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# Interim guidance for the care of adult patients

with cognitive impairment requiring hospital care during  
the COVID-19 pandemic in Australia





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Available from:

<https://chsr.centre.uq.edu.au/files/4876/InterimGuidance.pdf>

## Endorsed by:

- Cognitive Impairment and COVID-19 Hospital Care Guidance Readers Group (Box 2)
- NHMRC's National Institute of Dementia Research (NNIDR) Special Interest Group (SIG): Cognitive Impairment Identification and Care in Hospitals

## Other relevant documents:

- Patients with cognitive impairment in hospital during the COVID-19 pandemic (a summary for health professionals)<sup>^</sup>
- Going to hospital during the COVID-19 pandemic: guidance for adults with dementia or other cognitive impairments, their care partners and families<sup>^</sup>
- Safe hospital care for people with cognitive impairment during COVID-19 Fact Sheet for clinicians<sup>†</sup>
- Safe care for people with cognitive impairment during COVID-19 Poster<sup>†</sup>

<sup>^</sup> These documents are available from <https://chsr.centre.uq.edu.au/interim-guidance-care-adult-patients-cognitive-impairment-requiring-hospital-care-during-covid-19-pandemic-australia>

<sup>†</sup> These documents are available from <https://safetyandquality.gov.au/cognitive-impairment-and-covid-19>

## Executive Summary

COVID-19 is a highly infectious respiratory disease [1]. The COVID-19 pandemic in Australia brings new challenges for hospital health professionals in providing safe and optimal care for patients with cognitive impairment. These challenges are primarily related to the unintended impacts of COVID-19 pandemic policies on the unique and complex needs of hospitalised people with cognitive impairment, in particular:

1. The impact of changed hospital workflows on the continued involvement of people with cognitive impairment and their care partners/advocates in their goal-directed care.
3. An increased risk of delirium as a result of cognitive impairment while in hospital with COVID-19 or other illness, and increased risk of poor outcomes as a result of delirium management during COVID-19 pandemic.
4. The impact of COVID-19 infection control policies, particularly personal protective equipment (PPE) requirements, on cognitive impairment management strategies in acute settings – masks and gowns can cause confusion for people with cognitive impairment and may contribute to increased expression of behaviours (such as anxiety, disorientation, exit seeking, agitation and aggression) that can compromise patient and clinician safety.
5. There could be a possible increase in the use of pharmacological (often referred to as chemical) and physical restraint. Restraint usage can seriously impact long term physical and cognitive functioning, and mortality, for people with cognitive impairment.



Fundamental to the response to the COVID-19 pandemic is upholding the principle of partnering with people with cognitive impairment to plan, communicate, set goals and make decisions about current and future care. This is outlined in the Partnering with Consumers Standard of the National Safety and Quality Health Service (NSQHS) Standards and the Ethical Framework for shared decision making during the COVID-19 pandemic [2, 3]. For the purposes of this paper, care partners and advocates includes, for example, families, supporting or substitute decision-makers (including attorneys, enduring guardians, or guardians where relevant), care partners, advocates, friends, partners or spouse. Patients' wishes should be discussed as early as possible with patients and their care partners/advocates. An important component of the admission process is participating in discussions with the patient and care partners/advocates to develop relevant goals of care and identifying if patients have completed an Advance Care Plan. The goals of care should be revisited with the patient and care partners/advocates throughout the episode of care if the treatment plan changes significantly.

The National Safety and Quality Health Service (NSQHS) Standards continue to provide important standards for safe high quality care for people with cognitive impairment[4]. Given that much is still unknown about COVID-19, health care professionals will be interpreting and applying existing evidence-based practice in a new clinical situation. In particular, the treatment of delirium in COVID-19 has unique challenges and will require local interpretation and implementation based on resources and environmental constraints.

This interim guidance is based on current evidence and is intended to optimise patient care and assist health care practitioners in the acute care setting to appropriately care for people with cognitive impairment during the COVID-19 pandemic. It is developed in recognition of the evolving nature of the COVID-19 pandemic. It reflects the shared expertise of people living with dementia, their care partners/advocates, clinicians, peak bodies and researchers.

In Australia, the COVID-19 pandemic has impacted on the health system, creating phases of hospital presentations which will increase or decrease based on community COVID-19 infection rates and national management processes. Government advice at any given time will reflect the capacity of health services at a regional level and will guide the community in their decisions about seeking health care services as required. The recommendations documented here as interim guidance address the concerns of patients with cognitive impairment who receive hospital treatment during the COVID-19 pandemic (Table 1). This guidance is written with the expectation that the health system is currently in the position to be working to provide quality care for all patients and avoid suboptimal treatment and care that may occur in a changed and reactive environment with stretched resources. Treatment decisions and management plans may be different as a result of the COVID-19 pandemic (Figure 1). This is accepted. These anticipated changes should be communicated and discussed with patients and their care partners/advocates early in the admission process, and throughout the episode of care.

The Australian Commission on Safety and Quality in Health Care (ACSQHC) was consulted in the development of the guidance in relation to links to the National Standards in Quality Health and Safety (NSQHS) Standards [3, 5] and the Delirium Clinical Care Standard[6, 7]. The Dementia Australia Advisory Committee was consulted in the development of the recommendations. This [interim guidance](#) was endorsed by NHMRC's National Institute of Dementia Research (NNIDR) Special Interest Group (SIG): Cognitive Impairment Identification and Care in Hospitals, and the Australian and New Zealand Society of Geriatric Medicine (ANZSGM). The suite of support documents include:

- Patients with cognitive impairment in hospital during the COVID-19 pandemic (a summary for health professionals) (available from the Australasian Journal on Ageing and UQ)
- Going to hospital during the COVID-19 pandemic: guidance for adults with dementia or other cognitive impairments, their care partners and families (available from <https://chsr.centre.uq.edu.au/interim-guidance-care-adult-patients-cognitive-impairment-requiring-hospital-care-during-covid-19-pandemic-australia>)
- Safe hospital care for people with cognitive impairment during COVID-19 Fact Sheet for clinicians (available from <https://safetyandquality.gov.au/cognitive-impairment-and-covid-19>)
- Safe care for people with cognitive impairment during COVID-19 Poster (available from <https://safetyandquality.gov.au/cognitive-impairment-and-covid-19>)

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1 [https://www.safetyandquality.gov.au/sites/default/files/2019-06/acsqhc\\_cogcare\\_factsheet\\_2\\_d4.pdf](https://www.safetyandquality.gov.au/sites/default/files/2019-06/acsqhc_cogcare_factsheet_2_d4.pdf)



## Background

The pandemic of coronavirus disease 2019 (COVID-19) caused by the novel Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) was first detected in Wuhan, China and reported to the World Health Organization (WHO) Country Office in China on 31 December 2019. The aggressive spread of COVID-19 was declared a public health emergency of international concern by WHO on 30 January 2020. COVID-19 is a highly infectious respiratory disease with the majority of people experiencing mild to moderate symptoms [1]. A smaller percentage of people who are both frail, and either old or have multiple comorbidities, experience severe symptoms[8]. There is a high mortality rate amongst this group.

Cognitive impairment broadly describes a temporary or permanent condition resulting in clinically significant difficulties with remembering, new learning, concentrating, making decisions, and carrying out daily tasks. The most common underlying diagnoses of cognitive impairment in the hospital setting are dementia and delirium [5]. Other relevant causes include intellectual disability, acquired brain injury, stroke, psychiatric disorders, or side effects of medication.

People with cognitive impairment often have complex care needs arising from physical and psychiatric morbidities, behavioural and psychological symptoms (BPS), and a need for functional support which can result in frequent hospitalisations and long hospital stays. During hospitalisation, people with a diagnosis of cognitive impairment are at high risk of adverse outcomes such as falls, delirium, pressure injuries, becoming lost, dehydration, or malnutrition regardless of the reason for admission [9-13]. These risks are further compounded when BPS are present.



BPS involve, but are not limited to, any combination of agitation, aggression, exit seeking, wandering, repetitive vocalisation, disinhibition, apathy, dysphoria, hallucinations, delusions, and sleep disturbances. For people living with dementia, these symptoms are clinically defined as Behavioural and Psychological Symptoms of Dementia (BPSD) and the term Responsive Behaviours has also been adopted to encourage health care professionals to consider the behavioural symptoms as understandable reactions to specific situations/contexts. In delirium, a variety of BPS (also clinically defined as neuropsychiatric symptoms) are known to manifest, including agitation, aggression, exit seeking, psychotic symptoms (delusion, hallucination and paranoia) and sleep disturbance. All hospital patients with cognitive impairment, whether or not they have COVID 19, are at high risk of delirium and associated BPS [14-17]. Identifying the underlying cause of BPS as either clinical (such as delirium) or communication issues (frustration, misunderstanding) will guide treatment/intervention options. The presence of BPS, can challenge care delivery and increase the risk of harm to patients and others [13, 18]. Considering that for people with cognitive impairment, the complexity and unfamiliarity of a hospital ward can lead to fear, anxiety, confusion and misunderstanding, it is not surprising that health care professionals report aggression associated with cognitive impairment and hyperactive delirium [19].

