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Te Tāhū Hauora
Health Quality & Safety Commission

Frailty care guides

Ngā aratohu maimoa hauwarea

2023

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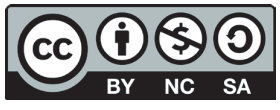

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Foreword
Kupu whakataki

Frailty is a recognised clinical syndrome that requires specialised assessment and interventions to promote resilience in people who are ageing and/or those with multiple co-morbidities.

This 2023 edition of *Frailty care guides | Ngā aratohu maimoa hauwarea* (FCGs), the development of which has been led by Julie Daltrey and Patumahoe Leaf-Wright on behalf of Te Tāhū Hauora Health Quality & Safety Commission, includes **mātauranga Māori** (Māori knowledge) and cultural concepts that are important when **manaaki** (caring for) **kaumātua** (Māori elder/s) as well as evidence updates. As with all practice guides, the FCGs do not replace clinical judgement and/or individualised resident goals of care. Rather, they continue to promote early intervention and communication with the older person's multidisciplinary team, particularly their lead primary care provider.

The FCGs have an aged residential care (ARC) focus and may be applied to other settings providing care for people living with frailty.

The **whakapapa** (history/genealogy) of these guides reaches back to 2007 where, under the leadership of Dr Michal Boyd, the Residential Aged Care Integration Programme developed a set of guides for registered nurses working in ARC in the Waitematā region. This 2023 update has been a collaborative effort incorporating feedback from diverse stakeholders. These include the original authors, Te Whatu Ora Gerontology Nursing Service, Waitematā, as well as ARC providers, the wider ARC community and experts in clinical content and mātauranga Māori.

The FCGs explain mātauranga Māori in a practical and pragmatic way and are designed to support health professionals to enhance the experience of kaumātua and their **whānau**/family in their care. The inclusion of cultural concepts applicable to caring for kaumātua aims to create a resource that encourages health professionals to fully explore the holistic needs of kaumātua and their whānau/family and to increase awareness and sensitivity to cultural needs. The inclusion of mātauranga Māori in the FCGs required drawing from deep wells of lived experience and innate understanding of **te ao Māori** (Māori world view). This was followed by consultation with Māori experts within the sector. We hope we have created a conversation starter while honouring the **mana** (dignity, prestige), **tapu** (sacredness) and **mauri** (life force, vitality) of the mātauranga (knowledge) contained within these guides.

Te Tāhū Hauora is pleased to publish the FCGs, recognising their value as a resource to support education and promote quality improvement initiatives within the ARC sector. If organisations choose to incorporate the guides into standard operating procedures, we highly recommend they become part of governance structures.

The FCGs are a starting point. We believe they will help providers and health professionals to reflect on and recognise where cultural competency training would enhance service delivery and professional practice.

Cultural competency training comes in many forms, from formal courses, through the establishment of dedicated cultural positions, to role-modelling from people with cultural expertise. Using cultural experts (kaumātua residents, community members, staff with other roles) fosters a supportive learning environment and helps to embed cultural competency throughout an organisation.

Creating this environment and providing care in this way aligns with health care's obligations under Te Tiriti o Waitangi (Treaty of Waitangi) through ensuring **mana motuhake** (unique Indigenous status) and active protection of Māori **taonga** (treasures), such as health, cultural concepts, language and identity. It also enables equity by providing care that is specifically designed to meet the unique needs of kaumātua while upholding their **tino rangatiratanga** (self-determination and autonomy) and providing options.

We hope this is a valuable resource for those caring for older people requiring specialised frailty support. Thank you for your ongoing efforts and dedication to ensuring the wellbeing and quality of care for those in your facility.

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Acknowledgements | He mihi

We would like to express our appreciation to the numerous individuals who have contributed to the development of the FCGs. We extend our gratitude to the leaders and clinicians who provided valuable feedback throughout the review process. Their insights and expertise have greatly enhanced the quality and relevance of the guides.

The many people who have contributed to the development of the FCGs are acknowledged below. We also acknowledge that the reviews of these guides were team efforts in many instances.

We extend our thanks to the wider groups involved, whose collective efforts have contributed to the final suite of guides.

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Key concepts
Ariā matua

Communicating effectively with older people and their whānau/family
Kia kōrerorero pai ki ngā kaumātua me ō rātou whānau

Frailty | Te wairuhi

Guide for health professionals caring for kaumātua
Kupu arataki mō te manaaki kaumātua

Communicating effectively with older people and their whānau/family

Kia kōrerorero pai ki ngā kaumātua me ō rātou whānau

The information in this guide is accurate to the best of our knowledge as of June 2023.

Definition

Effective communication is a dynamic two-way process that allows parties to exchange ideas, thoughts, knowledge, emotion and meaning in a way that they both understand (Wanko Keutchafo et al 2020). In health care, person-centred communication aims to engage older people and their **whānau**/families in decision-making about care planning and evaluation (Kwame and Petrucka 2021). Being respectful and recognising the person as a whole are at the centre of this process. When health professionals hear what is important to the person, it helps that person feel safe and listened to in their own home.

Why this is important

Effective communication recognises the person's experiences, stories and knowledge and respects their values, preferences and culture (Kwame and Petrucka 2021). It positively impacts on the person's self-esteem and feelings of control (Davis et al 2022). Research has also shown that listening and responding to whānau/family concerns reduces adverse events in health care (Gerdik et al 2010; Health Quality & Safety Commission 2017).

Implications for kaumātua*

Māori culture has very proud oral traditions, including oral histories through **waiata** (song), **whakataukī** (proverbs), **whakapapa** (genealogy) and **pūrākau** (stories), as well as through **kōrero** (speaking). **Te reo Māori** (the Māori language) is rich with **kupu whakarite** (metaphors) and is considered almost poetic. These language-related cultural influences continue to shape the communication styles Māori use today in some ways.

Kaumātua and whānau/family may use figurative language or other communication in which they imply the meaning rather than state it directly. They may also communicate from a place of politeness with the result that, because they are eager to be polite and not be a nuisance, they under-report issues and refrain from asking questions to clarify issues (Graham and Masters-Awatere 2020). It is important to take these cultural differences into account when communicating with kaumātua and their whānau/family.

* Kaumātua are individuals, and their connection with culture varies. This guide provides a starting point for a conversation about some key cultural concepts with kaumātua and their whānau/family. It is not an exhaustive list; nor does it apply to every person who identifies as Māori. It remains important to avoid assuming all concepts apply to everyone and to allow care to be person and whānau/family led.

At a time of illness or when navigating challenges, kaumātua may wish to have support with communication. Someone who is important to them, such as a whānau/family member, minister, neighbour or friend, may be best placed to provide this support. At the time of admission, it is important to establish who the support person is and update records if the person in this role changes.

Creating a connection is central to effective and meaningful communication with Māori and their whānau/family (Oetzel et al 2014; Wilson et al 2021). One way to achieve this is to use whanaungatanga, which means sharing information on a more personal level, outside of your clinical role (Wilson et al 2021). This helps form a connection that provides a foundation for open, two-way communication based on mutual respect and trust.

Due to the collective nature of Māori culture, it is important that kaumātua and whānau/family have a sense of being heard. Upholding the **mana** (dignity, prestige, esteem) of the kaumātua and their whānau/family throughout communication is important. You can do this by understanding that:

- it is important to include kaumātua in meetings even if they no longer appear to understand
- traditionally, direct eye contact could indicate a challenge, leading to conflict, so kaumātua may look away or even close their eyes during conversations (see the *Guide for health professionals caring for kaumātua | Kupu arataki mō te manaaki kaumātua* for more information).

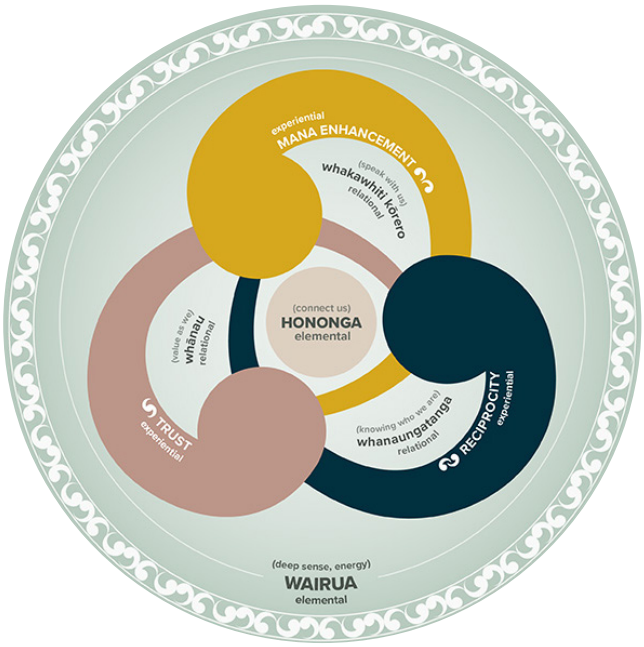
Assessment

Communicating with older people in care situations

Address barriers and facilitators to person-centred communication before you begin (Kwame and Petrucka 2021).

Barriers	Facilitators
Time restriction	Stop, give the person your attention and create time to address the issue. Options for creating time range from setting time in the immediate future for a simple one-on-one conversation to booking an appointment that works for staff, resident and whānau/family. The sooner you form relationships and address issues, the less likely it is that communication issues will occur.
Task focused	Make communication the task.
Language differences	Have a translator in place (people often prefer independent translators).
Resident health status	Pick the best time of day or moment in the resident's health journey for discussion.
Sensory loss	Communicate in a quiet (no background noise), private environment with hearing and visual aids in place (about one-third of people in residential care have visual and hearing deficits) (Yamada et al 2014).
Cognitive impairment	Have whānau/family members present. Use short sentences and closed or simple questions, and reduce distractions. Having a person they trust present can help a resident with cognitive impairment feel safe.
Religious or cultural	Find out about cultural and religious needs and match your communication to them.

Models of effective communication



Use meaningful connections to support effective communication (Wilson et al 2021).

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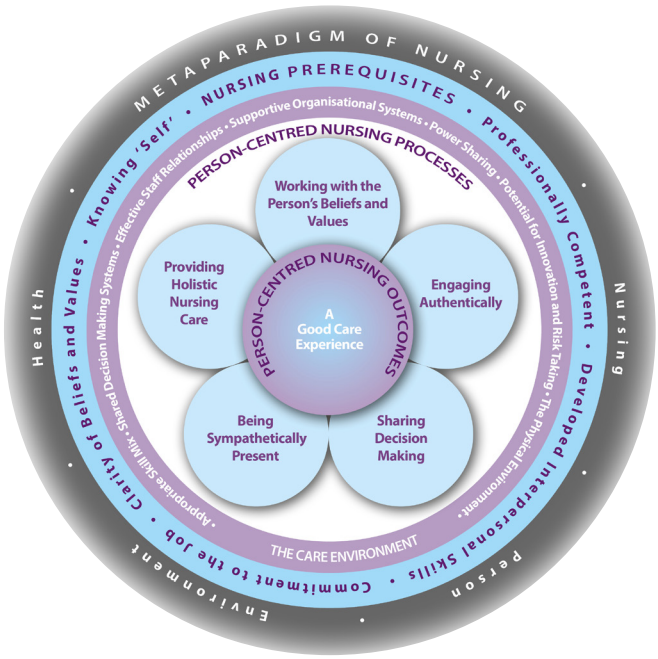

Use a person-centred framework such as McCance et al (2011) to support effective communication.

Source:
www.cpcpr.org/resources (Reused with permission)

Holistic care, engagement and presence

1. Attend to the conversation, display warmth and be genuinely interested (ie, don't multitask; make the time for this conversation).
    - Ask the resident about their physical and emotional health; be curious.
    - Recognise and acknowledge the resident's view of their health.
    - Be honest when answering a question about illness, using language that the resident can understand. (Be honest if you don't know the answer to the question.)
    - Be genuine: your non-verbal communication should match what you say.
    - Use appropriate humour.
2. Use respectful terms and approaches.
    - Address the person using their preferred name and pronoun.
    - Use culturally appropriate terms of respect – for example, **matua** (adult male), **whaea** (adult female) or Mr, Mrs, sir, madam.
3. Use appropriate methods of communication with people with memory issues.
    - Keep conversations short and to the point.
    - Provide reference information for the person and their whānau/family.
    - Have a support person present as often as possible.
    - Minimise distractions.
    - Use pictures, objects and gestures to support your words.
    - Write down key messages as memory prompts.
    - Focus on keeping the person feeling safe.

Shared decision-making – communicating with whānau/families

Researchers (Bélanger et al 2018) suggest families want help to be involved in the care of their loved ones. In particular, they want to:

1. understand issues about the person's condition through:
    - having scheduled access to the general practitioner or nurse practitioner
    - having a defined contact person to liaise with
    - being included in clinical decisions so they understand risks and benefits
2. participate in care and need:
    - structured information on how to help
    - written and verbal information on care and management issues
    - recognition of their knowledge of the person's personal preferences and habits.

