment through this review.

There are a range of validated cognitive function tests which are available for use in hospitals detailed in the Delirium Clinical Care Standard.[23] Some examples include the Abbreviated Mental Test Score (AMTS)[24], — the 4AT test: screening instrument for cognitive impairment and delirium[25], Rowland Universal Dementia Assessment Scale (RUDAS)[26], Kimberly Indigenous Cognitive Assessment tools (KICA).[27]

Frailty

One review paper and 12 original studies were assessed, including 21 tools identified for frailty screening in this theme. A number of tools were suggested to have acceptable validity and feasibility, including: the Identification of Seniors At Risk (ISAR) / Identification of Seniors At Risk Hospitalized Patients (ISAR-HP); the 4-item Frailty among Emergency department visitors (FRESH); and the Triage Risk Stratification Tool (TRST). Few studies addressed reliability and inter-reliability across disciplines. Aside from mortality, tools for frailty had low predictive accuracy for patient outcomes and adverse events. Common to these tools were multiple dimensions assessed through a short question set of four to six questions. Many of the tools were tested in the emergency department, and these may be suitable as first contact screening for frailty.

Functional assessment

Three systematic reviews and eight original research papers were identified as applicable to functional assessment. There were more than 20 tools identified, with eight tools considered feasible, and some of these had validity testing completed. The most commonly used tool was ISAR, which was also identified for frailty, as it was quick to administer and required minimal training. The validity testing had mixed results, and further testing was suggested to determine validity for the Australian context.

Falls

Two systematic reviews and six research papers identifying multiple tools were identified for falls screening. Results for this category were mixed, with one review only recommending the St Thomas's Risk Assessment Tool in Falling Elderly Inpatients (STRATIFY) and Hendrich Fall Risk Model II (HFRM II) tools for use in the acute care setting. Another meta-analysis concluded that the HFRM II showed higher sensitivity and the STRATIFY had higher specificity, while several other studies concluded that neither the STRATIFY (and modified versions of), and HFRM II, had high predictive validity. There was insufficient evidence to support the use of any individual screening tool to identify those at risk of falling in rehabilitation and among surgical and medical inpatients older than 65. There was moderate evidence for the use of STRATIFY in medical inpatients younger than 65 and in surgical inpatients. There was no evidence to support the use of STRATIFY or HFRM II for people over 65 in acute care.

Pressure injuries

One Cochrane Review, two systematic reviews with meta-analysis and three research articles assessing 10 tools were identified for the review. While there is some evidence to support the adoption of pressure injury risk screening tools (particularly the Braden and modified Braden scales) to predict the risk of pressure injury, implementing risk minimising strategies was the most important factor in reducing the incidence. A number of tools frequently used in Australia were not identified in the systematic review and this may be due to the limitations of the review methodology, such as years searched.

Medications

One systematic review and two research papers assessing two tools were identified relating to screening for prescription-related medication risk. The systematic review was supportive of the Screening Tool of Older Persons' potentially inappropriate Prescriptions/Screening Tool to Alert doctors to the Right Treatment (STOPP/START) to reduce prescription misadventures. The research papers described the results of a pilot to test a medication misadventure risk (MMR) tool in Australian emergency departments and STOPP/START. The MMR tool sought to identify patients needing pharmacist intervention but lacked some specificity in high-risk patients and would require further testing.

Malnutrition

Two systematic reviews and six research articles assessed a number of tools related to screening and assessment of nutrition status. There were mixed results. From two extensive systematic reviews of more than 30 nutritional tools, no single tool was recommended as being able to adequately screen for nutrition, or consistently predict poor nutrition-related outcomes. Of tools that were short and easy to administer, the Mini Nutritional Assessment-short form (MNA-short form) and the Malnutrition Screening Tool (MST) had the highest sensitivity and specificity for predicting poor nutrition, with the MST the only tool found to be both valid and reliable for identifying under-nutrition. The Subjective Global Assessment (SGA), the Nutritional Risk Screening (NRS-2002), and the Malnutrition Universal Screening Tool (MUST) performed well in the non-elderly population.

Self-harm

One systematic review and five papers assessing 19 tools were identified relating to screening for suicide and self-harm. The systematic review assessed 12 studies of 14 tools with no clear evidence of validity, reliability and feasibility testing to support a specific tool. The research papers reviewed also highlighted the lack of effective and well-validated screening tools for suicide risk. Few studies have evaluated the most commonly used tool in the acute sector (SADPERSONS). Other tools have only been evaluated for self-harm, and often sample sizes for evaluating the tools' predictive ability in the emergency department were small. There is no evidence that such tools were able to accurately predict suicide risk or differentiate suicide risk from self-harm.