There is also specific evidence that people with cognitive impairment due to intellectual disability are more likely to present to acute care with severe respiratory disease, raising differential diagnostic issues related to COVID-19 [20-22]. People with cognitive impairment face specific infection control challenges through being more likely to live in communal and institutional settings [23, 24], and are likely to face cognitive challenges in rapidly mastering and maintaining infection control practices, including the use of PPE.

In Australia, the reductions in emergency department and hospital attendance are indicating people are avoiding hospital attendance due to fear of exposure to COVID-19 [25]. The COVID-19 pandemic is being managed in Australia as a health emergency. During natural disasters and health crises, frail people and those with pre-existing medical conditions (for example, cognitive impairment, mental health disorders, respiratory disease, cancer, hypertension, and cardiac disease) have complex care needs that make them particularly vulnerable and more likely to experience negative consequences [26-29]. There are growing reports of increased out of hospital mortality associated with avoiding hospitalisation [31, 32]. This guidance recommends that health care professionals provide clear and transparent advice to any patient about the need to be admitted to hospital irrespective of cognitive impairment if the need arises. Hospitals are challenging environments at any time especially for people with cognitive impairment so this guidance aims to ensure hospital care can continue to meet the needs of those with cognitive impairment despite the challenges due to COVID-19.

During the COVID-19 pandemic, people with cognitive impairment will continue to require hospitalisation as they did before. Changes in patient flow, workforce and infection control are likely to create new complexities for what can already be a complex patient group. This guidance is written with the expectation that the health system will continue to be challenged by the COVID-19 pandemic, but remain in the position to provide quality care for all patients, including those with cognitive impairment, and avoid suboptimal treatment and care that may occur should the health system be overwhelmed.

## Purpose and scope

This interim guidance is for health care professionals working in acute care services and for administrators managing hospitals in the context of the COVID-19 pandemic in Australia. Guidance is also available specifically with reference to people with cognitive impairment living at home and in residential care<sup>2</sup>, including the recommendation to continue to seek medical advice if needed either in-person or via telehealth (video calls or phone calls) from general practitioners (GPs) and hospital services in a timely manner [33].

This interim guidance discusses the care of people with cognitive impairment inclusive of people living with delirium, minor and major neuro-cognitive disorders (Mild Cognitive Impairment and Dementia), or congenital and acquired brain injuries (intellectual disability) [5]. The guidance applies to the care of these patients in acute hospital settings in Australia throughout an episode of care, including admission and transitions, during the COVID-19 pandemic, irrespective of their reason for admission (COVID-19 or other). The guidance seeks to maximise the capacity for people with cognitive impairment to be supported to comply with and adjust to the necessary restrictions during the pandemic and continue to contribute to decisions about their care.

Preparation for the care of people with cognitive impairment in hospitals in Australia during the COVID-19 pandemic may benefit from consideration of factors recommended in this interim guidance. Recommendations cover the domains of:

1. Goals of care
2. Patient and care partner/advocate support
3. Infection control
4. Identifying triggers for behavioural and psychological symptoms leading to distress
5. Restraint use and medication.

## Method

The NHMRC National Institute for Dementia Research, with Dr Melinda Martin-Khan, and Prof Len Gray recognised the need for guidance on the care of people with cognitive impairment in hospital settings during the COVID-19 pandemic. The evaluating Quality Care (eQC) Patient and Carer Advisory Board at The University of Queensland drafted a scoping document for engaging people with cognitive impairment, their care partners/advocates, clinicians, peak bodies and researchers in the development of this interim guidance. The Advisory Board is chaired by Dr Jane Thompson (Public Contributor) and operates as part of the quality of care work led by Dr Martin-Khan. A Guidance Committee (Box 1) and Readers Group (Box 2) were then recruited. The guidance content was identified by the Guidance Committee and content-specific sub-groups, resulting in a draft document which was sent to the Readers Group for extensive review. People with dementia and care partners/advocates (also representing the Dementia Australia Advisory Committee and eQC Patient and Carer Advisory Board) were involved in each step of the process, including as members of the Guidance Committee and Readers Group, in email and telephone communications, and in editing of drafts of all output documents. All activities were aligned to the principle of partnering with people with lived experience of dementia to plan, communicate, set goals and make decisions about current and future care, as outlined in the Partnering with Consumers Standard [3].

<sup>2</sup> Non-hospital based guidance relevant to COVID-19 with specific reference to people with cognitive impairment at home, in residential aged care, in the emergency department or in intensive care is available online from a variety of reliable sources. Examples include: clinical guidelines for related treatment

<https://www.bgs.org.uk/resources/coronavirus-managing-delirium-in-confirmed-and-suspected-cases>,

<https://gedcollaborative.com/article/covid-19-resources/>

Government websites:

<https://www.health.nsw.gov.au/Infectious/diseases/Pages/coronavirus.aspx>;

<https://www.dhhs.vic.gov.au/coronavirus>

Advocates: <https://www.dementia.org.au/an-update-from-dementia-australia>.





# Interim guidance for the care of people with cognitive impairment

## 1. Goals of care

Supported decision making involves people in decisions about their own care [34]. For people with cognitive impairment a hospital admission during the COVID-19 pandemic may be seen as a stressful outcome in and of itself. During admission, patients' wishes should be discussed as early as possible. The health care professional's current local knowledge about the hospital's capacity to deliver care will be important information in discussions involving supported decision-making with patients and care partners/advocates about the admission process, treatment options, and the hospital care experience.

Explaining how the COVID-19 pandemic will impact the individual patient's care and long term health outcomes could help reduce the stress of treatment decisions. For some patients with cognitive impairment, particularly if they do not have COVID-19, there will be no change in the hospital episode of care and this will help with their decision-making. For others, a potential change in

management or treatment options as a result of COVID-19 (either because they have COVID-19 or because clinical practice changes due to the presence of pandemic conditions demands it) could have long term impacts for the patient which could potentially alter their goals of care.

Goals of care are the clinical and personal goals for a patient's episode of care that are determined through a supported decision-making process which is carried out in a manner that minimises stress as much as is feasible in the circumstances [7, 35]. Care planning, based on the goals of care, is patient centred and focused on comprehensive communication, patients' wishes and shared decisions. Steps to prevent deconditioning during illness and planning for allied health interventions to support reablement are examples of restorative care planning [36]. Understanding challenges faced by patients during the pandemic may be more difficult if the patient has a CALD background, or if they are an Aboriginal or Torres Strait Islander person [37]. Effective communication is vital to support appropriate and culturally safe patient care.

An Advance Care Plan should also guide any decision regarding limitations of care (e.g. do not intubate) [38]. These decisions should be clearly documented in the patient's records, respected and enacted. Each state works within specific legal frameworks so processes should follow the specific individual hospital policy. Additional consideration should be given to new state policies or frameworks released during the COVID-19 pandemic such as ethical frameworks which have particular relevance to the care for people with cognitive impairment [2].

Quality of life is paramount for all but especially for those in a palliative or terminal phase. Where relevant and feasible, care planning could include whether hospital admission is agreeable to the patient after the benefits and risks (such as possible distress) are evaluated.

## Recommendations for care of people with cognitive impairment

Given the evidence available, we recommend the following:

- Orientation to changed hospital processes. Provide a clear description of how the COVID-19 pandemic has or has not impacted the anticipated health care episode. Identify new hospital practices required in a pandemic and those that continue as usual care will alleviate some stress around the hospital admission
- Regular, clear conversations starting from admission providing information on who will be able to visit and support the admitted patient during hospitalisation and at home after discharge
- Arrangements for supported physical and cognitive restorative care are in place prior to discharge for patients deconditioned in hospital (as a result of COVID-19 and/or period of illness or sedation)
- Identification and documentation of the supporting or substitute decision-maker
- Ensure that the necessary skilled support health care professionals are available for patients and their care partners/advocates before, during and after advance care planning discussions based on their individual needs, such as spiritual, cultural, or linguistic
- Processes are in place for health service organisations to accept Advance Care Plans developed in the community
- Allocation of clinician/s responsible for conducting the advance care planning discussion/s with the patient and care partners/advocates
- Provision of training to the healthcare professionals with respect to COVID-19 outcomes, advance care planning and supported decision making
- Involvement of care partners/advocates in advance care planning discussions
- Palliative care and end of life choices are considered with the inclusion of care partners/advocates to ensure dignity and humane choices while managing COVID-19 risk
- Connections with specialist geriatric, rehabilitative and palliative care services to maximise the opportunities to effectively utilise their skills in supporting patients with complex problems and treatment decisions
- Involvement of people with cognitive impairment, care partners/advocates and GPs in discharge planning to ensure there is adequate support during COVID-19 and for continuity of care, by identifying any services, equipment or follow-up that may be needed
- Follow-up is organised by a health care agency (hospital, GP, community nursing, etc.) prior to discharge to prepare for initial discharge, and people with cognitive impairment and their care partners/advocates are included in the discharge plan for ongoing care at home

## 2. Patient and care partner/advocate support

Care partners/advocates often provide a 'cognitive anchor' for people with cognitive impairment, particularly in unfamiliar or complex environments such as hospitals[39]. Their presence can be a key element to a successful hospital admission. Most hospitals have currently implemented visitor bans to limit the transmission of COVID-19. While extra measures are needed to protect patients, care partners/advocates/visitors and health care professionals during a pandemic, the banning of visits to a person with cognitive impairment by care partners/advocates can jeopardise their successful treatment- a risk that must be balanced against the risk of COVID-19 transmission. It is preferable that, where possible, the situation for each patient with cognitive impairment is considered and that one regular visitor is permitted.