Care planning

It is useful to record in the care plan the communication preferences (frequency and method) of the person, their whānau/family and/or delegated decision-maker so that you are more likely to meet their expectations. Matters these preferences may relate to include, but are not limited to:

- routine communication (eg, newsletters, health updates or reports about routine reviews for the person and/or their delegated decision-makers)
- teleconferencing tool (eg, Zoom, Messenger)
- preferred telephone contact (by mobile or landline, at home or work)
- what information they are happy to receive by text
- preferred form of written information, such as by email (and at what primary email address) or hard copy
- social media preferences and restrictions, such as:
  - access to social platforms such as Facebook
  - sharing protocols
  - recording (voice, video or photographs).

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Frailty
Te wairuhi

The information in this guide is accurate to the best of our knowledge as of June 2023.

Definition

Frailty is an age-related, progressive (Pazan et al 2021) geriatric syndrome with many dimensions and causes (physical, cognitive and social). It is characterised by reduced strength, endurance and physiological and psycho-social function. Frailty increases an individual's vulnerability to poor health outcomes (Dent et al 2017; Morley et al 2013; Vermeiren et al 2016).

Key points

- The three broad approaches to defining frailty are: (a) physical frailty (Fried et al 2001); (b) deficit accumulation model (Rockwood and Mitnitski 2007); and (c) combination model: frailty as an effect of physical, cognitive and social elements (Rolfson 2022).
- Frailty is age related. It is most common in people aged 85 years and older.
- Māori experience frailty at a younger age than other ethnic groups (bpac^{nz} 2018).

Why this is important

Frailty is the most common underlying cause of illness and death among people living in aged residential care (Amblàs-Novellas et al 2016). It is a progressive syndrome that can be slowed but not stopped. Older people with severe frailty are less likely to recover from acute illness than people of the same age without frailty (Murray et al 2005; Pulok et al 2020; Stow et al 2018). Frailty scales can support conversations with older people and their **whānau**/family about goals of care.

Remember, older people are assumed competent. It is only when a formal capacity assessment establishes they lack 'capacity' that it is possible to activate an enduring power of attorney (EPoA) for personal care and welfare. When the EPoA is activated, the attorney has the legal responsibility to make sound decisions on behalf of the older person.

Key points

- Relatively small stressors (such as a change in medication or an infection) can result in severe clinical deterioration in older people with frailty (Clegg et al 2013).
- Acute deterioration may present as acute confusion, extreme weakness or fatigue and change the person's behaviour or function (Clegg et al 2013) before vital signs change.

Implications for kaumātua*

Te ao Māori (Māori world view) has a perspective of ageing based on a strength rather than a deficit model, and traditionally kaumātua have a lot of **mana** (dignity, respect, status). This means that the focus of care should be on who the person is and what they are still able to do.

Frailty is complex. It is important to note that kaumātua will differ in their experience of symptoms, even when those symptoms are the same. Individuals will also differ in the challenges they face and in their needs. You should tailor care specifically to the needs of the individual.

A Māori view of frailty is that it is a 'multidimensional experience encompassing physical and functional, social and whānau/family, psychological, environmental and macro-level factors'. Further, 'the experience of frailty is a dynamic balance between challenges/deficits and strengths/resources' (Gee et al 2021).

Factors that have a positive or balancing effect on kaumātua holistically (Gee et al 2021) include:

- feeling engaged and connected to people (whānau/family support, social networks, bonds with whānau/family including **mokopuna** [grandchildren])
- feeling useful and having a purpose (**manaaki** [looking after/giving support to] others, having a role as kaumātua of being central to whānau/family)
- having a sense of autonomy, mana and confidence (support people can recognise and strengthen these self-concepts or erode them)
- cultural identity (eg, practising **tikanga** and visiting **marae** can help them feel uplifted)
- **oranga wairua** (spiritual wellbeing).

Consider that pride may stop some kaumātua from accepting help or using aids. It is important to offer help proactively as kaumātua may be **whakamā** (ashamed/embarrassed) to ask for help due to a traditional view that this is rude or shameful, and because they do not want to bother anyone else.

Holistic care also includes equipping whānau/family with all of the information, knowledge and resources that will best support their ongoing involvement in the care of their loved ones.

For more information about any of the above, see the *Guide for health professionals caring for kaumātua | Kupu arataki mō te manaaki kaumātua*.

* Kaumātua are individuals, and their connection with culture varies. This guide provides a starting point for a conversation about some key cultural concepts with kaumātua and their whānau/family. It is not an exhaustive list; nor does it apply to every person who identifies as Māori. It remains important to avoid assuming all concepts apply to everyone and to allow care to be person and whānau/family led.

Assessment

International and Asia-Pacific (Dent et al 2017) frailty guidelines recommend assessing a person with a standard, recognised frailty tool.

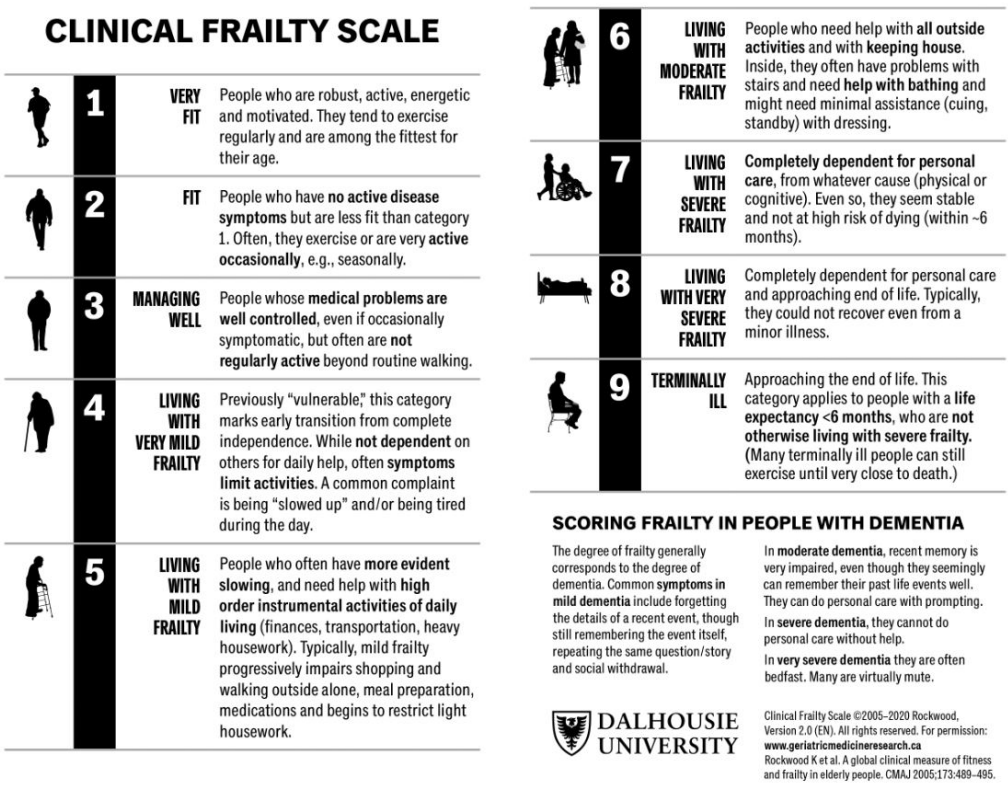
- The Clinical Frailty Scale (CFS) (Rockwood and Theou 2020) uses descriptions and images to categorise frailty stages (Oviedo-Briones et al 2021). Each category is related to an increase in the risk of death over the medium term (Pulok et al 2020). The CFS takes less than 30 seconds to complete (Oviedo-Briones et al 2021). Its clear, picture-based approach to frailty stages is helpful when discussing goals of care with residents and whānau/family.
- The FRAIL-NH tool is aimed at health professionals. It is straightforward to use, and over 20 countries have used it. Research shows it is good at predicting adverse outcomes in people living in aged residential care (Liau et al 2021).

Frailty assessment tools

FRAIL-NH (Kaehr et al 2015; Oviedo-Briones et al 2021)

	FRAIL-NH		
	Score = 0 each	**Score = 1 each**	**Score = 2 each**
Fatigue	No	Yes	PHQ-9 ≥ 10
Resistance	Independent transfer	Set up only	Physical help
Ambulation	Independent	Uses a walker	Not able or wheelchair
Incontinence	None	Bladder	Bowel
Weight loss	None	Yes	n/a
Nutrition	Normal diet	Mechanically altered	Feeding tube
Help dressing	Independent	Set up only	Physical help
Total FRAIL-NH score			

Meaning of total score: 0–5 = non-frail; 6–7 = pre-frail; ≥ 8 = frail



Source: Rockwood and Theou (2020); Rockwood et al (2005)

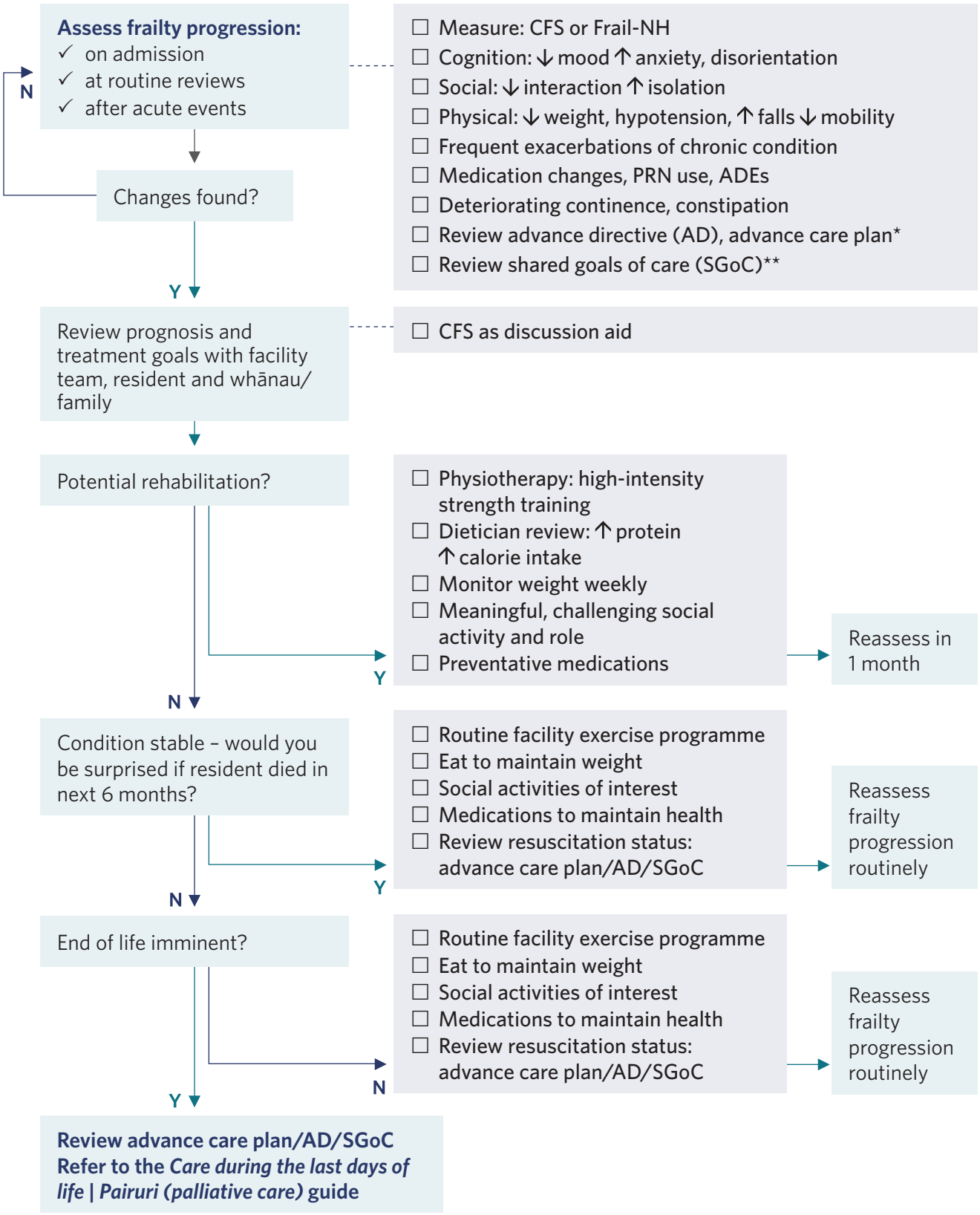
Treatment

Evidence shows a limited number of interventions slow the progression of frailty. Effective interventions are physical activity and strength training, nutritional supplements, weight monitoring, addressing polypharmacy, vitamin D supplements for those with deficiency, screening for causes of fatigue and optimising the management of chronic conditions (Dent et al 2017, 2019).

Care planning

Because frailty is multidimensional, a comprehensive care plan is needed to address it. Consider all the care guides relevant to the individual. Pay particular attention to physical activity, nutrition, medication and chronic conditions (Dent et al 2017, 2019). Care planning includes: routinely reassessing frailty; supporting cognition, social engagement, physical function and chronic conditions; remaining alert for acute deterioration; and planning for future care (Pulok et al 2020).