Professional and government reports

Searches of the grey literature identified a range of tools recommended or referred to for use in various states and territories. Australian and international government websites included policy documents and screening tools relating to falls, frailty, malnutrition, pressure injuries, delirium, cognition, acute pain, mental health, and alcohol and drugs. Many sites listed tools as a resource for consumers; therefore the review was unable to determine if the identified tools were recommended by the relevant bodies and which tools were in use in healthcare organisations.

Summary

Across the eight themes identified for this review, there is little evidence to support the presence of an established integrated risk screening tool that is brief, valid, easy to administer and feasible for use in acute care hospitals including emergency departments. There are a number of tools that were considered acceptable to assess risk in acute general medical and surgical wards, and emergency departments, as shown in **Table 4**.

A number of tools frequently used in Australia were not identified in the systematic review and this may be due to the limitations of the review methodology, such as years searched.

Table 4: Risk assessment tools for use in acute settings identified in the literature review

	Setting	
Risk	**Acute care**	**Emergency department**
Cognitive function	4AT CPS2* DTS-bCAM NuDESC RADAR*	CAM EDNSD*[A]
Frailty	CFS	FRESH* ISAR* ISAR-HP*
Functional assessment	BOOMER§ VES-13§	
Falls	STRATIFY*# H2RFM	Tiedmann
Pressure injuries	Braden* INSALUD Norton-MI* InterRAI PURS*	
Medications	MMRAT	
Malnutrition	GMS† MST	
Self-harm		C-SSRS* PSS3* Desjardins

Notes:
* Demonstrated acceptable validity.
† Acceptable validity based in initial study, but further validity testing required.
§ Acceptable validity after first testing in acute care setting, but further validity testing required.
# For medical patients < 65 years and surgical patients.

Appendix B: Scoping review on screening processes

Method

The Commission carried out a scoping review of the published peer-reviewed and grey literature to explore policy and practice issues related to screening and assessment processes in acute care hospitals, with a focus on identifying enablers and barriers to screening and assessment in healthcare practice.

Twenty-seven articles published from 2005–17 were included in the review. Publications originated in multiple countries with seven (26%) of the publications originating in Australia.

Findings

Overall, the scoping review found a range of issues and concerns related to the practice and processes of screening and assessment. The use of multiple tools, duplication of screening and general inefficiency of processes was reported to contribute to the clinical workforce and patient burden, and poor experience for patients. One of the key findings of this review was there seemed to be confusion about the scope and definition of 'screening' and 'assessment' with the terms often used interchangeably.[17] The 'screening' referred to in the literature ranged from very short tools to more complex assessment processes. The blurring of the two terms and processes may have contributed to workload, as some services may be undertaking multiple complex assessment processes for more patients than is necessary.

Policy and practice issues

Research indicated that multiple screening and assessment tools are used in healthcare organisations, with tools having been developed for different purposes and populations. Having tools for multiple conditions, diseases and purposes has contributed to a duplication of patient data, with reports of the need to complete up to 10 different forms following a patient admission or transfer.[28] In addition, some studies noted different tools assessing the same clinical indicators within the one hospital.[18, 29] Such processes led to patients being screened on multiple occasions, contributing to duplication of written data[18, 28] and increasing the workload burden for clinicians. Repeated questioning was recognised as tiring for elderly patients,[18] and generally contributing to poorer patient experience.

Despite there being many screening and assessment tools available, the variation between the tools has limited the capacity for comparison.[9] A criticism is that many tools are of questionable quality[10] and few have been validated.[11, 12] — This has led to concerns over data accuracy[10, 13] and questions about which of the combined concepts within integrated tools are of benefit.[13, 15]

- Regarding the issue of data accuracy, compliance with screening is influenced by several factors. Nurses who are responsible for the majority of screening[30] indicated that they prefer to rely on their own observations and professional judgement to assess patients,[7, 31–33] with some nurses stating that they had little faith in screening and assessment tools.[28, 34] The nurses recognised that screening was within their scope of practice[35, 36] and that some forms of documentation were essential for patient care.[28] However, they questioned the need to complete screening tools on some short-stay, younger or independent patients describing the activity as an unnecessary audit trail.[28] The nurses

also queried whether some forms of screening, such as nutritional screening, would be better performed by other clinicians.[31, 33, 34] At times screening was reportedly delegated to nursing assistants.[28, 31, 36]