In an environment where visiting bans are applied to care partners/advocates, hospitals can ensure care partners/advocates continue to be involved in decision-making by maintaining accurate contact details and planning regular communication. Health care professionals need to proactively engage decision support persons or substitute decision-makers and care partners/advocates utilising either videoconference or telephone conference technology to involve them in care discussions. Visual conversations (via videoconference platforms like FaceTime or Zoom) improve the ability of a person with cognitive impairment to successfully process a conversation [40]. Connecting with care partners/advocates, or translators for CALD patients, during invasive procedures (like collecting blood samples) could help the patient with cognitive impairment understand the situation more clearly.

### Recommendations for patient and care partner/advocate support

Given the evidence available, we recommend the following:

- Appropriate contact details are accurately documented and shared so communication is not denied on privacy grounds
- Health care professionals proactively call care partners/advocates utilising videoconference and telephone conference technologies where possible and if necessary (such as when visitor bans are in place) to support shared discussions
- Interpreters are involved in conference calls where required for CALD patients who have a preferred language other than English
- Visiting ban modifications are granted on compassionate grounds (i.e. currently in place in paediatric wards) to include visits for the cognitive support of any patient with cognitive impairment, especially those who are COVID-19 negative
- Regular reminders for patients are provided by care partners/advocates to explain hospitalisation, why care partners/advocates are not present, or the reason for unusual attire (this should be provided in the patient's preferred language, particularly for CALD or Aboriginal and Torres Strait Islander peoples) – this may be as simple as a large photograph with written explanations, or a talking photo album
- Maintain stable environment by reducing patient movement during the hospital (i.e. moving between rooms). This will help to minimise the risk of delirium, and it will also potentially reduce the risk of cross infection
- Review nursing workforce models (e.g. AIN, EEN and RN supervision and patient-to-nurse ratios) to ensure the needs of patients with cognitive impairment and their care partners are supported
- Cognition nurse specialists, cognitive psychologists, occupational therapists, and/or diversional therapists can devise the most therapeutic environment and psychosocial care to manage the limitations of infection control for people with cognitive impairment
- Health care professionals experienced in the care of patients with cognitive impairment should be carefully rostered to care for patients where their skills can best be utilised, and in a way that minimises health care professionals rotations where feasible
- Designated training should be provided for health care professionals following a review of models of care to cater for the needs of people with cognitive impairment in a high infection control area

### 3. Infection control

COVID-19 infection control is underpinned by the use of appropriate PPE (for health care professionals, patients and visitors), vaccinations, hygiene, social distancing and isolation. The use of PPE by admission health care professionals, particularly protective eyewear and facemasks, can be confusing for people with cognitive impairment. In addition, the need for people with cognitive impairment presenting with suspected COVID-19 to wear PPE, particularly face and oxygen masks, can exacerbate this confusion. In this confused state, people with cognitive impairment may exhibit behaviours such as disorientation, exit seeking, agitation and aggression, which may risk breaching PPE. These anxiety and delirium related behaviours can also be exacerbated by social distancing and isolation.

There is still some degree of vaccine hesitancy in the community. Given that hospitals are a high risk setting, health professional should reassure patients COVID-19 vaccines are widely available, are safe, and have been proven to reduce the risk of serious illness and death, especially for older people and people with comorbidities. Patients should consult their health professional to determine which vaccines and vaccine schedule is right for their specific health situation.

Wherever possible, proactive social distancing and isolation practices for people with cognitive impairment should include the provisioning of a segregated ward. Through co-locating people with cognitive impairment, preventative solutions can be considered to reduce the risk of PPE breaches.

An increase in the use of telehealth and virtual assessment to monitor delirium and pain levels will limit intrusive activity which will increase confusion and potential infection control issues. Establishing consistent monitors in relevant rooms for clinical observation and carrying out communication regularly to support patient wellbeing may minimise breaches [41, 42]. Enabling care partners/advocates to regularly interact with patients through a visitation portal via video conferencing technology utilising monitors or iPads mounted in rooms can support patient and care partners/advocates well-being.

The COVID-19 pandemic may challenge the manner and location in which safe care for BPS can now be delivered. Agitation and aggression may threaten the integrity of health care professionals' PPE, while exit seeking carries significant risk of spreading infection in hospitals. A clinical environment in which both concerns can be alleviated is recommended. The allocation of one-to-one nursing specials to patients with cognitive impairment to prevent BPS and falls may not be possible amidst the increased demands of the COVID-19 pandemic. However, if extra nursing and allied health resources are available, they could be usefully deployed to provide preventative biopsychosocial care strategies, thereby potentially avoiding high risk situations and symptoms. In an emergency situation all resources should be considered that may protect the safety of patients and others, and this may include wards people and other available staff. Whole-of-hospital training in the recognition and management of people with cognitive impairment is encouraged if this approach is to be utilised. Refer to the flowchart (Figure 1) as a useful guide to assist with planning an individual care plan for patients, and in preparing health care professional training.

Single rooms may offer the most optimal therapeutic care setting while also providing an adequate solution for infection control purposes. Although patient responses to single rooms may vary, single rooms provide an opportunity to create a more separate quiet area, with diffused lighting and subdued sound thereby potentially reducing the confusion of constant activity often found in a larger ward. Depending on the individual needs of the patient, many will be at risk of adverse outcomes from a complex array of factors in hospital. Careful attention will be required to ensure that the interventions put in place to minimise the impact of one factor do not result in an increase in the risk of other factors (for example, increased risk of falls as a result of medication resulting in broken hip)[43]. With the single room door remaining open, and the patient under frequent or constant observation by nearby health care professionals to meet patient needs for assistance (pain support, toileting, food, mobility, or communication aids), the calmer environment may result in a reduction in PPE concerns. Decisions about closing doors of single rooms should be made with care and consideration. Doors should not be locked for infection control or for managing PBS. For some patients with cognitive impairment a locked room may increase BPS and the risk of personal harm, and potential harm to others. Minimising the number of times a patient with cognitive impairment moves rooms as part of their hospital stay will also reduce the risk of delirium. The use of a well-managed single room approach may assist with infection control and support improved health outcomes for people with cognitive impairment [44].



## Recommendations for infection control

Given the evidence available, we recommend the following:

- Personal items – People with cognitive impairment and their care partners are encouraged to bring in to hospital reminders (photos, objects) of home. Explain in the admission process if there will be infection control issues at discharge (regarding the removal or disposal of these items)
- Reassure patients and carers that COVID-19 vaccines are readily available, safe and reduce the risk of severe illness and death. Encourage patients and carers to discuss vaccination options with their GP.
- Health care professionals and visitors should wear PPE, employ social distancing and remain apart from COVID-19 infected patients as much as possible
- Telehealth capability should be established for virtual assessment, monitoring or interaction with care partners/care partners to minimise the use of PPE interactions with patients, and to increase comforting interactions. This will not remove all in-person clinical interactions but may be able to substitute for some
- Identified care partners/advocates would benefit from being able to visit and provide support where possible. Maintaining infection control with minimal restrictions may mean this is the one visitor making repeat visits
- Designated wards for patients with cognitive impairment with and without COVID-19 will help reduce the challenge of maintaining infection controls
- Awareness of escalation of risk for infection breaches should be monitored so that a severe breach will result in a considered, individually appropriate and safe response, rather than a reactive response (Figure 1)
- An assessment of immediate risk of breaching health care professional PPE should precede any decision to use sedative medication or physical restraints. An emphasis on early preventative measures delivered in a safe clinical environment will ultimately minimise the potential for overusing restrictive practices [45]

## 4. Identifying triggers for behavioural and psychological symptoms leading to distress

In the context of the COVID-19 pandemic, risks of people with cognitive impairment experiencing BPS may be heightened due to strict infection control procedures including the maintenance of health care professionals' PPE. The expression of BPS varies between different causes of cognitive impairment, whether it be due to delirium, dementia, brain injury or intellectual disability. Thus, management strategies can be different. Although aetiology may subtly differ, BPS often represent the expression of a stress response and can be considered need-driven, albeit constrained by the deficits of a cognitive impairment [46, 47].