Decision support



* Only a person with mental capacity can make an AD or advance care plan.

** SGoC is a health care plan produced in collaboration with the person (as able), the person who holds an activated enduring power of attorney (personal care and welfare), whānau/family and the health care team.

ADE = adverse drug event CFS = Clinical Frailty Scale PRN = pro re nata (as needed)

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Guide for health professionals caring for kaumātua
Kupu arataki mō te manaaki kaumātua

Introduction

This guide presents cultural concepts that define the cultural identity of being Māori both as an individual and as a collective ('it's part of the cultural DNA'). It aims to do so in a way that honours the **mana** (dignity, prestige), **tapu** (sacredness) and **mauri** (life force, vitality) of these concepts while also making sense of each concept in a practical way for health care.

Achieving both of these aims requires a delicate balance. In adding cultural concepts to the *Frailty care guides | Ngā aratohu maimoa hauwarea* for the first time, we have no doubt future updates will make improvements.

Oral traditions have been the main way of preserving many of the concepts introduced in this guide, as written records are rare. To develop this guide, we needed to draw from deep wells of lived experience, an innate understanding of **te ao Māori** (Māori world view) and applied nursing knowledge. The cultural knowledge shared herein is a **taonga** (treasure) and we ask that you respect it as such.

This guide explains **mātauranga Māori** in a simple and pragmatic way. It is designed to support health professionals to enhance the experience of **kaumātua** and **whānau**/family in their care. In particular, it:

- offers a conversation starter, encouraging health professionals to fully explore the individual cultural needs of kaumātua and their whānau/family
- shares cultural concepts that are relevant to caring for kaumātua and so increases awareness of and sensitivity to cultural needs.

Definition

Māori are the indigenous people of Aotearoa New Zealand. All people who **whakapapa** Māori (have Māori genealogy) have the right to identify as Māori.

Key points

- Identifying as Māori is self-determined (Te Huia 2015). Not everyone with Māori genealogy chooses to identify as Māori for complex reasons related to colonisation and historical intergenerational trauma (Hokowhitu et al 2020).
- Māori peoples and culture are not all the same. Different **hapū** (sub-tribes), **iwi** (tribes) and **rohe** (regions) have different customs, traditions and dialects.

- Not all Māori have been raised in te ao Māori. For this reason, individuals may vary greatly in their level of connection with their cultural identity, language and **tikanga**. Colonisation resulted in the desecration of Māori culture, land, language and customs, including tikanga and mātauranga Māori. Each new generation continues to feel the experience and impact of cultural disconnection (called 'historical intergenerational trauma') (Curtis et al 2019; Waitangi Tribunal 2019; Wirihana and Smith 2019).
- It is critical that users of this guide remain mindful that individuals and whānau/family have had varied experiences of intergenerational trauma, and it has affected them in different ways.

For the purpose of these frailty care guides, we use the term 'kaumātua' to mean any elder who identifies as Māori.* This use is a broad, modern interpretation of the term. Traditionally, 'kaumātua' meant particular Māori elders with a specific role as a figurehead or leader. We acknowledge the mana of kaumātua who hold this traditional title and role within their whānau/family, hapū and iwi.

Kaumātua are considered the keepers of knowledge, guardians of traditions and nurturers of the young (Higgins and Meredith 2011). Their roles and responsibilities increase with age due to their life experience, knowledge and wisdom (Dyall et al 2014). For these qualities, they are held in high esteem.

Key points

- From a Māori world view, ageing adds mana (see below). Kaumātua are valued for what they add to society. This can be at odds with health care assessments that focus on deficits (what people cannot do) rather than strengths (what people can do).
- Focusing on strengths helps align assessment and care planning with a Māori world view. (For an example of this approach in practice, see the *Falls | Ngā hinga* guide.)
- Incorporating cultural concepts into everyday practice with kaumātua upholds their mana and enables them to thrive. It also reassures whānau/family that they can entrust you with the care of their loved one.

Why this is important

Kaumātua are the people who carry mātauranga Māori (ancestral knowledge of how Māori view, understand and navigate the world, including creativity and cultural practices) and tikanga (customs and traditions). For this reason, they are cherished and venerated (Hikuroa 2016).

- Mātauranga Māori and tikanga cannot be understood without each other (Mead 2016).
- Mātauranga is the knowledge held in the mind. Tikanga is the embodiment of that knowledge – that is, it is knowledge that we can see, do and feel (Duncan and Rewi 2018; Royal 2012).

* You may also hear the term **kuia** or **kui** to refer to female elders and **koroua** or **koro** for male elders.

Important: Due to the impact of colonisation, some kaumātua and whānau/family do not have either the knowledge of these concepts or the ability to articulate them. If you presume kaumātua and whānau/family have such knowledge, it can cause **whakamā** (shame, embarrassment). So be curious, be open to conversations and seek to understand, but allow whānau/family to lead.

Cultural concepts that can help with assessments and planning and providing care

The concepts we discuss here are only some of the many that underpin te ao Māori. Having a background knowledge of these cultural concepts* may be useful when assessing kaumātua, and planning and providing their care.

Although we discuss the following concepts separately, please keep in mind that they are all closely related and interconnected. For this reason, we group some concepts in the same section to show particularly close connections.

Mātauranga Māori and tikanga Māori

Mātauranga Māori

Mātauranga Māori is the body of knowledge that is innately Māori and based on ancestral sources of knowledge. It consists of both traditional and contemporary knowledge and includes cultural practices, creativity and world view.

Tikanga Māori ('tika' meaning correct + 'nga' meaning more than one = correct ways)
Tikanga Māori represent the ethical values that keep us safe in interactions and relationships. Tikanga are tangible – they are present in Māori actions and behaviours and are how Māori live out being Māori.

Tikanga are more than customary values and practices: they enact mātauranga Māori in daily life (Mead 2016). On a day-to-day basis they provide a guide for living and interactions; they maintain social and spiritual balance. Traditionally, a breach of tikanga incurs the wrath of the **atua** (gods), so it is easy to imagine why even an unintentional breach of tikanga can have a significant spiritual impact on kaumātua.

In practice, whānau/family may be referring to a breach of tikanga when they make comments such as:

- 'It's just not how we or (kaumātua name) would normally do it'
- 'We are not sure you are looking after (kaumātua name) the right way'.

Such comments present an opportunity to explore cultural needs and care preferences. Of course, not all feedback is about tikanga – it is important to check rather than assume it is.

* This guide is not a comprehensive culture resource.

Manaakitanga and whanaungatanga

Some aspects of tikanga are universal. In the frailty care guides, two areas of tikanga that are particularly important to care are **manaakitanga** and **whanaungatanga**.

Manaakitanga ('mana' meaning dignity or prestige + 'aki' meaning to enhance + 'tanga' meaning action = acts that uphold mana of others)

Manaakitanga is about 'nurturing relationships, looking after people, and being careful about how others are treated' (Mead 2016). A common translation is hospitality, reciprocity, kindness and generosity. On a deeper level, however, manaakitanga is about the behaviours and actions that honour and uphold the mana of others. (For more on mana, see the next section.) Manaakitanga is reciprocal: by honouring the mana of others, you in turn uphold your own mana.

Practical examples of how you can support manaakitanga include:

- enabling kaumātua to show manaakitanga by providing whānau/family or **manuhiri** (guests) with hospitality, such as a cup of tea
- enabling kaumātua to contribute to the facility community, for example, by participating in committees, leading welcomes for new staff or residents and blessing food
- having a welcoming space for whānau/family when they visit.

For other examples, see the guides on *Frailty | Te wairuhi* and *Communicating effectively with older people and their whānau/family | Kia kōrerorero pai ki ngā kaumātua me ō rātou whānau.*

Whanaungatanga and whānau/family

Whanaungatanga means relationships or a sense of connection or belonging. **Whakawhanaungatanga** is the process of establishing relationships and relating to others through whānau/family, shared experience or other things people have in common. It requires both parties to share reciprocally about themselves and provides a sense of belonging (Lacey et al 2011).

This connection can occur between aged residential care (ARC) staff and kaumātua, with the result that staff become 'facility whānau/family'. It is a great honour to be thought of in this way and recognises the contribution staff make to the lives of kaumātua and their whānau/family.

Māori have ideals that are strongly centred on whānau/family. Traditionally, several generations of whānau/family members lived together, and younger whānau/family members helped **manaaki** (care for) and **tiaki** (look after) the older generation. In modern times, whānau/family care of kaumātua remains grounded in cultural norms. While kaumātua generally welcome this care, they may be reluctant or whakamā about accepting whānau/family help because of the demands of modern lifestyles. Whānau/family may also experience whakamā where they feel guilty about being unable to fulfil the traditional caring role.

When kaumātua live in ARC, whānau/family continue to have an integral role in contributing to their holistic health and wellbeing. In particular, they connect the kaumātua to and validate their cultural identity and are vital in maintaining the **oranga wairua** (spiritual wellbeing) of kaumātua. The contribution of whānau/family to kaumātua wellbeing cannot be overestimated.

Mana, mauri and tapu (and noa)

Mauri, tapu and mana are interconnected in te ao Māori. This interconnection is reflected in the way that an action impacting on one of these concepts affects them all.

Mana

Understanding the concept of mana is fundamental when planning care. Delivering care that upholds dignity and mana at all times is vital to **hauorangatanga** (health and wellbeing) of kaumātua. By upholding the mana of kaumātua in your care, you in turn honour the mana of their whānau/family, as well as your own.

Mana refers to dignity, prestige, esteem and status (as viewed by self and others), and with this status comes power and pride. Mana can be a difficult concept to translate but is represented in the social standing of an individual and the respect, reputation, credibility and responsibility that comes with it. Mana cannot be self-appointed as it exists outside the control of the individual (Reweti et al 2022). With older age, mana often grows in recognition of the wisdom, experience and knowledge that elders have.

Mana is considered a sacred force that the atua pass down, endowing a person with pride, dignity, integrity, self-esteem and spiritual vitality. After receiving it at birth, a person can gain more mana over their lifetime through their personal achievements. It is the source of identity, strength and pride for both the individual and the collective: personal achievements uplift the mana of the whole group (whānau/family, hapū, iwi) (Mead 2016). This is about how the individual has obligations to things beyond themselves (other people, relationships, the environment), which is why manaakitanga is so important.

The risk for kaumātua moving into ARC is that their feeling of mana may be diminished. This is due to them being removed from cultural contexts and environments that maintain their mana through customs, whānau/family interactions, **tuakana**–**teina** (older–younger person) interactions and 'giving back'.

Mana is closely tied to both mauri and tapu and as mana increases, so does tapu (Mead 2016). (See 'mauri' and 'tapu' below for more information.) Examples of how an impact on one of these concepts can affect them all are where:

- breaches of tapu cause damage to mana
- actions that diminish or uplift mana affect the mauri of the person, which impacts on their wellbeing
- mishandling of mana becomes a source of whakamā (shame, embarrassment).

Mauri

Mauri is the life spark, life force or essence in all living things. Mauri is also the source of emotions and connects people to the environment and to the atua (Reweti et al 2022).

Mauri is not a fixed state. Instead it moves through states of:

- mauri **noho** (languishing)
- mauri **rere** (unsettled)
- mauri **oho** (awakening)
- mauri **tau** (settled or in balance)
- mauri **ora** (flourishing) (Reweti et al 2022).

These different states of mauri help to explain levels of wellbeing and can be perceived or observed in those who are experiencing an imbalance in their **hauora** (holistic wellbeing).

Mauri can change due to actions that impact on the mana of the person, but it can also be a sign that the person is unwell (Mead 2016). At times, these changes in mauri may be observed as changes in consciousness, and it is understood that when a person dies, their mauri vanishes (Mead 2016). This means that paying close attention to mauri is important because it helps in recognising changes in the health and wellbeing status of kaumātua.

Tapu and noa ('tapu' restricted; '**noa**' unrestricted: a process of separation and balance)
In simple terms, tapu refers to prohibitions or restrictions and noa means ordinary, unrestricted or free of tapu. Tapu is used to protect the sacredness of places, certain objects and people (Duncan and Rewi 2018).

Personal tapu or the sacredness of the person is considered an individual's most important spiritual attribute. It is understood that the atua pass down tapu, bestowing it at birth. In providing care, you need to be aware that:

- the head and the sexual organs are most tapu
- an individual's personal space is tapu
- items that make physical contact with a person absorb their tapu.

Tapu and noa are almost opposing or balancing concepts and are a complex feature of tikanga Māori. Tapu and noa must remain separated and balanced. This is one of the areas where it is easy for health staff to unknowingly breach tikanga. Here are a few practical examples of how to avoid doing so.

- Do not pass anything over a person's head.
- Do not take food into the room of a **tūpāpaku** (deceased person's body).
- Do not put items that have touched the head or body on surfaces meant for food, drink or medications.

- Do not put items that have touched the head (eg, pillows, hats, hairbrushes) on chairs or anywhere other than the head of the bed. These items should be kept off surfaces and equipment used for the rest of the body.