Compliance rates for the completion of screening and assessment tools in health care can be low,[31, 32, 36–38] with compliance influenced by organisational culture[33] and the level of organisational and managerial support. Clinicians recognised their own lack of knowledge as a barrier to patient screening,[34, 35, 39–41] and as such requested mandatory training and education on screening and assessment processes to be made available.[17, 33, 34, 36, 41]

Tool design

Tool design was found to be an important factor in implementing screening processes. The complexity and length of the design influenced clinicians' acceptance of the tool and subsequently their compliance with completing risk screening and assessment. Clinicians are more accepting of tools that are short[37, 42] and easy to complete[32] without the need for additional patient probing.[32] The complexity of some tools is a contributory factor for missing data.[43]

The scoping review determined that the majority of screening tools are paper-based.[30] Clinicians expressed support for screening tools to be electronic to ease sharing between services and departments and reduce duplication of written data.[28, 44] Despite the potential for a reduction in duplication, it is unclear if electronic tools reduce clinicians' time, as studies exploring the time taken to complete paper-based tools compared to electronic versions have demonstrated mixed results.[30] The cost of both electronic and paper-based tools is an issue. Integrating tools with IT systems is costly[30] and lengthy, and does not guarantee the information is shared, while for paper-based tools, print quality and the cost of printing were reported impediments to data sharing.[30, 36]

Appendix C:
Consultative process on screening implementation

Method

Clinicians and managers working in a range of healthcare organisations within metropolitan and rural areas were consulted about their experiences of screening and assessment. Focus groups and individual telephone interviews were held with participants (n = 29) from eight different organisations either via the telephone or within the participants' workplace. These semi-structured interviews and focus groups lasted between 30–60 minutes and aimed to elicit how screening and assessment worked in practice.

The majority of participants (n = 23) came from a nursing background. Nurses interviewed included nurse managers, clinical nurse consultants, nurse educators and clinical nurses. Four participants had an allied health background including nutrition and dietetics, speech pathology and social work. Two doctors were interviewed. Participants were experienced in their clinical field, with the majority of participants having 10 or more years of clinical experience.

A list of questions used in interviews and focus groups is shown in **Table 5**.

Table 5: List of interview questions on screening implementation

Topic	Questions/prompts
Demographics, consent and process	Role, years of experience Ensure consent obtained Explain purpose, remind that interview is recorded
Screening and assessment tools	Approximately how many screening and assessment tools do you routinely use in your: (a) Department (b) Organisation?
	List of named screening tools in your: (a) Department (b) Organisation.
	What is the aim of these tools i.e. to detect risk in which areas?

Topic	Questions/prompts
Screening and assessment process	Are these screening tools completed: (a) Manually (paper-based)? (b) Electronically?
	Who completes the screening tools e.g. the patient (self-report) or the clinician in conjunction with the patient?
	Are all patients or selected patients screened? If *selected* patients are screened, how are patients selected as a candidate for screening or assessment?
	When are patients screened? (a) On admission (b) On transfer from another organisation or department (c) Prior to transfer to another organisation or department (d) On discharge from hospital (e) On specified days of the week (f) Any other time?
	How often are patients screened with the same tool? (a) On a daily basis (b) Every 2–3 days (c) Every 4–6 days (d) Following clinical changes (e) Once only?
	What is the process when a patient is identified to be: (a) At risk? (b) Not at risk?
	How is the outcome of the screening process evaluated?
Staff experience	Does screening and assessment help your work?
	What impact does screening and assessment have on your workload?
	Have you received any training or education related to screening and assessment? Who provided this training or education? How frequently is training/education provided?
Organisational factors	Are there readily available screening and assessment policies in your (a) Organisation (b) Department?
	What are the factors in your organisation that promote screening and assessment?
	What are the factors in your organisation that act as barriers to screening and assessment?
	Any other comments you would like to make regarding screening and assessment?

Findings

The type of screening undertaken varied between, and within, organisations and clinical disciplines. When talking about screening within their service, participants referred to a range of tools and formats including patient self-report, patient interview, clinician assessment or pathological (laboratory) testing.