Effective management requires a salutogenic (holistic) approach to wellbeing in which physiological, psychological and social precipitants of BPS are equally addressed within an individualised care plan [48]. Utilise the flowchart provided in Figure 1 to assist in guiding this process. A proper health history and physical assessment should be completed, and health care professionals should initiate preventative biopsychosocial strategies first. Examples include identifying pain, constipation, patient preferences (likes, dislikes), and communication approaches as well as environmental modifications such as makeshift floor grids to redirect exit seeking behaviours. Other strategies can involve the creative use of signs such as 'closed today' to subtly discourage opening; the use of appropriate day/night lighting to aid orientation; and shadowing patients with exit seeking behaviours to identify what they are seeking and whether it can be resolved creatively.

Given the additional challenges associated with infection control during the COVID-19 pandemic, it is a priority to identify biopsychosocial care early in an admission to reduce the risks associated with BPS. For psychosocial hospital care, resources have been developed across many health services and generally involve tools for collecting and communicating biographical information and preferences, alongside simple resources for recreation and socialisation. Experienced health care professionals and the utilisation of online information and tools will be important resources.

Pain is often an overlooked but significant contributor to BPS in cognitive impairment. Best practice requires the use of a behavioural observation instrument for pain, alongside a verbal self-report scale. When pain is suspected, a time-limited analgesic trial should be undertaken and evaluated using such instruments [49]. To avoid poor management, pain should be regularly assessed during care interventions and at rest. Involving the care partner/advocate in discussion and observations regarding subtle pain and non-verbal cues could be helpful. This may be done via video call [50].

## Recommendations for identifying triggers for behavioural and psychological symptoms leading to distress

Given the evidence available, we recommend the following:

### *Prioritise preventative strategies*

- Utilise the flowchart (Figure 1) to guide care practice
- Conduct delirium screening and follow-up care based on clinical guidelines with escalated care for patients who screen positive for delirium
- Include the assessment and treatment of clinical provocations such as delirium followed by sepsis, illness, pain, polypharmacy and bowel conditions/continence. Pain should be regularly assessed and charted in one place over time, ideally using both an observational and self-report instrument with adequate utility for hospital care such as PAINAD, The Abbey Pain scale and the Pittsburgh Agitation Scale
- Prioritise psychosocial care through the accommodation of personal preferences, communication deficits, the need for familiarity, socialisation and activity, and through avoiding identified stressors
- For people with dementia, care partners/advocates should be contacted as a matter of priority to establish biography, triggers for distress, care preferences and favoured activity
- Ensure adherence to plans that outline specific communication and care needs
- Identify if an Advance Care Plan is in place and review if available
- Proactively seek advice regarding behavioural support from care partners/advocates/families or community agencies e.g. National Disability Insurance Scheme (NDIS) or mental health services – these may provide clinical direction about the use of restrictive practices
- Contact appointed care partners/advocates to inform them of any changes in management of BPS

### *Provide safe clinical environments*

- Consider safe environments such as shared care wards, specialised delirium and dementia units, health care professionals with increased skills and adoption of dementia enabling environmental design features
- Consider one-on-one specialising to support the care of patients with cognitive impairment
- Include consideration of the impact of clinical investigations such as MRIs (which may lead to agitation resulting in plans to sedate) prior to ordering tests

## 5. Restraint use and medication

The use of sedative medications or physical restraint must be determined by an assessment of the immediate risk of breaching infection control principles that may put the patient or other patients and health care professionals at risk. Physical restraint should always be a last resort. In patients where all other strategies have failed, the infection control requirements for COVID-19 may require the use of restrictive practices, such as sedation or physical restraint. Where there is documented justification for a specific patient, the least restrictive interventions available should always be used. All practices should be documented with a review date stated [45].

Patients with cognitive impairment who are prescribed antipsychotic, benzodiazepine or opioid medications may experience a reduction in their cognition that cannot be recovered. This could lead to a long term change in their capacity to maintain their autonomy following discharge from hospital [51]. For patients with severe delirium and COVID-19, where sedation and physical restraint are being considered, it may be an appropriate time to review the goals of care discussion with care partners/advocates and fully explain the impact of the change in care. If possible, and appropriate, inviting the palliative care team to participate and provide advice prior to decision making may also be helpful.

There is little evidence to support the use of medications for BPS in people with delirium, dementia or other cognitive impairment outside the intensive care unit. There is insufficient evidence that antipsychotics reduce the severity or duration of delirium in hospitalised patients outside the intensive care unit [52] as well as little evidence for the use of benzodiazepines outside of that setting [53]. Atypical antipsychotic medications, especially risperidone, olanzapine and quetiapine have some benefits for agitation and psychosis in people with dementia but significant risks include cerebrovascular events and extrapyramidal symptoms [17, 54, 55]. Haloperidol may reduce aggression in patients with dementia but at the risk of serious side effects [17, 55, 56]. Information regarding medication doses

has been included in the recommendations to guide health care professionals prescribing in situations of acute deterioration. These should be interpreted in line with the patient's existing medications and the current Australian prescribing guidelines.

The use of pharmacological treatments for BPS should be in accordance with guidelines. Informed consent from appointed decision-makers for pharmacological treatments for BPS may be required (unless in an emergency situation). These discussions with patients and care partners/advocates should include information about a review or cessation time/date for the pharmacological treatment. Use of physical restraint or sedating medication can be distressing for patients, care partners/advocates, and health care professionals so clear communication of the documented care and decision-making process should be carried out.

After seeking a direct cause for any BPS and screening for delirium, the Australian Clinical Practice Guidelines and Principles of Care for People with Dementia, the SIGN delirium guidelines or NICE guideline for violence and aggression should be used where a rapid response is required (Refer to Flowchart in Figure 1) [57-59]. Some examples of medication doses (based on COVID-19 guidance from the British Geriatric Society and UK Royal College of Psychiatry, and using existing guidelines for delirium and dementia by the Royal Australian and New Zealand College of Psychiatrists, NPS Medicinewise, and the Australian Clinical Practice Guidelines) have been provided to highlight the importance of starting low and going slow when using medication in situations of acute deterioration. These should be interpreted in line with the patient's existing medications and the current Australian prescribing guidelines. Dementia Support Australia (DSA) does not recommend the use of pharmacological restraint for people living with dementia because amongst other side effects, an adverse reaction to these medications can cause respiratory depression or render a person immobile [45]. COVID-19 is primarily a respiratory disease, and the use of medications might lead to an adverse outcome for that patient [45]. Potential restrictive practices should be clearly described with a response hierarchy outlined, in advance in the patient's care plan, to support health care professional decision making at the point of care including an account of the risks involved. Documentation of any restrictive practices used need to be included in patient's clinical file at the time and provide a dated plan for cessation, in line with hospital policies and local legal requirements [45]. It is also a requirement of the NSQHS Standards, in the case of physical restraint, that the use of restrictive practices is reported to the governing body.

## Recommendations for restraint use and medication

Given the evidence available, we recommend the following:

### *Adhere to safe restrictive practices*

- Utilise the flowchart (Figure 1) to guide care practice
- Local hospital policy and principles of safe use of restrictive practice will not have changed and should continue to be adhered to. These policies emphasise the ongoing use of preventative and non-pharmacological measures as a priority in managing BPS and that restrictive measures should be used for as short a period as necessary and are a last resort
- An assessment of immediate risk of breaching health care professional PPE should precede any decision to use sedative medication or physical restraints. An emphasis on early preventative measures delivered in a safe clinical environment will ultimately minimise the potential for overusing restrictive practices
- Comply with general guidance related to medications for BPS provided under the medications section in these recommendations
- Review patients' advance care plan and in hospital goals of care established at admission, and discuss any significant changes that may be needed with care partners/advocates

### *Ensure safe use of medications*

- Non-pharmacological strategies (see above) should be used first and foremost and medications last and least
- Psychotropic medications may paradoxically worsen symptoms in some people and a history-taking of previously used medications and their effects, both positive and negative, is vital. Note cautions for Lewy Body Disease and Parkinson's Disease - Quetiapine has the lowest risk of causing significant extrapyramidal side effects in patients with Lewy body dementia and Parkinson's disease dementia.
- There is little evidence to support the use of medications, including antipsychotics, for BPS in people with delirium, dementia or other cognitive impairment. Information regarding medication doses has been included in the recommendations to guide health care professionals prescribing in situations of acute deterioration (based on COVID-19 guidance from the British Geriatric Society and UK Royal College of Psychiatry, and using existing guidelines for delirium and dementia by the Royal Australian and New Zealand College of Psychiatrists, NPS Medicinewise, and the Australian Clinical Practice Guidelines). These should be interpreted in line with the patient's existing medications and the current Australian prescribing guidelines
- Starting doses of antipsychotic medication should be lowest possible if attempted. The suggested doses for haloperidol or risperidone in the acute situation are 0.25 to 0.5 mg every 4 hours up to a maximum of 2mg over 24 hours [17, 55]. Haloperidol may be given intramuscularly if medication cannot be given orally. Refer to prescribing guidelines [60, 61]. Start low, go slow and review regularly
- If these medications are ineffective then small doses of more sedating agents can be tried: olanzapine (2.5 mg prn four hourly up to a maximum of 10mg over 24 hours) or quetiapine (12.5 mg to 25 mg prn four hourly up to a maximum of 100mg over 24 hours) [55]. The use of these more sedating agents can carry considerable risk in acutely unwell patients
- Avoid the use of benzodiazepines, in view of the risk of respiratory depression in patients with COVID-19. If they are used, a clearly established rationale for use must be recorded in the patient's record of medicines during the hospital visit. Senior experienced health care professionals should be consulted and caution must be exercised with clear goals of care required regarding ventilation and/or palliation
- The hospital policy for medication prescribing with a response of last and least, including specified review dates for ceasing new medications, should be reviewed and highlighted for all health care professionals as part of the COVID-19 response training
- All new medications commenced for behavioural disturbance should be reviewed with respect to cessation prior to discharge. If cessation is not possible, clear instructions regarding indication, duration and frequency of review should be provided in the medical discharge summary to the GP and where applicable to the health care professionals at the receiving residential aged care facility[62]
- Introduction of medications for sedating purposes or use of restraint should be discussed with care partners/advocates or substitute decision-maker, and appropriate consents obtained (unless in an emergency, then communication should be carried out at earliest time). A review or cessation time should be included in the discussion
- Alerts for potential adverse reactions to these medications are flagged in electronic medication management systems and should be noted on patient medication records to help guide decision making if at-risk situations arise