It is common practice after the burial of tūpāpaku to lift the tapu from the room or area where the deceased was lying, as well as from their home and possessions, through a ceremony called '**takahi whare**'.

Food and water (except holy or sacred water) are considered noa. Water is used as part of some ceremonies to lift or remove tapu.

There may be instances where things go wrong and a breach of tapu occurs, or mana is not upheld. This may result in whakamā.

Whakamā (shame, embarrassment or shyness)

The concept of whakamā is grounded in Māori social context. It is considered a complex and holistic experience (Knight 2019).

The experience of whakamā is closely linked to mana. Damage to an individual's mana may result in whakamā (Knight 2019). (See an example of how mana, mauri, tapu and whakamā are interconnected under 'Mana' above.)

Whakamā may also occur when a kaumātua:

- senses a loss of **rangatiratanga** (autonomy and self-sufficiency), such as when their mobility, continence or cognition changes
- experiences a loss or breach of privacy. Take a delicate approach when the kaumātua needs to share intimate personal details or information and, where possible, allow the kaumātua to direct this process.

When kaumātua experience whakamā, they may respond with withdrawal behaviours and it may impact on their holistic wellbeing. (For examples of such situations, see the wound-related care guides as well as the *Acute deterioration | Te tipuheke tārū, Constipation | Kōroke, Falls | Ngā hinga, Scabies | Mate māngeongeo riha* and *Urinary incontinence | Te turuturu o te mimi* guides.)

Other important Māori cultural concepts

From a Māori perspective, wellbeing is holistic, so the following concepts that impact on health and wellbeing are interconnected. Keep in mind that, although we discuss them separately, the concepts flow into each other.

Wai (water)

From the perspective of te ao Māori, **wai** sustains life both physically and spiritually. The understanding that people are made up of water is reflected in the word **wairua** (spirit). It literally means two waters, referring to both the physical and metaphysical aspects of being.

This perspective is reflected in the question, 'Who are you?' in **te reo Māori**: **'Ko wai koe?'**. In essence, this is asking, 'Of what water are you?'. The question acknowledges the person's whakapapa connection to **Ranginui** (sky father) and **Papatūānuku** (earth mother), through the waters that flow from the atua to form Māori people.

It is believed that where a person's internal waters shift either up or down from their usual balance, it can reflect a change in the person's state of wellbeing. Shifting up can be due to mental distress and elevated mental state. Downward shifts are often associated with depression and/or anxiety. This is why water is used as a medium to heal.

Oranga wairua (spiritual wellbeing)

From a Māori perspective, oranga wairua is fundamental to human existence. It has important implications for staff providing health care.

- Spiritual disturbances or wairua unrest can occur when kaumātua experience an imbalance in holistic health such as during times of illness or acute deterioration (bpac^{nz} 2010; Lindsay et al 2022; Valentine et al 2017). (For examples, see the *Delirium | Mate kuawa, Diabetes | Mate huka, Responsive and reactive behaviour | Ngā momo whanonga kātoitoi, tauhohe hoki* and *Urinary tract infections | Te pokenga pūaha mimi* guides.)
- Because of their holistic view of health and wellbeing, during times of wairua unrest, Māori may see addressing a person's spiritual needs as equally important to meeting their physical needs. It is important to support kaumātua and whānau/family to do this and to include culturally relevant, holistic interventions in care planning and treatment.
- Wairua disturbances can manifest in many ways. To understand them accurately, you need careful interpretation from a Māori world view. Listening to kaumātua, whānau/family and other sources of cultural knowledge will be vital.

Whenua

Another aspect of oranga wairua acknowledges the close connection that **tangata whenua** (people of the land) have to the **whenua** (land). From a Māori world view, the health and wellbeing of people are interconnected with the health and wellbeing of the land. Through this connection, the nourishment, healing and protection between people and the land are reciprocal (Reweti et al 2022). Many traditional Māori healing principles and practices focus on connecting with te **taiao** (the natural environment).

Kaumātua living in ARC may gain some benefit from spending time outside. This can be a way to promote oranga wairua by supporting them to connect with te taiao. A meaningful experience with nature may be as simple as going barefoot on soil or grass, feeling the wind on their face or hearing the sounds of birds and insects.

Kupu Māori used in the frailty care guides

Te reo Māori	English translation
Aroha	Love, compassion, kindness, empathy
Atua	God(s), primordial being(s)
Hauora	Health, wellbeing
Kai	Food
Kanohi ki te kanohi	Face to face, in person
Karakia	Prayer, incantation
Kaumātua	Māori elder(s), older adult(s) (see 'Definition' section for further information)
Koroua	Male elder(s)
Kuia	Female elder(s)
Mana	Prestige, authority, control, power, influence, status, spiritual power, charisma (see 'Mana' section)
Manaaki	Host, care for, look after, support
Manaakitanga	Hospitality, kindness, reciprocity, generosity
Manuhiri	Visitor(s), guest(s)
Mātauranga Māori	Māori sources of knowledge, Māori ways of knowing. It covers both traditional and contemporary forms of knowledge, including waiata, maramataka, pūrākau (see 'Mātauranga Māori' section)
Mauri	Life force, life essence, vitality
Noa	Neutral, ordinary, unrestricted (see 'Tapu and noa' section)
Oranga	Health
Pūrākau	Traditional cultural stories or mythology, including Māori creation stories
Pure	Traditional cleansing ritual or ceremony to remove tapu, usually including karakia and often water
Rongoā	Medicine
Rongoā Māori	Traditional Māori medicine
Takahi	Trample; can be used to describe damage to ('trampling on') a person's mana or to describe the custom of 'takahi whare' where a house/place of residence is blessed to lift the tapu after the burial of a deceased person (See example in the *Care during the last days of life | Pairuri (palliative care)* guide)
Taiao	Nature, environment
Tangata whenua	People of the land; used to refer to the indigenous people

Te reo Māori	English translation
Tapu	Sacred, prohibited, restricted (See 'Tapu and noa' section)
Te ao Māori	The Māori world – a Māori world view or perspective
Te reo Māori	The Māori language
Tiaki	Look after, take care of
Tikanga	Cultural customs and traditions; literally means the 'correct, right way(s)'
Tuakana-teina	Term describing the relationship between a tuakana (person who is older) and a teina (someone who is younger), where the teaching and learning are reciprocal
Tūpāpaku	Deceased person
Wā	Time
Wai	Water
Wairua	Spirit
Whakamā	Shame, ashamed, embarrassed, embarrassment, shy, bashful
Whakapapa	Genealogy
Whakawhanaungatanga	The process of establishing connections or relationships and relating to others
Whānau	Family, extended family or familiar group of people. Can include friends or others who may or may not be connected through kinship ties
Whenua	Land

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Legal and ethical
Ture me te matatika

Assisted dying | Tauwhiro mate

Advance care planning | Te whakamahere tauwhiro whakamau

Enduring power of attorney (EPoA) | Mana mauroa ā-rōia

Assisted dying
Tauwhiro mate

The information in this guide is accurate to the best of our knowledge as of June 2023.

Definition

The New Zealand End of Life Choice Act 2019 gives people who experience unbearable suffering from a terminal illness the option of asking for medical assistance to die. Medically assisted dying involves the person's doctor or nurse practitioner administering or providing medication to bring on death (Ministry of Health 2022).

Key points

- Assisted dying **is not** for people who are simply of advanced age or living with disability.
- Whānau/family, welfare guardians or an enduring power of attorney **cannot** request assisted dying for the person.
- Nurses **cannot** discuss assisted dying unless the person raises this first.
- Nurses **do not** have to participate in assisted dying (conscientious objection).

Why this is important

Aged residential care provides services for people with terminal illness. Some residents may ask staff for this service. Check your policy to see if your facility supports this service.

Implications for kaumātua*

For Māori, identity is a central element to wellbeing and, as a collectivist culture, ideas of self are entwined with **tīpuna** (ancestors), **whānau**/family and community, rather than the emphasis being on the individual's needs and aspirations (Ministry of Health 2021, p 12).

Tikanga and **kawa** (Māori cultural customs and traditions) are concepts that are important during the end-of-life process (see the *Guide for health professionals caring for kaumātua | Kupu arataki mō te manaaki kaumātua* for more information). Whānau/family have a central role in including and observing them in this process (Malpas et al 2017). Complex and varied whānau/family dynamics, as well as the possibility that assisted dying may conflict with tikanga and kawa, may cause some tension within whānau/family. As a result, health professionals may find this situation challenging to navigate.

* Kaumātua are individuals, and their connection with culture varies. This guide provides a starting point for a conversation about some key cultural concepts with kaumātua and their whānau/family. It is not an exhaustive list; nor does it apply to every person who identifies as Māori. It remains important to avoid assuming all concepts apply to everyone and to allow care to be person and whānau/family led.

Assess the topic of **mate whakaahuru** (assisted dying) on a case-by-case basis. It is likely that the resident will require whānau/family support for a conversation about assisted dying so, by making time and space for this to happen, you can provide whānau/family-focused, holistic care.

Responding when a person raises assisted dying

Health professionals working with patients and their whānau/family may be approached by someone wanting to know about assisted dying. These conversations may take the form of a direct request for help to die or a 'testing of the waters', using phrases and euphemisms that suggest a wish to discuss the topic further.

Regardless of their personal views, it is important that health professionals are prepared to respond with respect and compassion if someone raises the topic of assisted dying.

The following are two suggested responses.

- Where the person lives independently: 'This is an important conversation, and I want to help you talk to the best person to support you. May I suggest talking to your general practitioner (GP) or nurse practitioner (NP)?'
- Where the person is in care: 'Can I arrange for your GP/NP to come and see you?'

The following resources are available on the Manatū Hauora Ministry of Health website. They are designed to support health professionals when responding to an initial request for information. Note, they are not intended to be used to assess a person's eligibility for assisted dying.

- **Responding When a Person Raises Assisted Dying: A handbook for registered health professionals** (docx, 533 KB)
- **Responding When a Person Raises Assisted Dying: A conversation guide for registered health professionals** (docx, 260 KB)

Assessment

To be eligible, the person must **meet** all the following criteria:

- aged 18 years or over
- a citizen or permanent resident of Aotearoa New Zealand
- suffering from a terminal illness that is likely to end their life within 6 months
- in an advanced state of irreversible decline in physical capability
- experiencing unbearable suffering that cannot be relieved in a manner that the person considers tolerable
- competent to make an informed decision about assisted dying **AND** retains competence during the whole process, including on the day of administering the medication.

AND two doctors must agree the person is eligible for assisted dying. If one or both doctors think the person may not be competent, a psychiatrist assessment is required.

Care planning

If the person is eligible for assisted dying, the care plan will include deciding:

- date and time of death (which can be any time up to 6 months away)
- place of administering medication
- who else (eg, whānau/family members) may be present
- administration process (self-administered or GP/NP administered).

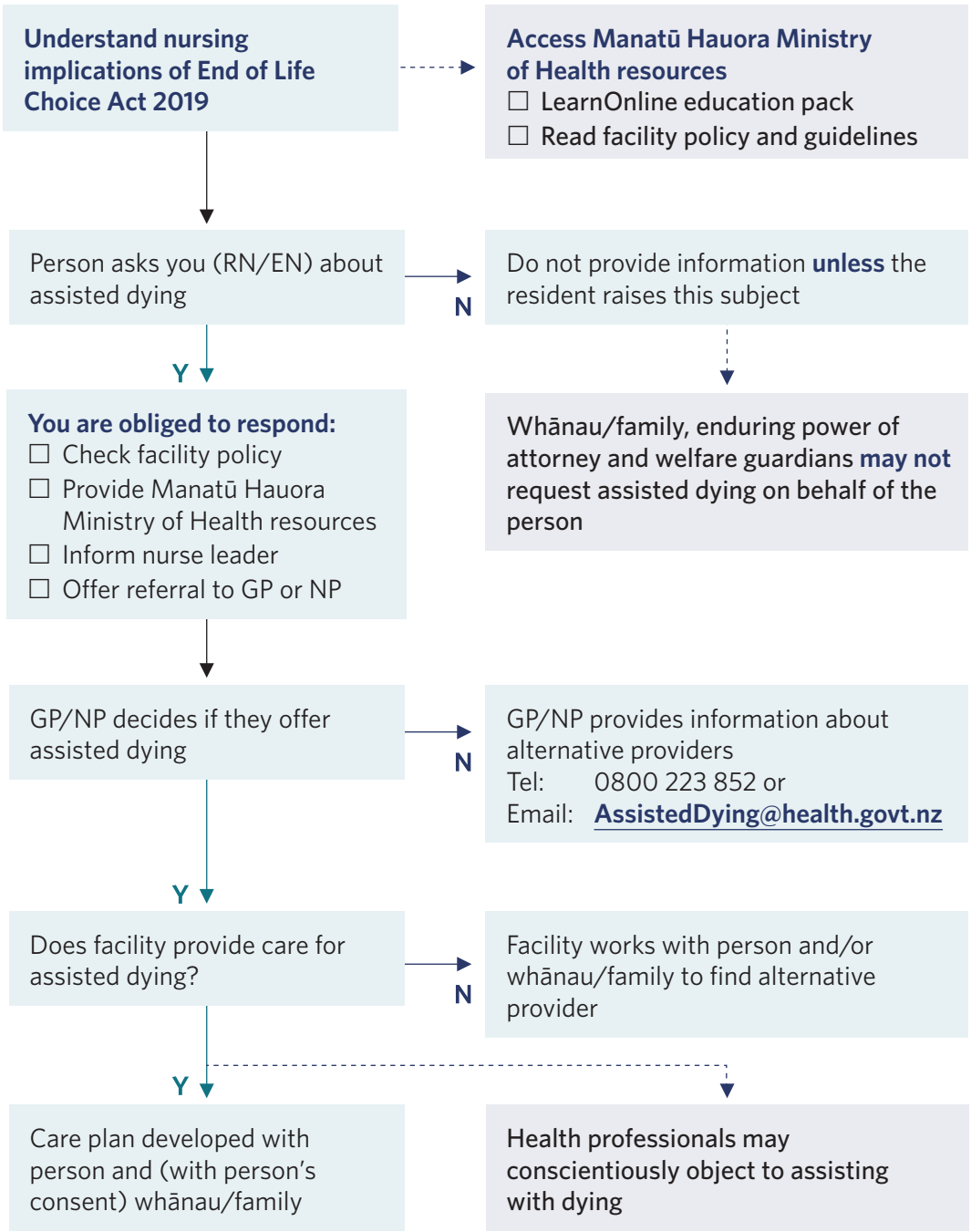
For an example of a care plan, see **www.tewhatuora.govt.nz/assets/For-the-health-sector/Assisted-Dying/Public-information/My-Journey-My-Needs-assisted-dying-care-plan-PDF-353-KB.pdf**.