Types of tools currently in use

The consultative process identified that patients were often screened using 6–10 different tools. The majority, if not all, patients are screened for pressure injuries, risk of falls and for social indices on first contact with a health service. Some services screened for nutritional status and mental health issues. Screening for domestic violence and for child protection was routinely undertaken by emergency department nurses, nurses working in maternity services, and, within some jurisdictions, by ward-based nurses. Paediatric patients were routinely screened for developmental milestones and immunisation status.

The focus group and interview process identified multiple tools in use in Australian health services. Participants identified 57 different screening and assessment tools, some of which were unique to an individual service or health service. The list of tools identified during the consultative process appears in **Table 6**.

Table 6: Screening and assessment tools identified in consultative process

Clinical discipline	Category	Screening and assessment tool
Obstetrics	Antenatal	Antenatal risk questions
	Perinatal	Bishop's score
		Labour clinical pathway
	Postnatal	Postnatal risk questions
Obstetrics and Acute/ Aged care		Family and Domestic Violence Screening*
Paediatrics		Paediatric developmental screening
		Child protection risk screening
Acute/Aged care	Admission screening	Pre-admission screening and assessment
		Nursing Admission, Screening and Assessment Tool†
		Adult Nursing Care Plan *My Care Plan*†
	Falls risk	NSQHS Standard 10 Preventing Falls: Patient audit tool
		Falls Risk Assessment Tool (FRAT)
		Falls Risk Assessment Management Plan (FRAMP)
		Timed Up and Go (TUG)
		St Thomas' Risk Assessment Tool in Falling Elderly Inpatients (STRATIFY)

Notes:
* Contained within the Nursing Admission, Screening and Assessment Tool (8 pages).
† Accompanied by *Releasing Nursing Time to Care, MR111, MR120, MR29 Implementation Procedure* (17 pages).

Clinical discipline	Category	Screening and assessment tool
Acute/ Aged care (continued)	Activities of daily living	Lawton Instrument of Activities of Daily Living (IADL)
		Modified Barthel Index (MBI)
		Community Integration Questionnaire (CIQ)
		Canadian Occupational Performance Measure (COPM)
		Stroke Survivor Quality of Life Scale (SS-QOL)
		Resource Utilisation Groups-Activities of Daily Living (RUG-ADL)
	Health and health planning	Patient Health Questionnaire (PHQ)
		Healthcare-associated infection risk assessment
		Advanced Health Directive/Not for Resuscitation Orders*
		Venous Thromboembolism Risk Detection
	Wound and pressure injury	The Waterlow Pressure Ulcer Risk Assessment Tool
		Braden Score*
		Wound Assessment
		Wound Management Plan
		NSQHS Standard 8 Pressure Injury: Patient Audit Tool
	Nutritional screening	Malnutrition Screening Tool (MST)*
		Malnutrition Universal Screening Tool (MUST)
		Mini-Nutritional Assessment (MNA®)
		Mini-Nutritional Assessment — Short Form (MNA®-SF)
		Eat-10
		Subjective Global Assessment (SGA)
		Patient-Generated Subjective Global Assessment (PG-SGA)
	Neurological screening	Glasgow Coma Scale*
		Acute Screening of Swallow in Stroke/TIA (ASSIST)
		Modified Rankin Scale
	Mental and cognitive health	Confusion Assessment Method (CAM)
		Six-Item Screener (SIS)
		Abbreviated Mental Test Score (AMTS)
		Mental Status Examination (MSE)
		Mini-Mental State Examination (MMSE)
		Suicide Risk Assessment
		Kimberley Indigenous Cognitive Assessment (KICA)
	Medication and pain management	Verbal and visual analogue score
		Pain assessment
		Medication management plane
	Nicotine, alcohol and other drugs	National Institute on Drug Abuse (NIDA) screening tool
		Alcohol and Tobacco Screening Tool
		Fagerstrom Test for Nicotine Dependence

Notes:
* Contained within the Nursing Admission, Screening and Assessment Tool (8 pages).
† Accompanied by *Releasing Nursing Time to Care, MR111, MR120, MR29 Implementation Procedure* (17 pages).

Clinical discipline	Category	Screening and assessment tool
Acute/ Aged care (continued)	Discharge screening	Assessment for Hospital-in-the-Home (HITH) program Blaylock Discharge Assessment Referral Record and Leaving Hospital Checklist — Adults
	Caregiver coping	Caregiver Strain Index (CSI)

Notes:
* Contained within the Nursing Admission, Screening and Assessment Tool (8 pages).
† Accompanied by *Releasing Nursing Time to Care, MR111, MR120, MR29 Implementation Procedure* (17 pages).