# The National Safety and Quality Health Service (NSQHS) Standards

During this pandemic the National Safety and Quality Health Service (NSQHS) Standards and accompanying resources continue to provide important guidance for providing safe and high quality care for people with cognitive impairment. These include:

- The [Comprehensive Care Standard](#) that brings together screening, assessment and shared decision processes to develop a plan that identifies agreed goals of care as well as strategies to minimise possible multiple risks of harm; and processes for comprehensive care at the end of life [7].
- This Standard also includes actions for comprehensive assessment of BPS so that possible causes (such as pain or environment) are investigated and individualised strategies are implemented to minimise distress, minimise the use of restraint, and ensure appropriate use of psychotropic medicines as a last option.
- The [Communicating for Safety Standard](#) that provides guidance on maintaining effective, timely communication of critical information with people with cognitive impairment, care partners/advocates, families; between multidisciplinary teams; with GPs, and with organisations such as residential and community care providers [3]<sup>5</sup>
- The [Delirium Clinical Care Standard](#) that provides guidance on delivering appropriate care to people at risk of, or with, delirium[6].
- A [Cognitive Care Fact Sheet](#) for safe high quality care for people with cognitive impairment.
- Online training recommendations and other resources focused on patient care for people with cognitive impairment is available ACSQHC's [cognitive care](#) website. Links to other useful non- ACSQHC resources include:
  - o Resources to facilitate an increase in supported decision-making throughout healthcare services.
  - o Dementia Training Australia provides specific free acute care training which can be accessed online. This course is designed to help nurses and other health professionals develop the knowledge and practice skills they need to care for people with dementia in hospitals.

While there are specific actions in the NSQHS Standards that are particularly relevant to safe and high quality care for people with cognitive impairment, there are some actions that are critical in responding to the challenges of the pandemic (Table 1).

## Other hospital related issues

Outside the scope of this paper, but in urgent need of consideration (specifically for the care of people with cognitive impairment) is the issue of hospital alternatives, including but not limited to programs such as Hospital in the Home. Hospital alternatives may be suitable for some acute care treatments, but also for programs which support restorative care where deconditioning may have occurred during a period of in-hospital care. Collaborations with existing organisations such as Dementia Behaviour Management Assessment Service (DBMAS) may enable some hospital alternatives to operate during the COVID-19 pandemic to provide a treatment environment that is effective for a person with cognitive impairment. Other opportunities for new practices include the use of telehealth to triage for admission, supporting more triage at home (with follow-up links to general practice and practice nurses) or triage with residential care via videoconference to help prepare for more effective utilisation of the health system.

## Conclusion

People with cognitive impairment will be requiring admission to hospital during the COVID-19 pandemic either as a direct result of a COVID-19 infection or from other causes. Adopting innovative approaches will minimise infection risks for patients and health care professionals, but planning for the needs of patients with cognitive impairment can ensure these approaches also minimise risk of delirium and poor long term outcomes.

In an environment where visiting bans may be applied to care partners/advocates, hospitals must ensure care partners/advocates can continue to provide vital decision-making support. Appropriate contact details must be accurately documented and shared so communication with the correct people is not denied on privacy grounds or as a part of infection control measures. Health care professionals need to proactively engage care partners/advocates utilising either videoconference or telephone conference technology, where practical, to involve them in care discussions. Visual conversations (via videoconference platforms like FaceTime or Zoom) also improve the ability of a person with cognitive impairment to successfully process a conversation [39]. Infection control measures, in particular identity and communication hampering PPE and movement restricting measures, can challenge the routines of patients with cognitive impairment leading to an escalation of distress. Collaboration between health care professionals, including delirium and infection control experts, to develop models of care which proactively support best practice will mitigate escalating symptoms and potentially poor outcomes for patients with cognitive impairment.

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<sup>3</sup> <https://www.safetyandquality.gov.au/sites/default/files/2019-04/National-Safety-and-Quality-Health-Service-Standards-second-edition.pdf>

Table 1: Summary of relevant NSQHS Standards and interim guidance for COVID-19 pandemic care of adults with cognitive impairment in hospital[5]

Care issue	Relevant NSQHS Standard	Interim Guidance
<p>Goals of care</p>	<p><b>Comprehensive Care Standard</b></p> <p><a href="https://www.safetyandquality.gov.au/standards/hsqhs-standards/comprehensive-care-standard">https://www.safetyandquality.gov.au/standards/hsqhs-standards/comprehensive-care-standard</a></p> <p><b>See</b></p> <p><a href="https://www.safetyandquality.gov.au/our-work/comprehensive-care/essential-elements-comprehensive-care">https://www.safetyandquality.gov.au/our-work/comprehensive-care/essential-elements-comprehensive-care</a></p> <p>Including Goals of Care</p> <p><a href="https://www.safetyandquality.gov.au/our-work/comprehensive-care/essential-element-2-identifying-goals-care">https://www.safetyandquality.gov.au/our-work/comprehensive-care/essential-element-2-identifying-goals-care</a></p> <p>Specific NSQHS Standards actions:</p> <p>Informed consent and substitute decision making (2.4 and 2.5)</p> <p>Shared decisions and planning care (2.6 and 2.7)</p> <p>Shared decisions about end of life care (5.20)</p> <p>Advance care plans (5.9)</p>	<ul style="list-style-type: none"> <li>• Orientation to changed hospital processes. Provide a clear description of how the COVID-19 pandemic has or has not impacted the anticipated health care episode. Identify new hospital practices required in a pandemic and those that continue as usual care will alleviate some stress around the hospital admission</li> <li>• Regular, clear conversations starting from admission providing information on who will be able to visit and support the admitted patient during hospitalisation and at home after discharge</li> <li>• Arrangements for supported physical and cognitive restorative care are in place prior to discharge for patients deconditioned in hospital (as a result of COVID-19 and/or period of illness or sedation)</li> <li>• Identification and documentation of the supporting or substitute decision-maker</li> <li>• Ensure that the necessary skilled support health care professionals are available for patients and their care partners/advocates before, during and after advance care planning discussions based on their individual needs, such as spiritual, cultural, or linguistic</li> <li>• Processes are in place for health service organisations to accept Advance Care Plans developed in the community</li> <li>• Allocation of clinician/s responsible for conducting the advance care planning discussion/s with the patient and care partners/advocates</li> <li>• Provision of training to the healthcare professionals with respect to COVID-19 outcomes, advance care planning and supported decision making</li> <li>• Involvement of care partners/advocates in advance care planning discussions</li> <li>• Palliative care and end of life choices are considered with the inclusion of care partners/advocates to ensure dignity and humane choices while managing COVID-19 risk</li> <li>• Connections with specialist geriatric, rehabilitative and palliative care services to maximise the opportunities to effectively utilise their skills in supporting patients with complex problems and treatment decisions</li> <li>• Involvement of people with cognitive impairment, care partners/advocates and GPs in discharge planning to ensure there is adequate support during COVID-19 and for continuity of care, by identifying any services, equipment or follow-up that may be needed</li> <li>• Follow-up is organised by a health care agency (hospital, GP, community nursing, etc.) prior to discharge to prepare for initial discharge, and people with cognitive impairment and their care partners/advocates are included in the discharge plan for ongoing care at home</li> </ul>