The person may change their mind about going ahead with assisted dying at any time.

Resources for health professionals

- Manatū Hauora Ministry of Health information for health professionals **www.tewhatuora.govt.nz/for-the-health-sector/assisted-dying-service/information-for-health-professionals/information-for-health-professionals**
- Manatū Hauora Ministry of Health information to print and share with residents and families **www.health.govt.nz/our-work/life-stages/assisted-dying-service/assisted-dying-information-public#infosheets**
- LearnOnline self-directed learning package **learnonline.health.nz/admin/tool/sitepolicy/userpolicy.php**

Decision support



EN = enrolled nurse
GP = general practitioner
NP = nurse practitioner
RN = registered nurse

References | Ngā tohutoro

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Advance care planning
Te whakamahere tauwhiro whakamau

The information in this guide is accurate to the best of our knowledge as of June 2023.

Definition

Advance care planning is a process of discussion and shared planning for future health care that a competent person undertakes with their **whānau**/family (at the person's discretion) and health care professionals (Health Quality & Safety Commission 2022). Advance care planning provides an opportunity for a person to develop and express preferences for future care based on:

- their values, beliefs, concerns, hopes and goals
- a better understanding of their current and likely future health
- the treatment and care options available.

Advance care planning is about shared decision-making and delivering care that is centred on the person (and their whānau/family) now and in the future, including at the end of life. It helps to prepare all involved for what may lie ahead and with making decisions in the future that align with what matters most to the person.

- **Shared goals of care** are the outcome of a decision-making process between the person, whānau/family (as appropriate) and clinical team. They may result from an advance care planning conversation or a stand-alone process. The aim is to set a direction for an episode of care, including any limitations in medical treatment such as cardiopulmonary resuscitation (CPR) and the level of treatment desired or available in likely clinical scenarios (Martin et al 2019).
- **An advance directive (AD)** is a consent to, or a refusal of, a **specific treatment** that may or may not be offered in the future. It may be written or oral. For the AD to be valid and legally binding, the person must, at the time of creating it, be competent, informed and acting freely and must anticipate that health professionals will use the AD later to direct the treatment they offer. An AD may only be used when the person lacks capacity. **A person cannot use an AD to choose assisted dying.**
- **Advance treatment planning** is a process of planning for likely future health needs. It is an important process for people who lack capacity. It is a clinician-led process that includes consulting pre-existing documents and the person's representatives.

Key points

- All of the above (advance care planning, shared goals of care, AD and advance treatment planning) involve having conversations with the aim of giving the person care and treatment that are consistent with their values, beliefs and clinical needs. Having the conversation is more important than which form is used to capture it.
- People with capacity (competence):
  - choose who to include in conversations
  - decide on their (clinically appropriate and reasonable) care and treatment options
  - should be encouraged to document their preferences.
- The following conditions apply to people who lack capacity (as established through a formal capacity assessment).
  - Health professionals have a legal obligation to consider the resident's expressed preferences when determining which treatments to offer. If there is a valid AD that relates to that **specific treatment**, it is legally binding.
  - Health professionals should make every attempt to include the person's representatives (enduring power of attorney: personal care and welfare) in treatment planning. **Note**: The attorney cannot 'refuse any standard medical treatment or procedure intended to save that person's life or to prevent serious damage to that person's health' (Protection of Personal and Property Rights Act 1988). For example, they cannot refuse CPR on behalf of the resident (New Zealand Government 2021).
  - **All of the above processes inform decision-making. They do not replace clinical judgement or accountability for decisions about what treatment to offer.** For example, health professionals may judge CPR to be clinically inappropriate (unlikely to save the life of a person with advanced frailty) and so make a 'do not resuscitate' decision.
  - An advance treatment plan is the outcome of reviewing decisions the person made when they had capacity, talking with the person's representative(s) and applying clinical judgement.

Why this is important

Understanding the values, goals and wishes of the person living in care helps the health care team make decisions that are most likely to uphold the **mana** (dignity, status, esteem) of the person.

Implications for kaumātua*

Given the basis for advance care planning is to honour the values and wishes of the individual and their whānau/family, it is important to involve all the necessary people and make sufficient time and space available for these conversations to happen. Providing support and guidance to the whānau/family throughout the process is also vital.

The whānau/family members involved may extend to a much wider group of people than those typically considered immediate 'next of kin'. The method of communication with whānau/family should also be flexible – for example, **kanohi ki te kanohi** (face to face) meetings, email, telephone or video conferencing. The whānau/family involved in each case should determine the method based on their own preference.

Assessment

Conversations about choices to do with frailty and care or treatment occur when a person is admitted to aged residential care, at routine reassessments and after significant changes in their condition. Having a standard process helps these conversations to take place (Siu et al 2020). As a general guide, it is helpful to discuss five levels of treatment with the person and their whānau/family when deciding about shared goals of care and advance care planning.

1. Restorative (full) **for CPR**:
   Treatment aims to preserve life and may require transfer to acute hospital for diagnostic procedures and treatments that are not available in aged residential care.
2. Restorative (conditional) **not for CPR**:
   Treatment aims to preserve life or maintain the best possible health outcome. It may require assessment in urgent care, while limiting treatment to the options manageable and/or available in aged residential care.
3. Active care on-site **not for CPR**:
   Treatment aims to slow decline and enhance quality of life. Generally, the guidance is not for hospital transfer. However, transfer to hospital may be necessary following advice from a general practitioner or nurse practitioner. Examples of such situations include traumatic injury (eg, suspected fracture) and acute surgical issues (eg, suspected bowel obstruction).
4. Comfort care on-site **not for CPR**:
   Treatment aims to optimise comfort rather than to try to prolong life. This phase may be for a short or extended period.
5. Care of dying: Treatment aims to provide comfort for the person living in care and their whānau/family in the last days or hours of life, when 'dying' has been diagnosed.

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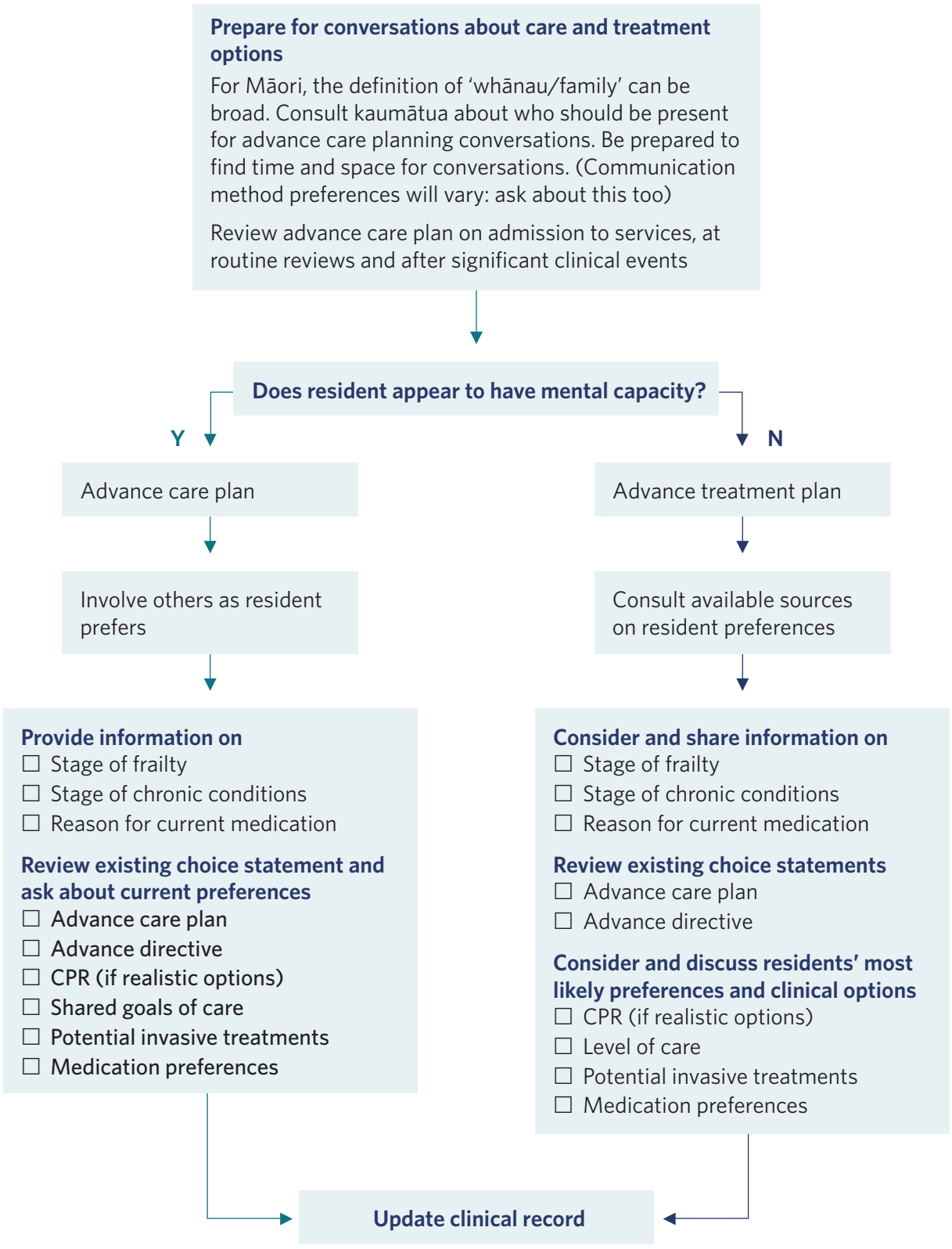
Key points

- Research suggests it is almost impossible to predict when dying will occur. The levels of assessment outlined above are an approach to care, not an approach to dying (Stow et al 2020).
- **If a person experiences an acute illness, it is always necessary to complete a clinical assessment to determine whether it is possible to address the illness no matter what level of intervention the person has chosen.**
- All treatments (eg, subcutaneous fluids and antibiotics) may be considered at all levels of intervention (except active dying) but may be stopped if the treatment does not reverse the underlying condition. Thorough communication with the older person (as able) and their whānau/family is essential if treatments are stopped on the reasoning that they are futile, regardless of what level of intervention is involved.
- When competent older people with frailty become unwell, their ability to make rational decisions can be compromised. When they lack this capacity temporarily, the health care team must make sound clinical judgements on their behalf.

Care planning

- Advance care planning **www.hqsc.govt.nz/our-work/advance-care-planning/acp-information-for-clinicians**
- Shared goals of care resources **www.hqsc.govt.nz/our-work/advance-care-planning/talkingcovid/arc-specific-resources**
- Shared goals of care form **www.hqsc.govt.nz/resources/resource-library/shared-goals-of-care-form-for-aged-residential-care**

Decision support



CPR = cardiopulmonary resuscitation

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Stow D, Matthews FE, Hanratty B. 2020. Timing of GP end-of-life recognition in people aged ≥75 years: retrospective cohort study using data from primary healthcare records in England. *British Journal of General Practice* 70(701): e874-e879. DOI: 10.3399/bjgp20X713417.

Enduring power of attorney (EPoA)
Mana mauroa ā-rōia

The information in this guide is accurate to the best of our knowledge as of June 2023.