Screening and age

Some hospitals instigated age-specific screening requirements for some screening practices, while others required that all patients be screened on admission. Generally, age-specific protocols were set at older than 65, with a younger age for some population groups such as Aboriginal and Torres Strait Islander people. One emergency department physician advocated that falls screening be limited to patients aged 75 years and older unless frailty or clinical conditions suggested a level of risk.

Clinician involvement in screening

Participants reported that the majority of screening tools were completed by nurses. There was little evidence from the interviews indicating that doctors or allied health clinicians were screening patients, although allied health clinicians would conduct more detailed assessments. Nonetheless, doctors and allied health clinicians regularly used information from screening tools completed by nurses to gain insight into patients' conditions, associated risks and to identify patients who would benefit from referral to other services.

One health service required that elective patients be screened for infection by the referring doctor prior to patient's admission. In some health services, administrative staff initially reviewed completed pre-admission forms and then referred selected patients to a registered nurse for further assessment and follow-up. Organisational policy varied, but participants generally reported a need for admission screening to be completed within 8–24 hours of admission.

In one jurisdiction, dietetic assistants were trained by qualified dieticians to complete the Malnutrition Screening Tool (MST) on all newly admitted patients. The three-question MST formed a component of the admission screening package completed by nurses. Having dietetic assistants complete the MST had resulted in approximately 30% more patients being screened and reportedly led to more patients being appropriately referred to the nutrition and dietetics department.

A multidisciplinary team approach consisting of allied health clinicians (occupational therapist, dietician, physiotherapist and pharmacist) was the model of care for one outpatient-based aged care service. The multidisciplinary approach to care commenced following identification and referral of patients at risk by acute health service clinicians. Upon referral to the service, any available allied health team member would screen the patient using standardised tools. The allied health clinician then referred the patient to the most appropriate allied health team member(s) for further assessment and follow-up if applicable.

Screening mode

Healthcare services differed in that electronic and paper-based tools were in use. In some hospitals, screening tools had been integrated with the electronic medical record, whereas other hospitals were in the process of rolling out the electronic medical record and had a combination of electronic and paper-based tools. The majority of hospitals (and tools) remained paper based. Nurses using electronic tools reported frequently needing to wait for a computer at the nurses' station to become available, and so would aim to complete all forms of documentation at the one time.

The screening process

Following initial screening, clinicians documented any positive findings in the medical record and (if applicable) in the nursing care plan. These documentations were reportedly used as a basis to communicate patients' care needs to other clinicians and to inform care. In other areas, such as the emergency department, screening was reported to be often an informal process based on professional judgement. This was explained as partly due to patients' clinical conditions, time constraints and the need to transfer patients to the ward within four hours.

For patients who were considered to have low (or no) risk of an adverse event, injury or condition, any screening and assessment documentation that had been completed was filed in the patient's medical record. Participants reported that processes to repeat or evaluate the outcomes of screening and assessment were not common practice.

Transferring patients between, and within, health services can increase the risk of healthcare-associated infection, delirium, falls and medication errors. Patients transferred from other organisations were generally screened on admission for falls and pressure injuries. It was reported that generally patients were not re-screened prior to transfer within the health service, although some patients were re-screened following a transfer from one ward to another. The same or a different tool (assessing the same risk) could be used. As critical care patients had a greater risk of developing an infection, they could be screened (swabbed) for healthcare-associated infections prior to transfer.

Some health services had formal processes for routine review and repeat screening. This ranged from re-screening at the beginning of each nursing shift for patients previously identified to be at risk of falling or pressure injury, to weekly or three times weekly re-screening of all patients.

Finally, most health services required patients to be screened in response to clinical changes. This included re-screening following multiple changes to prescribed medications and post-operatively.

Clinicians' perceptions of screening

Clinicians' perceptions of screening differed according to discipline, position and whether the individual was required to undertake the screening process. For example:

- Nurses and other clinicians who were responsible for screening did not perceive that screening and assessment aided their work. They perceived screening to be a time-consuming, legal requirement that limited their professional judgement
- Doctors, allied health clinicians and nurse managers who did not routinely screen patients, but benefited from the information garnered from screening, believed that risk screening was a way to triage patients and detect clinical changes
- Nurse managers were of the opinion that screening improved patient outcomes and reduced the number of critical incidents; however, they could not readily demonstrate evidence of this.