Care issue	Relevant NSQHS Standard	Interim Guidance
<p><b>Patient and care partner support</b></p>	<p><b>Comprehensive Care Standard</b>  <a href="https://www.safetyandquality.gov.au/standards/nsqhs-standards/comprehensive-care-standard">https://www.safetyandquality.gov.au/standards/nsqhs-standards/comprehensive-care-standard</a>            Specific action: Preventing delirium and managing cognitive impairment (5.29)</p> <p><b>Partnering with Consumers Standard</b>  <a href="https://www.safetyandquality.gov.au/standards/nsqhs-standards/partnering-consumers-standard">https://www.safetyandquality.gov.au/standards/nsqhs-standards/partnering-consumers-standard</a>            ACSQHC on relevant online training:  <a href="https://cognitivecare.gov.au/resources/online-learning/">https://cognitivecare.gov.au/resources/online-learning/</a></p>	<ul style="list-style-type: none"> <li>• Appropriate contact details are accurately documented and shared so communication is not denied on privacy grounds</li> <li>• Health care professionals proactively call care partners/advocates utilising videoconference and telephone conference technologies where possible and if necessary (such as when visitor bans are in place) to support shared discussions</li> <li>• Interpreters are involved in conference calls where required for CALD patients who have a preferred language other than English</li> <li>• Visiting ban modifications are granted on compassionate grounds (i.e. currently in place in paediatric wards) to include visits for the cognitive support of any patient with cognitive impairment, especially those who are COVID-19 negative</li> <li>• Regular reminders for patients are provided by care partners/advocates to explain hospitalisation, why care partners/advocates are not present, or the reason for unusual attire (this should be provided in the patient's preferred language, particularly for CALD or Aboriginal and Torres Strait Islander peoples) – this may be as simple as a large photograph with written explanations, or a talking photo album</li> <li>• Maintain stable environment by reducing patient movement during the hospital (i.e. moving between rooms). This will help to minimise the risk of delirium, and it will also potentially reduce the risk of cross infection</li> <li>• Review nursing workforce models (e.g. AIN, EEN and RN supervision and patient-to-nurse ratios) to ensure the needs of patients with cognitive impairment and their care partners are supported</li> <li>• Cognition nurse specialists, cognitive psychologists, occupational therapists, and/or diversional therapists can devise the most therapeutic environment and psychosocial care to manage the limitations of infection control for people with cognitive impairment</li> <li>• Health care professionals experienced in the care of patients with cognitive impairment should be carefully rostered to care for patients where their skills can best be utilised, and in a way that minimises health care professionals rotations where feasible</li> <li>• Designated training should be provided for health care professionals following a review of models of care to cater for the needs of people with cognitive impairment in a high infection control area</li> </ul>

ACSQHC Communicating for Safety Standard		
<b>Care issues</b>	<b>Infection control</b>	<b>ACSQHC Communicating for Safety Standard</b>
<b>Infection control</b>	<b>ACSQHC Communicating for Safety Standard</b> <a href="https://www.safetyandquality.gov.au/standards/nsqhs-standards/communicating-safety-standard">https://www.safetyandquality.gov.au/standards/nsqhs-standards/communicating-safety-standard</a> <b>ACSQHC Preventing and Controlling Healthcare-Associated Infection Standard</b> <a href="https://www.safetyandquality.gov.au/standards/nsqhs-standards/preventing-and-controlling-healthcare-associated-infection-standard">https://www.safetyandquality.gov.au/standards/nsqhs-standards/preventing-and-controlling-healthcare-associated-infection-standard</a>	<ul style="list-style-type: none"> <li>Personal items – People with cognitive impairment and their care partners are encouraged to bring in to hospital reminders (photos, objects) of home. Explain in the admission process if there will be infection control issues at discharge (regarding the removal or disposal of these items)</li> <li>Health care professionals and visitors should wear PPE (as per current hospital policies), employ social distancing and remain apart from COVID-19 infected patients as much as possible</li> <li>Telehealth capability should be established for virtual assessment, monitoring or interaction with care partners/care partners to minimise the use of PPE interactions with patients, and to increase comforting interactions. This will not remove all in-person clinical interactions but may be able to substitute for some</li> <li>Identified care partners/advocates would benefit from being able to visit and provide support where possible. Maintaining infection control with minimal restrictions may mean this is the one visitor making repeat visits</li> <li>Designated wards for patients with cognitive impairment with and without COVID-19 will help reduce the challenge of maintaining infection controls</li> <li>Awareness of escalation of risk for infection breaches should be monitored so that a severe breach will result in a considered, individually appropriate and safe response, rather than a reactive response (Review flow chart in Figure 1)</li> <li>An assessment of immediate risk of breaching health care professional PPE should precede any decision to use sedative medication or physical restraints. An emphasis on early preventative measures delivered in a safe clinical environment will ultimately minimise the potential for overusing restrictive practices [45]</li> </ul>
<b>Behavioural and Psychological Symptoms</b>	<b>ACSQHC Delirium Clinical Care Standard</b> <a href="https://www.safetyandquality.gov.au/sites/default/files/migrated/Delirium-Clinical-Care-Standard-Web-PDF.pdf">https://www.safetyandquality.gov.au/sites/default/files/migrated/Delirium-Clinical-Care-Standard-Web-PDF.pdf</a> <b>ACSQHC Communicating for Safety Standard</b> <a href="https://www.safetyandquality.gov.au/standards/nsqhs-standards/communicating-safety-standard">https://www.safetyandquality.gov.au/standards/nsqhs-standards/communicating-safety-standard</a>	<p><i>Prioritise Preventative strategies</i></p> <ul style="list-style-type: none"> <li>Utilise the flowchart in Figure 1 to guide care practice</li> <li>Conduct delirium screening and follow-up care based on clinical guidelines with escalated care for patients who screen positive for delirium</li> <li>Include the assessment and treatment of clinical provocations such as delirium followed by sepsis, illness, pain, polypharmacy and bowel conditions/continence. Pain should be regularly assessed and charted in one place over time, ideally using both an observational and self-report instrument with adequate utility for hospital care such as PAINAD, The Abbey Pain scale and the Pittsburgh Agitation Scale</li> </ul>

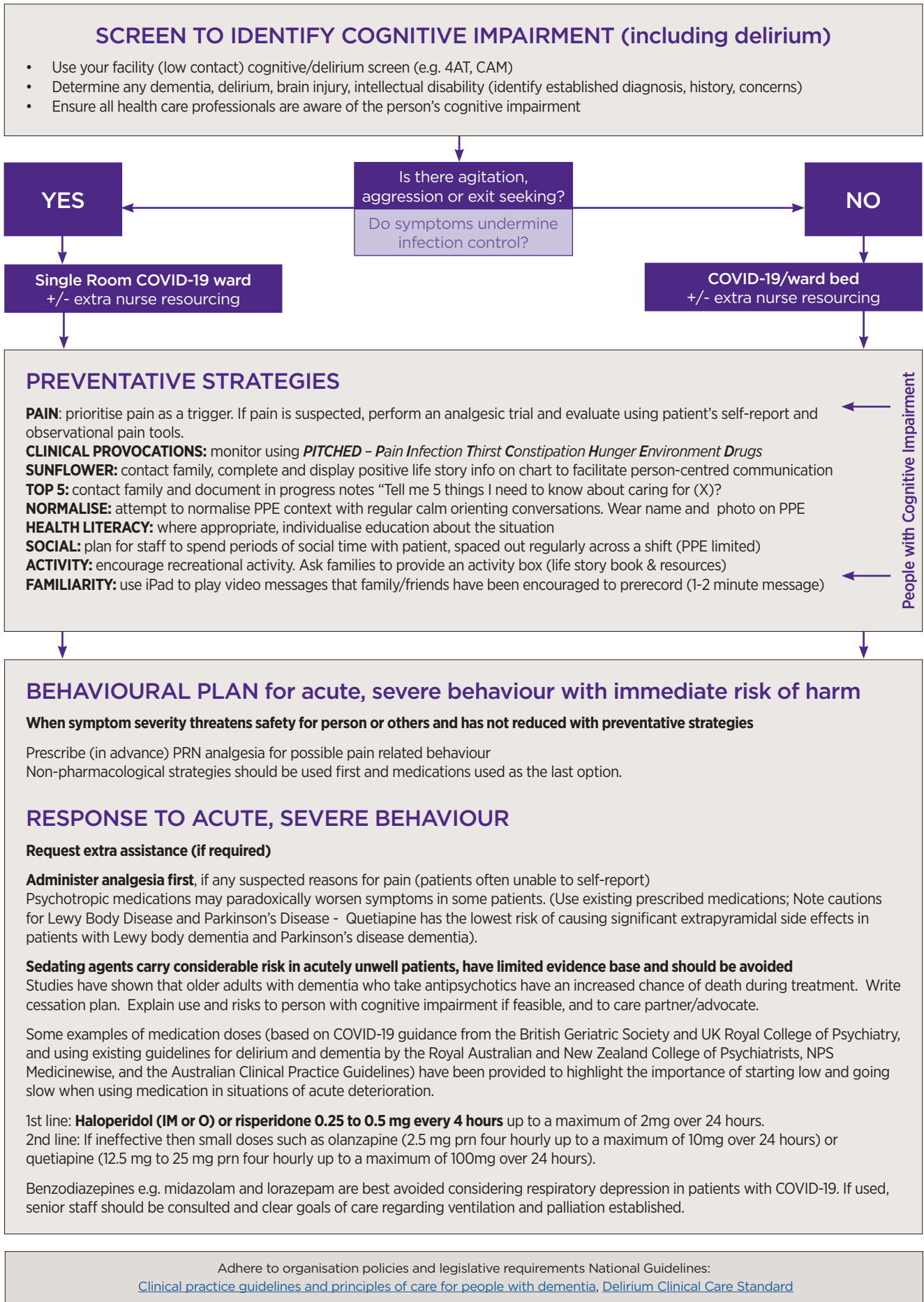
Care issues	Infection control	ACSQHC Communicating for Safety Standard
<p><b>Restraint use and medication</b></p>	<p><b>Specific NSQHS Comprehensive Care Standard action:</b> Manage the use of antipsychotics and other psychoactive medicines in accordance with best practice and legislation (5.29 b)</p> <p>Collaborate with patients, care partners/advocates to understand the patient and implement individualised strategies to minimize anxiety or distress (5.30b)</p> <p>Minimising restraint (5.35)</p> <p><b>Other resources:</b> Dementia Training Australia provides specific free acute care training which can be accessed online. This course is designed to help nurses and other health professionals develop the knowledge and practice skills they need to care for people with dementia in hospitals. Available at no cost via the DTA website: <a href="https://www.dta.com.au/online-dementia-courses/the-view-from-here-dementia-hospitals/">https://www.dta.com.au/online-dementia-courses/the-view-from-here-dementia-hospitals/</a></p>	<ul style="list-style-type: none"> <li>• Prioritise psychosocial care through the accommodation of personal preferences, communication deficits, the need for familiarity, socialisation and activity, and through avoiding identified stressors</li> <li>• For people with dementia, care partners/advocates should be contacted as a matter of priority to establish biography, triggers for distress, care preferences and favoured activity</li> <li>• Ensure adherence to plans that outline specific communication and care needs</li> <li>• Identify if an Advance Care Plan is in place and review if available</li> <li>• Proactively seek advice regarding behavioural support from care partners/advocates/families or community agencies e.g. National Disability Insurance Scheme (NDIS) or mental health services – these may provide clinical direction about the use of restrictive practices</li> <li>• Contact appointed care partners/advocates to inform them of any changes in management of BPS</li> </ul> <p><i>Provide safe clinical environments</i></p> <ul style="list-style-type: none"> <li>• Consider safe environments such as shared care wards, specialised delirium and dementia units, health care professionals with increased skills and adoption of dementia enabling environmental design features</li> <li>• Consider one-on-one specialising to support the care of patients with cognitive impairment</li> <li>• Include consideration of the impact of clinical investigations such as MRIs (which may lead to agitation resulting in plans to sedate) prior to ordering tests</li> </ul> <p><i>Adhere to safe restrictive practices</i></p> <ul style="list-style-type: none"> <li>• Utilise the flowchart (Figure 1) to guide care practice</li> <li>• Local hospital policy and principles of safe use of restrictive practice will not have changed and should continue to be adhered to. These policies emphasise the ongoing use of preventative and non-pharmacological measures as a priority in managing BPS and that restrictive measures should be used for as short a period as necessary and are a last resort</li> </ul>