Definition

An enduring power of attorney (EPoA) is the legal process of giving (donating) a trusted person (the attorney) the power to make decisions on your behalf under the Protection of Personal and Property Rights Regulations 2008. Decisions may be about (1) your property or (2) your personal care and welfare. Each type of decision is a separate authority.

1. **EPoA: property** donates the power to make financial decisions. This can be set up for use when the donor has 'capacity' or when they lack 'capacity' (ie, it is the donor's choice).
2. **EPoA: personal** care and welfare donates the power to make health care decisions only if the donor lacks 'capacity' to make their own decisions.

Key points

- EPoA: personal care and welfare (PCW) **is active only after** a suitably qualified health professional assesses the person and certifies they are 'mentally incapable'. Examples of a suitably qualified health professional are a general practitioner, nurse practitioner or medical consultant.
- The authority of the attorney to make personal care and welfare decisions can be challenged if the attorney fails to act in the donor's best interest.

Why this is important

By being clear about the parameters of the EPoA:PCW, health professionals and attorneys can understand their respective roles in clinical decision-making.

Implications for kaumātua*

The collective nature of Māori culture may conflict with the underlying individualistic principles of EPoA legislation. This may mean there is some tension to navigate when working with the legislation and meeting the needs of kaumātua and their **whānau**/family. Establishing a clear EPoA communication plan for whānau/family will likely reduce tension in times of acute illness when it is especially important to include whānau/family.

* Kaumātua are individuals, and their connection with culture varies. This guide provides a starting point for a conversation about some key cultural concepts with kaumātua and their whānau/family. It is not an exhaustive list; nor does it apply to every person who identifies as Māori. It remains important to avoid assuming all concepts apply to everyone and to allow care to be person and whānau/family led.

Generally, an EPoA is established before a person is admitted to aged residential care. However, if it needs an update or review, kaumātua will likely require whānau/family support. By creating time and space for this support to happen, you can provide whānau/family-focused holistic care.

Assessment

The registered nurse (RN) should make a referral for a **capacity assessment** when they reasonably suspect that the older person lacks mental capacity and that an alternative decision-maker is required.

A lack of mental capacity means the 'inability to; understand the nature of the decision, foresee the consequences of decision making or effectively communicate a decision' (Protection of Personal and Property Rights (Enduring Powers of Attorney Forms and Prescribed Information) Regulations 2008).

Key points

- People are assumed to have mental capacity until proven otherwise.
- The RN contributes to the capacity assessment by documenting the reasons they believe the person lacks capacity. Importantly, this includes decision-making capacity that the person has retained as well as decision-making capacity that they have lost.
- Consultation with whānau/family or loved ones with an insight into the person's decision-making history may provide useful supporting or contextual information.

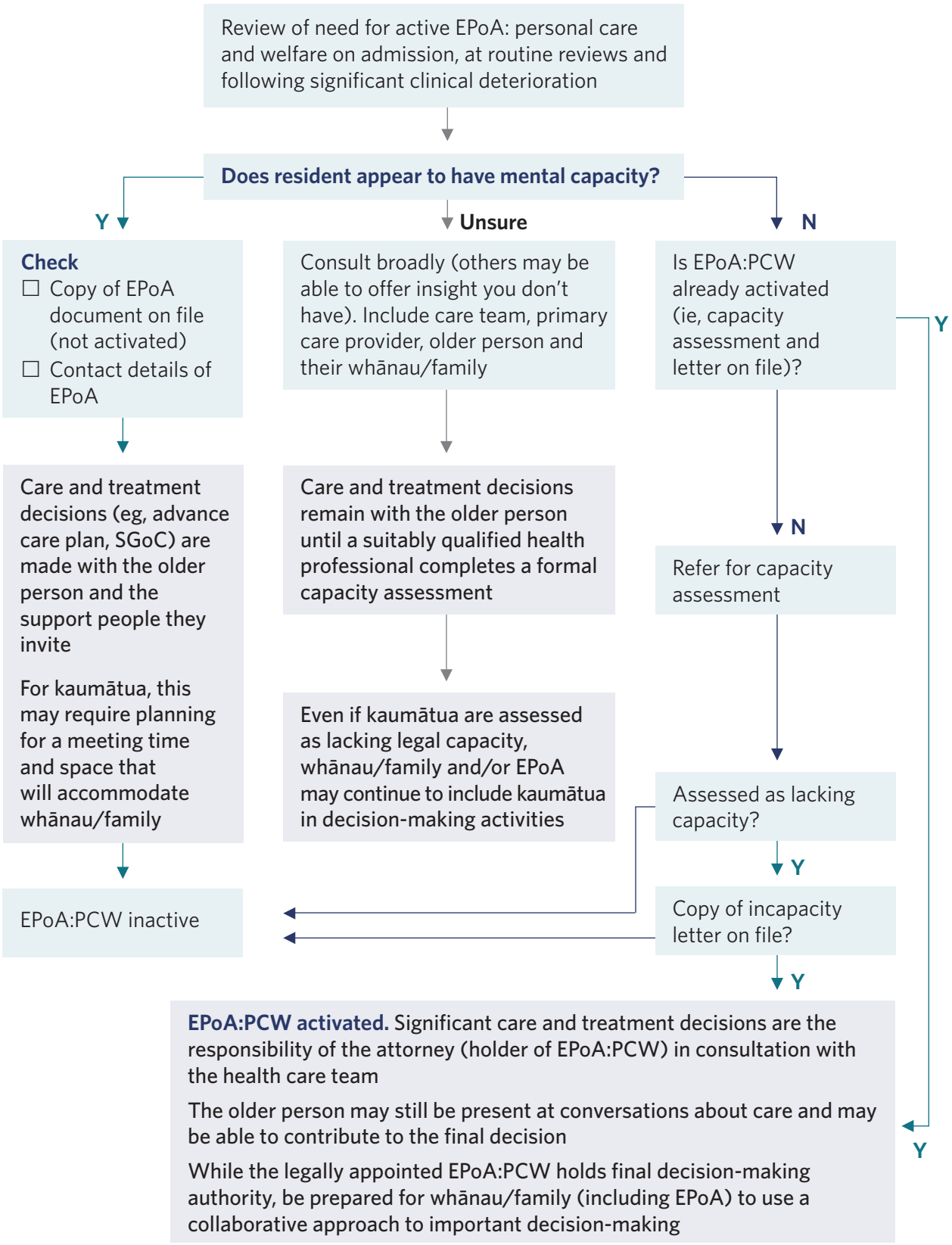
Care planning

An EPoA communication plan for whānau/family is an important part of the care planning process.

Further resources

This video explains how to conduct a capacity assessment: **vimeo.com/uow/capacityassessment** (Plesner et al 2016).

Decision support



EPoA = enduring power of attorney

EPoA:PCW = enduring power of attorney: personal care and welfare

SGoC = shared goals of care

References | Ngā tohutoro

Plesner E, Fergus L, Young G. 2016. Training video on capacity assessment. Wellington: University of Otago Wellington. URL: **vimeo.com/uow/capacityassessment**

Acute care
Tauwhiro tārūrū

Acute deterioration
Te tipuheke tārū

The information in this guide is accurate to the best of our knowledge as of June 2023.

Definition

Acute deterioration is a sudden, clinically important, rapid change in the person's baseline cognitive, behavioural, functional or physical health domains. In this case, 'clinically important' means a change that, without intervention, may result in complications or the death of the older person (American Medical Directors Association 2003).

Key points

- The broad concept of acute deterioration includes all causes of acute illness, from exacerbation of a chronic condition to a new undifferentiated (unknown cause) issue. It includes syndromes such as delirium and sepsis.
- Changes in health domains often occur before vital signs change.
- Vital sign changes may be late indicators of deterioration. Do not hesitate to call for help if you believe the person to be unwell.

Why this is important

Detecting acute deterioration in people living in aged residential care (ARC) enables registered nurses (RNs) to access the right treatment, at the right time, in the right place for older people living in their care (Daltrey et al 2022; Laging et al 2018). If acute deterioration occurs, frail older people are at higher risk of mortality and morbidity than their counterparts who are not frail (Clegg et al 2013; Kojima et al 2018; Stow et al 2018).

Implications for kaumātua*

It is important to take a holistic approach to assessing the impact of the episode of deterioration on kaumātua. This may include how they are feeling spiritually (a **wairua**), physically (a **tinana**), mentally and emotionally (a **hinengaro**). Kaumātua may experience **whakamā** (shame, embarrassment) about their deterioration and may not report symptoms to avoid burdening others.

It is essential to provide kaumātua and whānau/family with all the information they need to understand the approach to assessing and treating episodes of acute deterioration.

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Support them by:

- including whānau/family in conversations
- providing opportunities for whānau/family to share their observations and insights, and valuing their input
- setting aside adequate time to discuss the matters with all parties involved
- thoroughly discussing and explaining decision-making about any changes in the plan of care (eg, escalation in care, medication changes, investigations).

See the *Guide for health professionals caring for kaumātua | Kupu arataki mō te manaaki kaumātua* for more information.

Assessment*

A standardised approach to identifying and responding to acute deterioration is recommended. Tools specifically designed to support RNs in ARC are limited. The most widely distributed caregiver tool for identifying deterioration is the Stop and Watch tool.

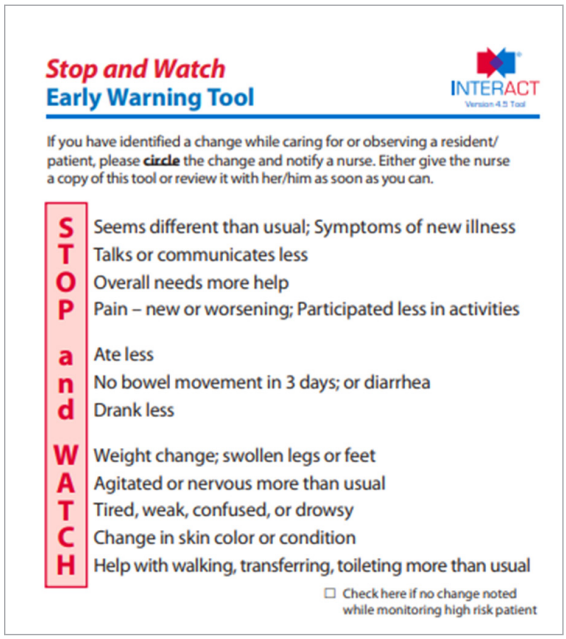
Reports on common patterns of acute deterioration in people living in ARC may help RNs identify and respond to acute deterioration (Daltrey et al 2022).

Identifying deterioration

Care staff have the most direct contact with people living in ARC and are most likely to identify a subtle change from baseline. In ARC, where long-term relationships develop, noticing subtle changes is often described as 'knowing' something is wrong (Boockvar et al 2000; Sund-Levander and Tingström 2013). Care staff may notice something listed on the Stop and Watch tool or a change from baseline that is unique to the individual. Where they identify a change, the RN needs to assess it to determine its urgency and what response is required.

* Research is under way in New Zealand to develop a Deterioration Early Warning System for ARC (DEWS © Daltrey and Boyd 2022). The DEWS will support this guide once published.

Stop and Watch early warning tool



Stop and Watch
Early Warning Tool

INTERACT
Version 4.5 Tool

If you have identified a change while caring for or observing a resident/patient, please **circle** the change and notify a nurse. Either give the nurse a copy of this tool or review it with her/him as soon as you can.

S Seems different than usual; Symptoms of new illness
T Talks or communicates less
O Overall needs more help
P Pain – new or worsening; Participated less in activities

a Ate less
n No bowel movement in 3 days; or diarrhea
d Drank less

W Weight change; swollen legs or feet
A Agitated or nervous more than usual
T Tired, weak, confused, or drowsy
C Change in skin color or condition
H Help with walking, transferring, toileting more than usual

☐ Check here if no change noted while monitoring high risk patient

The Stop and Watch early warning tool helps care staff identify and report specific issues (Ouslander et al 2009).

It is available as Pathway INTERACT® from the Pathway Health website after registering (Pathway Health nd).

Role of the registered nurse

RNs have an obligation to assess issues that care staff team members and whānau/family report to them. They must also initiate a timely and appropriate response.

Assessing the situation

Assessment is complex. Subtle changes noted in the older person could be evidence of acute deterioration, an expected end-of-life process or an undisclosed social issue. Acute deterioration can be life threatening so the safest approach is to focus on confirming whether acute deterioration is present or not before considering other non-clinical causes of a changed presentation.