Participants overwhelmingly reported that screening and assessment processes added to their workload. Nurses stated that the number of screening tools, associated length of tools, and patient turnover made screening and assessment time-consuming, was workload intensive and impinged on the time they had available for patient care activities. In particular, clinicians working in the emergency department indicated that the National Emergency Access Target (NEAT) limited the time available for screening to be completed in a comprehensive manner.

Dieticians, occupational therapists and speech pathologists agreed that screening increased their workload. The increase in referrals following accurate screening was viewed positively in that patients may not have otherwise been identified and referred to their service. However, the increase in the number of patient referrals was reported to be stretching the capacity of current allied health resources.

Several factors were perceived to promote compliance with patient screening. Clinical governance, the need to comply with NSQHS Standards, key performance indicators, accreditation and auditing were major factors. A positive team culture, regular multidisciplinary meetings and associated managerial support were also considered integral for effective screening and assessment processes. Reported barriers to patient screening were time restrictions, workload and staffing levels. Patients' clinical conditions and English language fluency reportedly inhibited screening and assessment but this was not perceived to be a major barrier. Clinicians reported utilising translators, interpreters, Aboriginal Liaison Officers and patients' carers when necessary.

Education and training

The provision of training and education on screening and assessment reportedly varied between healthcare services, and ranged from simple overviews to more complex activities. Examples include:

- Training on mandated screening tools provided by a state-level coordinator
- Hospital orientation programs for newly employed nurses
- On-the-job training
- Clinical nurse educator-led training to demonstrate tools in practice.

Many senior clinicians did not recall having been provided with any formal training or education, and two participants believed that they might have received screening and assessment education at a tertiary (university) level, but were uncertain.

Overall, it appears that education and training about risk screening, and the use of particular screening tools is variable. This is likely to contribute to perceptions of lack of value in risk screening and assessment, and reliability of implementation.

Glossary

carer: a person who provides personal care, support and assistance to another individual who needs it because the individual has a disability, medical condition (including a terminal or chronic illness) or mental illness, or they are frail and aged.

An individual is not a carer merely because they are a spouse, de facto partner, parent, child, other relative or guardian of an individual, or live with an individual who requires care. A person is not considered a carer if they are paid, a volunteer for an organisation or caring as part of a training or education program.[45]

clinical governance: an integrated component of corporate governance of health service organisations. It ensures that everyone — from frontline clinicians to managers and members of governing bodies, such as boards — is accountable to patients and the community for assuring the delivery of safe, effective and high-quality services. Clinical governance systems provide confidence to the community and healthcare organisation that systems are in place to deliver safe and high-quality care.

clinician: a healthcare provider, trained as a health professional, including registered and non-registered practitioners. Clinicians may provide care within a health service organisation as an employee, a contractor or a credentialed healthcare provider, or under other working arrangements. They include nurses, midwives, medical practitioners, allied health practitioners, technicians, scientists and other clinicians who provide health care and students who provide health care under supervision.

comprehensive care: health care that is based on identified goals for the episode of care. These goals are aligned with the patient's expressed preferences and healthcare needs, consider the impact of the patient's health issues on their life and wellbeing, and are clinically appropriate.

comprehensive care plan: a document describing agreed goals of care, and outlining planned medical, nursing and allied health activities for a patient. Comprehensive care plans reflect shared decisions made with patients, families, carers and other support people about the tests, interventions, treatments and other activities needed to achieve the goals of care. The content of comprehensive care plans will depend on the setting and the service that is being provided, and may be called different things in different health service organisations. For example, a care or clinical pathway for a specific intervention may be considered a comprehensive care plan.

consumer: a person who has used, or may potentially use, health services, or is a carer for a patient using health services. A healthcare consumer may also act as a consumer representative to provide a consumer perspective, contribute consumer experiences, advocate for the interests of current and potential health service users, and take part in decision-making processes.[46]

diagnosis: The identification by a medical provider of a condition, disease, or injury made by evaluating the symptoms and signs presented by a patient.[47]

goals of care: clinical and other goals for a patient's episode of care that are determined in the context of a shared decision-making process.

governance: the set of relationships and responsibilities established by a health service organisation between its executive, workforce and stakeholders (including patients and consumers). Governance incorporates the processes, customs, policy directives, laws and conventions affecting the way an organisation is directed, administered or controlled. Governance arrangements provide the structure for setting the corporate objectives (social, fiscal, legal, human resources) of the organisation and the means to achieve the objectives. They also specify the mechanisms for monitoring performance. Effective governance provides a clear statement of individual accountabilities within the organisation to help align the roles, interests and actions of different participants in the organisation to achieve the organisation's objectives. In the NSQHS Standards, governance includes both corporate and clinical governance.

health care: the prevention, treatment and management of illness and injury, and the preservation of mental and physical wellbeing through the services offered by clinicians, such as medical, nursing and allied health professionals.[48]

health literacy: the Commission separates health literacy into two components — individual health literacy and the health literacy environment.