Care issues	Infection control	ACSQHC Communicating for Safety Standard
	<p><b>ACSQHC Delirium Clinical Care Standard</b>  <a href="https://www.safetyandquality.gov.au/sites/default/files/migrated/Delirium-Clinical-Care-Standard-Web-PDF.pdf">https://www.safetyandquality.gov.au/sites/default/files/migrated/Delirium-Clinical-Care-Standard-Web-PDF.pdf</a></p> <p><b>ACSQHC Medication Safety Standard.</b>  <a href="https://www.safetyandquality.gov.au/standards/nsqhs-standards/medication-safety-standard">https://www.safetyandquality.gov.au/standards/nsqhs-standards/medication-safety-standard</a></p> <p>Medication reconciliation (4.5 and 4.6)            Adverse drug reactions (4.7–4.9)            Medication review (4.10)            Information for patients (4.11)            Provision of a medicines list (4.12)            Reducing inappropriate use of antipsychotics infographic</p>	<ul style="list-style-type: none"> <li>• An assessment of immediate risk of breaching health care professional PPE should precede any decision to use sedative medication or physical restraints. An emphasis on early preventative measures delivered in a safe clinical environment will ultimately minimise the potential for overusing restrictive practices</li> <li>• Comply with general guidance related to medications for BPS provided under the medications section in these recommendations</li> <li>• Review patients' advance care plan and in hospital goals of care established at admission, and discuss any significant changes that may be needed with care partners/advocates</li> </ul> <p><i>Ensure safe use of medications</i></p> <ul style="list-style-type: none"> <li>• Non-pharmacological strategies (see above) should be used first and foremost and medications last and least</li> <li>• Psychotropic medications may paradoxically worsen symptoms in some people and a history-taking of previously used medications and their effects, both positive and negative, is vital. Note cautions for Lewy Body Disease and Parkinson's Disease - Quetiapine has the lowest risk of causing significant extrapyramidal side effects in patients with Lewy body dementia and Parkinson's disease dementia.</li> <li>• There is little evidence to support the use of medications, including antipsychotics, for BPS in people with delirium, dementia or other cognitive impairment. Information regarding medication doses has been included in the recommendations to guide health care professionals prescribing in situations of acute deterioration (based on COVID-19 guidance from the British Geriatric Society and UK Royal College of Psychiatry, and using existing guidelines for delirium and dementia by the Royal Australian and New Zealand College of Psychiatrists, NPS Medicinewise, and the Australian Clinical Practice Guidelines). These should be interpreted in line with the patient's existing medications and the current Australian prescribing guidelines</li> <li>• Starting doses of antipsychotic medication should be lowest possible if attempted. The suggested doses for haloperidol or risperidone in the acute situation are 0.25 to 0.5 mg every 4 hours up to a maximum of 2mg over 24 hours [17, 55]. Haloperidol may be given intramuscularly if medication cannot be given orally. Refer to prescribing guidelines [60, 61]. Start low, go slow and review regularly</li> <li>• If these medications are ineffective then small doses of more sedating agents can be tried: olanzapine (2.5 mg prn four hourly up to a maximum of 10mg over 24 hours) or quetiapine (12.5 mg to 25 mg prn four hourly up to a maximum of 100mg over 24 hours) [55]. The use of these more sedating agents can carry considerable risk in acutely unwell patients</li> </ul>

Care issues	Infection control	ACSQHC Communicating for Safety Standard
		<ul style="list-style-type: none"> <li>• Avoid the use of benzodiazepines, in view of the risk of respiratory depression in patients with COVID-19. If they are used, a clearly established rationale for use must be recorded in the patient's record of medicines during the hospital visit. Senior experienced health care professionals should be consulted and caution must be exercised with clear goals of care required regarding ventilation and/or palliation</li> <li>• The hospital policy for medication prescribing with a response of last and least, including specified review dates for ceasing new medications, should be reviewed and highlighted for all health care professionals as part of the COVID-19 response training</li> <li>• All new medications commenced for behavioural disturbance should be reviewed with respect to cessation prior to discharge. If cessation is not possible, clear instructions regarding indication, duration and frequency of review should be provided in the medical discharge summary to the GP and where applicable to the health care professionals at the receiving residential aged care facility[62]</li> <li>• Introduction of medications for sedating purposes or use of restraint should be discussed with care partners/advocates or substitute decision-maker, and appropriate consents obtained (unless in an emergency, then communication should be carried out at earliest time). A review or cessation time should be included in the discussion</li> <li>• Alerts for potential adverse reactions to these medications are flagged in electronic medication management systems and should be noted on patient medication records to help guide decision making if at-risk situations arise</li> </ul>

**Figure 1: Flowchart of COVID-19 clinical strategies for people with cognitive impairment**

**People with COVID-19 or suspected COVID-19**



Citation: Martin-Khan, M., K. Bail, M. W. Yates, J. Thompson, F. Graham, and Cognitive Impairment & COVID-19 Hospital Care Guidance Committee. *Summary - Interim guidance for health care professionals and administrators providing hospital care to adult patients with cognitive impairment, in the context of COVID-19 pandemic in Australia.* Australasian Journal on Aging, 2020.