Responding and communicating

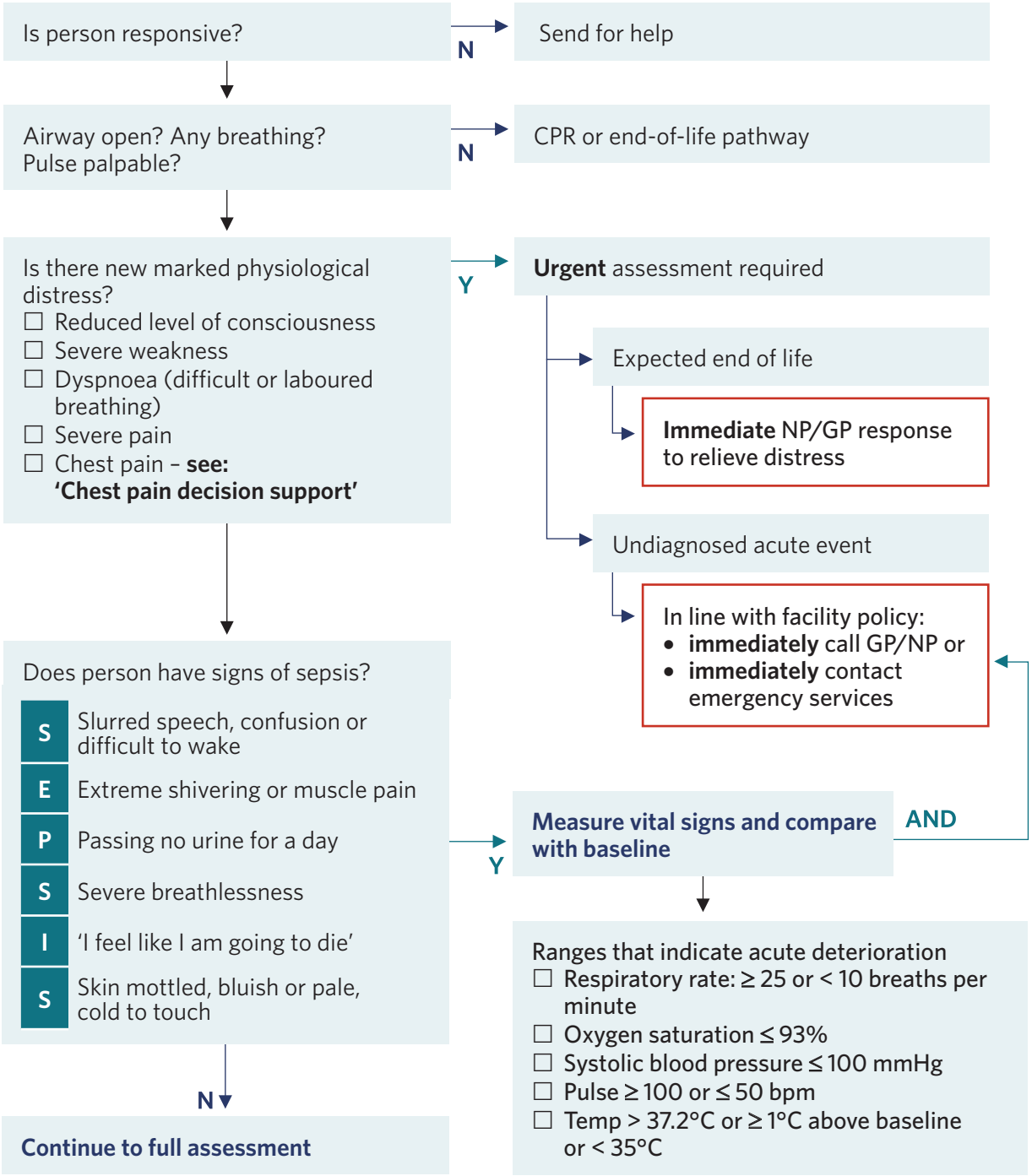
New undifferentiated issues (those with unknown cause) need a diagnosis. Follow your facility policy to contact the correct health professional, eg, general practitioner (GP), nurse practitioner (NP) or urgent care.

Acute deterioration assessment

Rapidly and immediately consider life-threatening issues before completing a full assessment of acute deterioration. Where the condition is life threatening, you must call urgent services (NP, GP or ambulance, according to the protocol of your facility).

Decision support

Emergency screen



bpm = beats per minute CPR = cardiopulmonary resuscitation GP = general practitioner NP = nurse practitioner

Chest pain assessment

Chest pain can have many different causes, but you should always investigate it. Frail older people with acute cardiac events may present with increased breathlessness (see the *Approach to breathlessness (dyspnoea)* | *Tūngāngā* guide) with or without chest pain. Use a framework to assess for cardiac chest pain (OLDCARTS-ICE).

- **Onset**: Does it start suddenly or gradually?
- **Location(s) and radiation**: Where is the pain?
- **Duration**: How long does it last?
- **Character**: What does it feel like?
- **Associated**: Are there any other symptoms?
- **Relieving or aggravating**: What makes it better or worse?
- **Treatments**: What treatments have been tried?
- **Severity**: How bad is it? What is the pain score?
- **Impact, Coping, Expectation**: What does it mean for the person?

Chest pain decision support

Ask about all features of pain (OLDCARTS-ICE)

Does chest pain have the following features of ischaemic pain? (OLDCARTS-ICE)

O	Starts gradually and gets worse
L	In central chest, upper abdomen or bra line, left arm, neck, jaw, teeth
D	Lasts for a few or up to 15 minutes
C	Feels heavy, pressure, squeezing – band-like sensation
A	SOB, nausea/vomiting, sweaty, cold, clammy, palpations, fatigue
R	Rest may help
T	GTN may help relieve symptoms
S	Mild to severe
I	Very frightening

N → See: 'Acute deterioration assessment steps' and 'Acute deterioration decision support'

Y → Does person have history of chest pain and management plan?

N → If available and prescribed, PRN GTN
Urgent care referral unless it contradicts advance care plan or SGoC
Oxygen **only** if there is:
- breathlessness
- saturation < 93%
- a history of heart failure
- cardiogenic shock (bpac^{nz} 2015)

Y → Follow prescribed plan, eg, GTN therapy

Pain resolved?

Y → Review with NP/GP next visit

N → Contact NP/GP or refer for **urgent** care unless it contradicts advance care plan or SGoC

Update person, whānau/family and/or EPoA

EPoA = enduring power of attorney
GP = general practitioner
GTN = glyceryl trinitrate
NP = nurse practitioner
PRN = 'as needed' (pro re nata)
SGoC = shared goals of care
SOB = shortness of breath

Sepsis

Sepsis is a life-threatening condition caused by the body's exaggerated response to infection that can lead to tissue damage, organ failure and death (Sepsis Trust NZ nd). Consider all people living in ARC who have an infection to be at risk of sepsis.

Tools for sepsis screening have not been validated for frail older people specifically (Daltrey et al 2022; Reyes et al 2018). However, the following tools may be useful to support decision-making. If the person has an infection and is deteriorating, **get help fast** (better to assume sepsis and be wrong than to be too cautious and miss sepsis).

Sepsis screening tools

Sepsis Trust New Zealand home-based screening

S	Slurred speech, confusion or difficult to wake
E	Extreme shivering or muscle pain
P	Passing no urine for a day
S	Severe breathlessness or breathing very fast
I	It feels like you are going to die (reported)
S	Skin mottled, bluish or pale or feels abnormally cold to touch

100:100:100 criteria

- Temperature (≥ 100°F) ≥ 37.8°C
- Systolic blood pressure < 100 mmHg
- Heart rate > 100 beats per minute

Quick sepsis-related organ failure (qSOFA)

- Respiratory rate ≥ 22 breaths per minute
- Altered mental status
- Systolic blood pressure ≤ 100 mmHg

Sepsis treatment in ARC

Sepsis management in ARC is limited. It consists of oral antibiotic therapy, supplemental oxygen to keep saturation above 93%, maintaining fluid intake to about 1.5 L in 24 hours (or considering subcutaneous fluids) and pain management.

Sepsis has a high mortality rate, and early intervention is key. If a person is likely to need intravenous therapy, they will require rapid transfer to hospital.

Acute deterioration assessment steps

Step	Domain	Assessment
1	History of presenting complaint	• Use available resources (staff, whānau/family, notes) to understand a full history of presenting complaint (OLDCARTS-ICE).
2	Concern	• Changes can be subtle based on knowledge of person (staff, whānau/family). How concerned are you?
3	Delirium	• Consider hyper- and hypoactive delirium. Note: Be aware that the person who is very quiet and drowsy or sleeping a lot may have hypoactive delirium.
4	Observed change in behaviour	• Are behaviours inconsistent with the person's usual routines and habits? • Unusually withdrawn or not wanting personal care support with activities of daily living? • Eating: meals missed? Consider starting food chart. • Drinking: how much has person drunk in last 24 hours? • Consider fluid balance chart: aim for 1.5 L in 24 hours.
5	Functional symptoms	• Is there evidence or recent history of a fall? • Is there evidence of weakness or fatigue such as: – a change in activities of daily living – a loss of mobility?
6	Physical symptoms	• **Cardiorespiratory**: Any breathlessness, cough, oedema? • **Gastrointestinal**: Is there any abdominal pain, nausea or vomiting? • **Review bowel chart**: Is there evidence of constipation, diarrhoea, overflow? • **Skin**: Any breakdown, infections, rash, sores? • **Pain**: Review pain status. • **Genitourinary**: Any dysuria, urgency, frequency?
7	Vital signs and examination	Measure vital signs and compare with baseline. A change from baseline is important even if this sits in the 'normal range' (American Medical Directors Association 2003). Values of concern are: • respiratory rate: ≥ 25 or < 10 breaths per minute • oxygen saturation ≤ 93% • systolic blood pressure ≤ 100 mmHg • pulse ≥ 100 or ≤ 50 bpm • temperature > 37.2°C **or** ≥ 1°C above baseline **or** < 35°C. Examine the relevant system or systems: • neurological: unilateral weakness, balance, facial changes • respiratory: breath sounds and work of breathing • cardiac: heart sounds, pulses, oedema • abdomen: tenderness or masses, bowels and bladder • musculoskeletal: strength, pain, range of movement • skin, wounds, rash, infection.

Step	Domain	Assessment
8	Consider in context of person	Any recent changes to medication or treatment plans? Any recent investigations or laboratory tests? Decision-making: • Is this primarily a clinical decision? (New acute presentations need a diagnosis.) • Does an advance care plan or directive apply? • Is the person able to participate in decision-making? (Delirium reduces a person's decision-making capacity.) Does this appear to be: • an exacerbation of a chronic condition • an expected end-of-life process • a new clinical issue • a worsening situation that needs NP, GP or urgent care review?

Vital signs associated with acute deterioration

The research has not reached a consensus on normal physiological ranges for older adults living in ARC (Daltrey et al 2022; Reyes et al 2018). Comparison with baseline is recommended when assessing for deterioration as the degree of change may be more important than the absolute number recorded (American Medical Directors Association 2003). The following trigger points are based on the available evidence:

- respiratory rate: ≥ 25 or < 10 breaths per minute
- oxygen saturation: ≤ 93%
- temperature:
  - > 37.2°C or 1°C above baseline (Sloane et al 2014) or
  - > 37.2°C (twice) or ≥ 37.8°C (once) or > 1°C over baseline (Centers for Disease Control 2023)
  - < 35°C (hypothermia often indicates sepsis in ARC)
- blood pressure: systolic blood pressure ≤ 100 mmHg
- heart rate (pulse): ≥ 100 or ≤ 50 beats per minute.

Acute deterioration decision support

Step 1: History of presenting complaint
From person, care team, whānau/family, notes (OLDCARTS-ICE)

- ☐ Onset
- ☐ Location
- ☐ Duration
- ☐ Character: describe
- ☐ Associated symptoms
- ☐ Relieving or aggravating factors
- ☐ Treatments tried
- ☐ Severity: score
- ☐ Impact, coping: what this means to person
- ☐ Expectations: what they want

Step 2: Concern
Knowing person, what is level of concern?

Step 3: Delirium
Consider cognition (hinengaro) and consciousness (mauri)

- ☐ New or increased confusion
- ☐ Confusion fluctuates
- ☐ Inability to concentrate
- ☐ Change in level of consciousness: hyperactive or hypoactive (sleepy/drowsy or difficult to wake, slowed movements)
- ☐ Can have vivid and disturbing hallucination

Step 4: Observed change in behaviour or wairua
Individual behaviour change
Unusually withdrawn, doesn't want ADLs
Eating and drinking change

- ☐ Reduced eating: food chart and small meals
- ☐ Review fluid intake last 24 hrs and FBC – aim for 1.5 L per 24 hrs (unless fluid restriction in place)
- ☐ Changed behaviour may have spiritual cause

Step 5: Functional symptoms
Evidence of fall, weakness or fatigue, reduced ADL status or loss of mobility

- ☐ Breathlessness, cough or oedema
- ☐ Nausea or vomiting
- ☐ Bowels: constipation, diarrhoea, overflow
- ☐ Skin breakdown or infection rash
- ☐ Pain status
- ☐ Dysuria, urgency, frequency

Step 6: Physical symptoms
Ask about symptoms

Step 7: Vital signs and examination
Examine affected system if obvious issue
If issue unclear, examine all systems

Vital signs – these ranges indicate acute deterioration

- ☐ Respiratory rate: ≥ 25 or < 10 breaths per minute
- ☐ Oxygen saturation ≤ 93%
- ☐ Systolic blood pressure ≤ 100 mmHg
- ☐ Pulse ≥ 100 or ≤ 50 bpm
- ☐ Temperature > 37.2°C **or** ≥ 1°C above baseline **or** < 35°C

- ☐ Neurological: unilateral weakness, balance, facial changes
- ☐ Respiratory: breath sounds and work of breathing
- ☐ Cardiac: heart sounds, pulses, oedema
- ☐ Abdomen: tenderness or masses, bowels and bladder
- ☐ Musculoskeletal: strength, pain, range of movement
- ☐ Skin, wounds, rash, infection

Step 8: Consider in context of person

- Recent changes to medication or treatment?
- Recent investigations or laboratory tests?
- Does this appear to be something new?
- Does an advance care plan or SGoC apply?
- Can person reliably make a decision? (Acute confusion affects decision-making)

Does this appear to be:

- ☐ An exacerbation of a chronic condition?
- ☐ An expected end-of-life process?
- ☐ A new clinical issue? Needs a diagnosis
- ☐ A worsening situation that needs NP, GP or urgent care?