Individual health literacy is the skills, knowledge, motivation and capacity of a consumer to access, understand, appraise and apply information to make effective decisions about health and health care, and take appropriate action.

The health literacy environment is the infrastructure, policies, processes, materials, people and relationships that make up the health system, and it affects the ways in which consumers access, understand, appraise and apply health-related information and services.[49]

health service organisation: a separately constituted health service that is responsible for implementing clinical governance, administration and financial management of a service unit or service units providing health care at the direction of the governing body. A service unit involves a group of clinicians and others working in a systematic way to deliver health care to patients. It can be in any location or setting, including pharmacies, clinics, outpatient facilities, hospitals, patients' homes, community settings, practices and clinicians' rooms.

higher risk (patients at higher risk of harm): a patient with multiple factors or a few specific factors that result in their being more vulnerable to harm from health care or the healthcare system. Risk factors may include having chronic clinical conditions; having language barriers; being of Aboriginal or Torres Strait Islander background; having low health literacy; being homeless; or being of diverse gender identities and experiences, bodies, relationships and sexualities (currently referred to as lesbian, gay, bisexual, transgender and intersex, or LGBTI).

leadership: having a vision of what can be achieved, and then communicating this to others and evolving strategies for realising the vision. Leaders motivate people, and can negotiate for resources and other support to achieve goals.[50]

multidisciplinary team: a team including clinicians from multiple disciplines who work together to deliver comprehensive care that deals with as many of the patient's health and other needs as possible. The team may operate under one organisational umbrella or may be from several organisations brought together as a unique team. As a patient's condition changes, the composition of the team may change to reflect the changing clinical and psychosocial needs of the patient.[51] Multidisciplinary care includes interdisciplinary care. (A discipline is a branch of knowledge within the health system.[52])

patient: a person who is receiving care in a health service organisation.

person-centred care: an approach to the planning, delivery and evaluation of health care that is founded in mutually beneficial partnerships among clinicians and patients.[53] Person-centred care is respectful of, and responsive to, the preferences, needs and values of patients and consumers. Key dimensions of person-centred care include respect, emotional support, physical comfort, information and communication, continuity and transition, care coordination, involvement of family and carers, and access to care.[54] Also known as patient-centred care or consumer-centred care.

policy: a set of principles that reflect the organisation's mission and direction. All procedures and protocols are linked to a policy statement.

procedure: the set of instructions to make policies and protocols operational, which are specific to an organisation.

process: a series of actions or steps taken to achieve a particular goal.[55]

protocol: an established set of rules used to complete tasks or a set of tasks.

quality improvement: the combined efforts of the workforce and others — including consumers, patients and their families, researchers, planners and educators — to make changes that will lead to better patient outcomes (health), better system performance (care) and better professional development.[56] Quality improvement activities may be undertaken in sequence, intermittently or on a continuous basis.

responsibility and accountability for care: accountability includes the obligation to report and be answerable for consequences. Responsibility is the acknowledgement that a person has to take action that is appropriate to a patient's care needs and the health service organisation.[57]

risk: the chance of something happening that will have a negative impact. Risk is measured by the consequences of an event and its likelihood.

risk management: the design and implementation of a program to identify and avoid or minimise risks to patients, employees, volunteers, visitors and the organisation.

risk screening: a short process to identify patients who may be at risk of, or already have a disease or injury. It is not a diagnostic exercise, but rather a trigger for further assessment or action.

safety culture: a commitment to safety that permeates all levels of an organisation, from the clinical workforce to executive management. Features commonly include acknowledgement of the high-risk, error-prone nature of an organisation's activities; a blame-free environment in which individuals are able to report errors or near misses without fear of reprimand or punishment; an expectation of collaboration across all areas and levels of an organisation to seek solutions to vulnerabilities; and a willingness of the organisation to direct resources to deal with safety concerns.[58]

screening: a process of identifying patients who are at risk, or already have a disease or injury. Screening requires enough knowledge to make a clinical judgement.