## Box 1 Cognitive Impairment and COVID-19 Hospital Care Guidance Committee

Full Name and Title	Roles	Affiliations
Dr Melinda Martin-Khan, Chair	Health Scientist, Senior Research Fellow	Centre for Services Research, The University of Queensland, Australia.
	Adjunct Professor	School of Nursing, University of Northern British Columbia, Canada.
	Member	NHMRC National Institute for Dementia Research (NNIDR) SIG: Cognitive Impairment Identification and Care in Hospitals
Dr Alison Argo	Co-chair	Statewide Dementia Clinical Network
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A/Professor Gideon Caplan	Director, Geriatric Medicine	Prince of Wales Hospital
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	PhD Candidate	
Anne Cumming	Principal Advisor Cognitive Impairment	Australian Commission on Safety and Quality in Health Care
Stephanie Ellis	Assistant Director	NHMRC National Institute for Dementia Research
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Full Name and Title	Roles	Affiliations
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	Dementia Advocate	Dementia Australia Advisory Committee
Dr Jennifer Galstuch-Leon	Consultant Psychiatrist	Specialist Mental Health Intellectual Disability Service (SMHIDS)
		West Moreton Health
Dr Frederick Graham	CNC Dementia & Delirium	Princess Alexandra Hospital
	Senior Lecturer	Centre for Services Research, The University of Queensland, Australia.
AnnMarie Hosie	Associate Professor	The University of Notre Dame, School of Nursing Sydney
	Palliative Care Nursing	St Vincent's Health Network Sydney
Juanita Hughes	Dementia Advocate	Dementia Australia Advisory Committee
		OPAN Older Persons Reference Group
Leanne Jack	Post Graduate Study Area Coordinator Intensive Care Nursing, Emergency Nursing and Acute Care Nursing, Lecturer	School of Nursing Queensland University of Technology, Australia
	Dementia Advocate	
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Dr David Lie	Clinical Director	Older Adult Mental Health Service
		Metro South Hospital and Health Service
A/Professor R.J. Soares Magalhães	Associate Professor Population Health and Biosecurity	School of Veterinary Science
		Children's Health Research Centre
		The University of Queensland

Full Name and Title	Roles	Affiliations
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	Community Advisory Council Member	Brisbane South PHN, Brisbane, Qld
	Board Member	eQC (evaluating Quality Care) Patient and Carer Advisory Board, Centre for Health Services Research; The University of Queensland
	Consumer Reference Group Member	The Hopkins Centre, Research for Rehabilitation & Resilience
Glenys Petrie	Dementia Advocate	
	Care partner of person living with dementia	
	Co-chair	StepUp for Dementia Research Committee
	Advisor (committees)	Researchers  Metro South Health & Hospital Service
	Member	eQC (evaluating Quality Care) Patient and Carer Advisory Board, Centre for Health Services Research; The University of Queensland
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Full Name and Title	Roles	Affiliations
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Bobby Redman	Person living with dementia	Dementia Australia Advisory Committee
	Dementia Advocate	
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## Box 2 Cognitive Impairment and COVID-19 Hospital Care Guidance Readers

Full Name and Title	Roles	Affiliations
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	Co-Chair	Aged Health Executive and CHOPs Expert Advisory Group
	Member	NHMRC National Institute for Dementia Research (NNIDR) SIG: Cognitive Impairment Identification and Care in Hospitals
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	Director	Dementia Centre for Research Collaboration
	Director	Dementia Training Australia (Qld)
	Adjunct/Honorary Professor	James Cook University; The University of Queensland; University of Iowa (USA); Pennsylvania State University (USA)
Janice Besch	Director	NHMRC National Institute for Dementia Research, National Health and Medical Research Council
Mary Bronson	Acting Nurse Co Director	Sir Charles Gairdner Hospital, WA
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Benito “ Benny “ Chan Jr.	Consumer member	NHMRC National Institute for Dementia Research (NNIDR) SIG: Cognitive Impairment Identification and Care in Hospitals
Mr Keith Davies	Retired School Principal	
	Dementia Advocate	Dementia Australia
	Community Volunteer	Community Visitor Scheme, Belong Blue Mountains
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	Steering Committee Member	Australasian Delirium Association
Andrew Hill	Clinical Nurse Consultant – Acute Care of the Elderly	Sir Charles Gardner Hospital, Western Australia
	Member	NHMRC National Institute for Dementia Research (NNIDR) SIG: Cognitive Impairment Identification and Care in Hospitals

Full Name and Title	Roles	Affiliations
Ms Danijela Hlis	Dementia Advocate Bi-cultural Social Support Worker	Dementia Australia
Eileen Jones	Consumer Representative  Member	Health Consumers Queensland  eQC (evaluating Quality Care) Patient and Carer Advisory Board, Centre for Health Services Research; The University of Queensland  Dying with Dignity
Dr Jenny Jones	Clinical Ethics Coordinator	Princess Alexandra Hospital, Metro South Health
Dr Lisa Kelly	Senior Staff Specialist Conjoint Senior Lecturer UQ  Co-Chair	Princess Alexandra Hospital and South West Health  Statewide Older Person's Health Clinical Network
Mrs Ann Lord	Carer  Dementia Advocate  University Liaison	Dementia Australia  Flinders University, College of Education, Psychology & Social Work
Dr Kannan Natarajan	Geriatrician - Cognitive Assessment & Management Unit	Queensland Health
Ann Pietsch	Consumer,  Former Nursing Advisor and Nursing Administrator	Dementia Australia  DAAC (Dementia Australia Advisory Committee)  NNIDR Community and Consumer Involvement Program Reference Group  DARF (Dementia Australia Research Foundation) Scientific Panel  OPAN Older Persons Reference Group
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Full Name and Title	Roles	Affiliations
Dr Jane Thompson	Board Member, Chair	eQC (evaluating Quality Care) Patient and Carer Advisory Board, Centre for Health Services Research; The University of Queensland
	Public Involvement Panel	NHMRC National Institute for Dementia Research (NNIDR) Advisory Board
		StepUp for Dementia Research Project; University of Sydney
		Executive Advisory Group of Capacity Building in Care Research (CBCR) Flagship Project; Dementia Centre for Research Collaboration: Care and Consumers Hub; Queensland University of Technology
		Consumer Buddy Program, Walter and Eliza Hall Institute of Medical Research.
Ivy Yuen Yee Webb	Board Member	eQC (evaluating Quality Care) Patient and Carer Advisory Board, Centre for Health Services Research; The University of Queensland

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# Appendices

## Appendix 1: Document Definitions

Term	Definition
Advance Care Plan	<p>A document describing health care preferences and a nominated spokespersons for when people are not able to speak for themselves. The title of the document may change between states, and it could include: Advance Care Directive, an Advance Care Plan or Advance Personal Plan, or an Advance Health Directive.</p> <p><a href="http://www.advancecareplanning.org.au">www.advancecareplanning.org.au</a></p> <p>Formal Advance Care Plans are signed and witnessed (each state has specific instructions)</p>
Australian Commission on Safety and Quality in Health Care (ACSQHC)	The Australian Commission on Safety and Quality in Health Care (ACSQHC) <b>works in partnership with patients</b> , consumers, clinicians, managers, policy makers and healthcare organisations to achieve a sustainable, safe and high-quality health system
Behavioural and psychological symptoms (BPS)	Including but not limited to: agitation, aggression, anxiety, apathy, disturbance, disorientation, distress, dysphoria, exit seeking, hallucinations, psychotic symptoms (delusion, hallucination and paranoia), repetitive, sleep, symptoms of BPSD, vocalisation
Care partners/advocates	<p>Care partnering includes providing assistance to an individual with a health condition to meet their self care deficits, the commitment to a care partner relationship, and the recognition that people with self-care deficits are care partners contributing to their own care[63].</p> <p>Examples include but are not limited to partner, spouse, family member/s, friends, supportive decision makers, substitute decision makers, attorney, enduring guardian, or guardian</p>
Culturally and Linguistically Diverse (CALD)	<p>In Australia, people from CALD backgrounds are people who:</p> <ul style="list-style-type: none"> <li>• come from different countries across the world</li> <li>• speak a Language Other Than English (LOTE)</li> <li>• represent different cultural backgrounds</li> <li>• have various religious beliefs</li> </ul>
COVID-19	The disease, coronavirus disease 2019 caused by the novel severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2)
Dementia Behaviour Management Assessment Service (DBMAS)	Provides clinical support for people caring for someone with dementia who is demonstrating behavioural and psychological symptoms of dementia (BPSD) which are impacting on their care
General Practitioner (GP)	A doctor who is qualified in general medical or primary care. Often treat people of any age who feel sick or have a health concern
Hospital in the Home	The provision of admitted care in the comfort of the patient's home or other suitable location
National Disability Insurance Scheme (NDIS)	The National Disability Insurance Scheme (NDIS) provides support to people with disability, their families and carers in Australia. It is jointly governed and funded by the Australian and participating states and territory governments. It is implemented by The National Disability Insurance Agency (NDIA) is an independent statutory agency

National Safety and Quality Health Service (NSQHS)	The primary aims of the National Safety and Quality Health Service (NSQHS) Standards are to protect the public from harm and improve the quality of health service provision. The National Safety and Quality Health Service (NSQHS) Standards provide a nationally consistent statement of the level of care consumers can expect from health service organisations. The NSQHS Standards were developed by the ACSQHC in collaboration with the Australian Government, states and territories, private sector providers, clinical experts, patients and care partners
Pharmacological restraint	A pharmacologic agent used to control or restrain an individual in a sheltered environment. Can be referred to as chemical or medical restraint
Personal protective equipment (PPE)	PPE is equipment that will protect the user against health or safety risks, usually at work. It can include items such as gloves, eye protection, goggles, gowns or footwear. It can also include respiratory protective equipment (RPE)
SARS-CoV-2	The virus, severe acute respiratory syndrome coronavirus 2
UQ	The University of Queensland
WHO	World Health Organisation



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