shared decision making: a consultation process in which a clinician and a patient jointly participate in making a health decision, having discussed the options, and their benefits and harms, and having considered the patient's values, preferences and circumstances.[59]

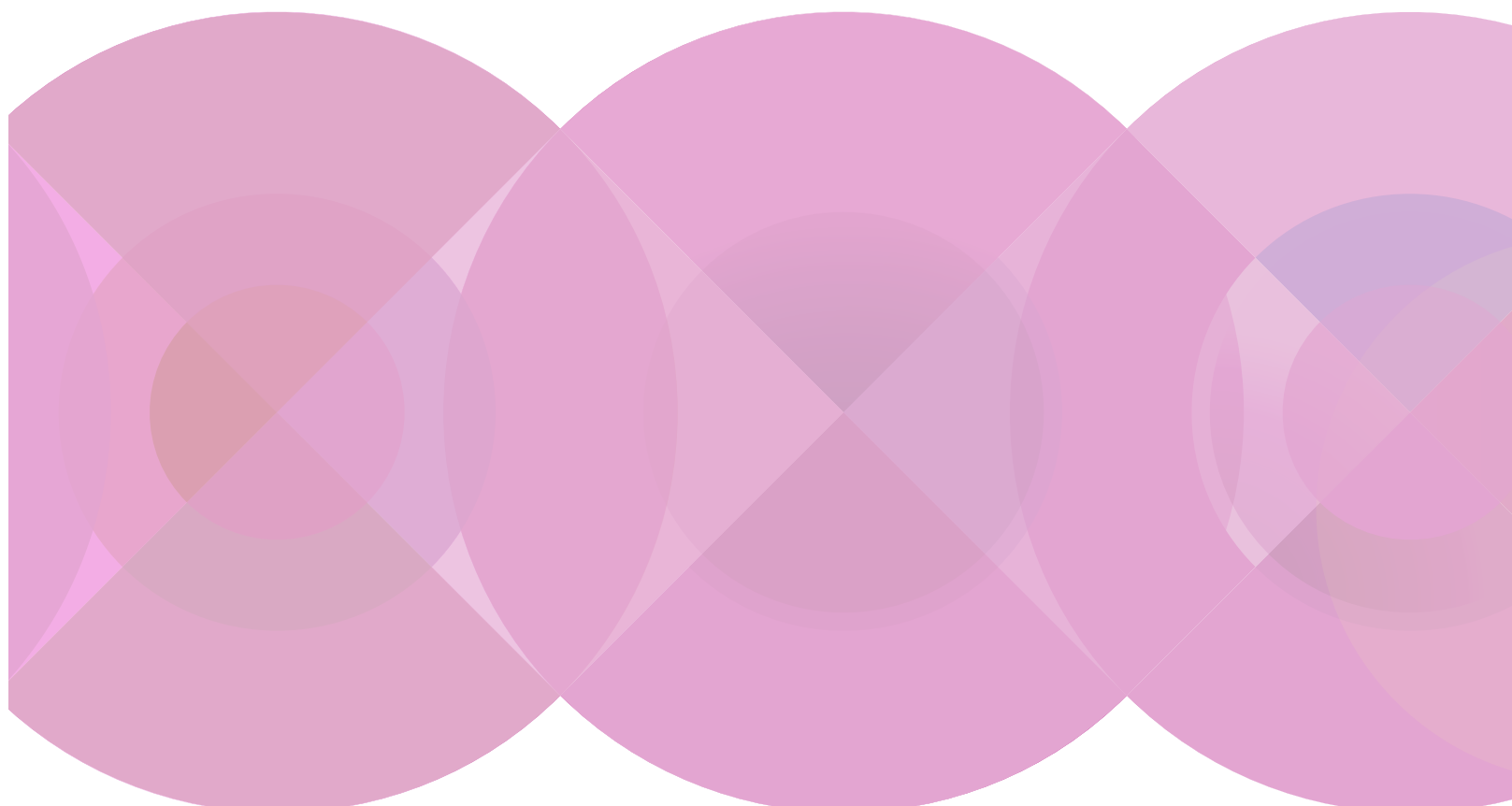**training**: the development of knowledge and skills.

workforce: all people working in a health service organisation, including clinicians and any other employed or contracted, locum, agency, student, volunteer or peer workers. The workforce can be members of the health service organisation or medical company representatives providing technical support who have assigned roles and responsibilities for care of, administration of, support of, or involvement with patients in the health service organisation. See also clinician.

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