Contact GP, NP or urgent care with full details in line with facility protocol (SBAR or other handover process)

Establish plan:

- ☐ Treatment with expected improvement
- ☐ Treatment with expected dignified end of life
- ☐ Monitoring frequency and when to call NP, GP or urgent care

Update care team (handover), whānau/family
Start short-term care plan

Monitor and escalate to NP, GP or urgent care if person deteriorates or no improvement in 24–48 hrs

ADLs = activities of daily living
bpm = beats per minute
FBC = fluid balance chart
GP = general practitioner
NP = nurse practitioner
SBAR = situation, background, assessment, recommendation
SGoC = shared goals of care

Responding to acute deterioration

Responses to acute deterioration include the following.

1. Communicate the situation to NP, GP or urgent care.
    - Research shows handover tools such as SBAR (situation, background, assessment, recommendation) provide effective support for clear and accurate clinical communication (Müller et al 2018).
    - The SBAR framework from Pathway Health (nd) can help with assessing and handing over the clinical situation.
2. Develop a short-term care plan that includes prescribed actions and nursing interventions.
3. Collaborate with NP or GP to establish the type and frequency of monitoring **and** threshold for further escalation if the older person gets worse or fails to improve.
4. Fully inform the older person, whānau/family and/or enduring power of attorney about the situation and plan.
5. Complete effective handover: provide information the team needs to understand the situation and care plan for the acute event until it is resolved.
6. Sign off the short-term care plan once situation is resolved.
7. Update long-term care plan if the person's overall health has changed.

Treatment

Nursing interventions are critical to the quality of care the older person and their whānau/family experience. That applies whether the interventions are aimed at the person's recovery from an acute event or a safe, comfortable and dignified end-of-life process.

Nursing interventions include:

- spiritual care (comfort, support, person-centred care)
- nutrition and hydration
- skin care
- positioning and mobility (avoiding bed rest and deconditioning in anticipation of recovery)
- use of appropriate PRN medication
- monitoring the person **and updating NP/GP** if the person deteriorates, becomes distressed or fails to show expected signs of improvement in 24–48 hours.

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Approach to breathlessness (dyspnoea)
Tūngāngā

The information in this guide is accurate to the best of our knowledge as of June 2023.

Definition

Breathlessness (dyspnoea) is the difference between the demand to breathe and the ability to breathe (Mahler 2017). To observe it, watch how hard a person works to catch their breath (work of breathing) and count the number of breaths per minute. It is a frightening symptom and has a significant impact on how a person feels and functions.

Key points

- People with dyspnoea are more likely to be admitted to hospital than those with other symptoms (Johnson et al 2016).
- Common causes of breathlessness in older adults are (Mahler 2017):
  - respiratory (infection or chronic obstructive pulmonary disease)
  - cardiac (heart failure, myocardial infarction, angina)
  - anaemia
  - psychological (anxiety, panic)
  - imminent end of life (predicted/diagnosed dying).

Why this is important

Breathlessness is a strong predictor of mortality (Mahler 2017). It tends to increase in the last few months of life regardless of condition and is an indicator of worsening health and reduced survival (Johnson et al 2016). It is common in older people and often has cardiac or respiratory causes (van Mourik et al 2014).

Implications for kaumātua*

Breath and breathing are significant in Māori culture. **Te reo Māori** has several words for breath, many of which link breath and breathing to **te taiao** (the natural world) and to Māori creation stories. While these cultural constructs do not change the occurrence, cause or treatment of breathlessness, it is important to understand them because experiencing breathlessness may contribute to anxiety or **wairua** (spiritual) unrest (see the *Guide for health professionals caring for kaumātua | Kupu arataki mō te manaaki kaumātua* guide for more information).

* Kaumātua are individuals, and their connection with culture varies. This guide provides a starting point for a conversation about some key cultural concepts with kaumātua and their whānau/family. It is not an exhaustive list; nor does it apply to every person who identifies as Māori. It remains important to avoid assuming all concepts apply to everyone and to allow care to be person and whānau/family led.

Assessment

Use a tool to gather a systematic and structured report of breathlessness. It is helpful to use OLDCARTS-ICE (adapted from Bickley 2017) selectively when exploring breathlessness.

OLDCARTS-ICE

Explore	Questions/actions
Onset	When did it start? *(Be as accurate about date and time as possible.)* Did it start suddenly or gradually? What (if anything) stimulated it? *(What was happening? What was the person doing?)* Has something similar happened in the past? If so, what worked and what happened?
Duration	How long does it last? Is it continuous or intermittent? How often does it occur?
Characteristics	What does it feel like? *(Get a description.)* • 'Hard work to catch breath' is reported in respiratory and cardiac disease. • 'Tight' often refers to constricted airways, more common in asthma than COPD. • 'Can't catch my breath' is more common in COPD.
Associated symptoms	Explore physical signs: • cough, mucus and wheeze • chest pain and palpations • lower leg oedema (or if bed bound, sacral oedema). Explore emotional signs: • anxiety or wairua (spiritual) unrest.
Relieving and aggravating	What makes it better? What makes it worse? • Is it worse when lying flat? • Do you wake at night suddenly short of breath?
Treatment	If chronic, are usual treatments working? • Do you need or are you using more pillows to prop you up at night? • Have you started sleeping in a La-Z-Boy armchair to catch your breath?
Severity	How bad is it? *(Use a scale – see the Medical Research Council dyspnoea scale below.)*
Impact	Have you stopped or started doing something due to SOB?
Coping	Fear and anxiety are common with SOB.
Expectation	Think about goals of care and what treatments are possible in your facility. *(Health professionals, patient and whānau/family differ in their expectations and priorities.)*

COPD = chronic obstructive pulmonary disease SOB = shortness of breath.

Assessment tool for chronic breathlessness specifically

The Medical Research Council dyspnoea scale is a widely used rating scale with five levels (van Mourik et al 2014):

1. Breathless with strenuous exercise
2. Short of breath when hurrying on the level or up a slight hill
3. Walking slower than people of the same age because of breathlessness
4. Stopping for breath after walking 100 metres or after a few minutes on the level
5. Too breathless to leave the house.

Treatment

Minimise risk of developing breathlessness

- Offer immunisations (influenza, COVID-19, pneumococcal).
- Use infection prevention and control measures (minimise exposure to others with respiratory illness).
- Support safe swallow techniques and positioning (refer for swallow deficits).
- Manage frailty.
- Support correct use of prescribed medications and inhaler technique.

Manage respiratory medication

- For inhaled medication, regularly review patient's technique and equipment.
- For anti-anxiety medication, support its use along with non-pharmacological interventions.
- Discuss with prescriber and patient the use of opioids for managing respiratory drive.
- For diuretic therapy, closely monitor body weight.

Care planning

A patient-centred approach to chronic breathlessness is recommended. Prioritise daily activity. Use the multidisciplinary team and **whānau**/family to address impacts of and impact on breathlessness, including physiological, psychological, whānau/family and spiritual aspects.

Non-pharmacological approaches include:

- listening to the person's concerns
- engaging whānau/family and spiritual support
- encouraging distraction and relaxation through music, reading and diversional therapy
- keeping the person moving at a level appropriate to them (from walking to repositioning in bed)
- supporting them to eat well, as maintaining strength and eating favourite foods improves mood
- supporting sleep
- providing person-specific complementary therapies such as massage, aromatherapy and/or pet therapy
- providing culturally informed complementary therapies such as **te ao Māori**
- breathing exercises (**Hikitia te Hā**: **www.allright.org.nz/tools/hikitia-te-ha**) and/or **waiata** (singing) to promote breath control
- whānau/family or a cultural advisor may recommend other therapies.

Decision support

Use a structured approach to assess breathlessness
Assess symptoms

- ☐ Onset: when did it start?
- ☐ Duration: how long does it last?
- ☐ Character: what does it feel like?
  '**Tight**' tends to refer to airway constriction (often asthma)
  '**Unable to catch my breath**' is more common in COPD
  '**Hard work to breathe**' is reported in cardiac and respiratory conditions
- ☐ Associated symptoms: explore cough, mucus and pain, anxiety and wairua
- ☐ Relieving or aggravating: Worse during night or day? Lying or sitting?
- ☐ Treatments: are usual treatments working (in chronic issues)?
- ☐ Severity: use disease rating tool for chronic issues

If this is a **significant change from baseline**, call GP/NP – **HIGH RISK**

Medical history: consider pre-existing conditions or risk factors for breathlessness

Consider conditions such as:

- ☐ COPD/asthma
- ☐ Heart failure
- ☐ Anaemia
- ☐ Terminal illness

Consider risk such as:

- ☐ Swallow deficits (aspiration)
- ☐ Immobility (thrombosis)
- ☐ Respiratory infection

Has medication changed in the last 2 weeks?

Consider:

- ☐ Change to routine inhalers?
- ☐ Change to cardiac medication, especially ACE inhibitor or diuretic?
- ☐ Change to antithrombotic medication?
- ☐ New medication, or existing medication toxicity?

Complete a physical exam

Inspection

- ☐ Does patient look well/ill?
- ☐ Are they confused?
- ☐ Has consciousness changed?
- ☐ Is skin pale/flushed/cyanotic/mottled?
- ☐ Are they working hard to breathe?
- ☐ Are they tripoding?
- ☐ Are they purse-lipped breathing?
- ☐ Can they speak in full sentences?
- ☐ Are neck veins congested/swollen?

Palpation

- ☐ Pitting oedema lower legs/sacrum?

Percussion

- ☐ Chest dull or resonant?

Auscultation lungs

- ☐ Air moving in and out of all lobes?
- ☐ Wheeze present? Where? Loud? During inspiration or expiration?
- ☐ Crackles? Where? Coarse or fine? During inspiration or expiration?

Measure vital signs

ALERT SIGNS

- ☐ Respiratory rate >25 breaths/minute
- ☐ Oxygen saturation ≤93%
- ☐ Pulse ≥100 bpm
- ☐ Temperature <35.5°C or >37.2°C
- ☐ Systolic blood pressure ≤100 mmHg

Review assessment data and structure for handover to GP or NP

- ☐ **New-onset SOB needs review by GP/NP**
  Your assessment information is critical for the GP/NP to determine urgency and potential treatment options. **DO NOT DELAY referral to GP/NP**

Nurse-initiated therapies for comfort

- ☐ PRN respiratory and/or anxiety medication
- ☐ Prescribed oxygen to keep saturation at or above 93%
- ☐ Guided purse-lipped breathing
- ☐ Fresh air/fan
- ☐ Prop patient up to open lungs
- ☐ Reduce exertion
- ☐ Provide reassurance, call whānau/family in to support

Initiate prescribed therapies or if end of life diagnosed, refer to end-of-life pathway

ACE = angiotensin-converting enzyme bpm = beats per minute COPD = chronic obstructive pulmonary disease
GP = general practitioner NP = nurse practitioner PRN = as needed (pro re nata) SOB = shortness of breath

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Delirium | Mate kuawa

The information in this guide is accurate to the best of our knowledge as of June 2023.

Definition

Delirium (also known as acute confusion) is a psychiatric syndrome characterised by a change in the person's ability to pay attention, level of consciousness and cognitive function. It has a sudden onset (over 1–2 days) and fluctuating course, with the person experiencing periods of hyperactivity, hypoactivity and normal function over a 24-hour period (Jeong et al 2020; Ramírez Echeverría et al 2022; Wilson et al 2020).

Key points

- Delirium is not always easy to recognise, and so the experience can be distressing for older people, their **whānau**/family and those caring for them.
- It may not be possible to identify the underlying cause of delirium.
- Hyperactive delirium can be confused with behaviours that challenge in people living with dementia.
- **Hypoactive delirium results in quiet people and so may go unnoticed.**
- In any behaviour change (hypoactivity or hyperactivity), the safest approach is to assume delirium first and follow up other issues after that (Nitchingham and Caplan 2021).
- Minimising the risk of delirium can have a significant impact on quality of life (Aung Thein et al 2020).

Why this is important

Delirium in older people is **a medical emergency that needs immediate referral and treatment**. People with delirium have a higher mortality rate than those without delirium (Jeong et al 2020).

Traditionally, delirium was considered reversible. However, recent evidence suggests that delirium may become chronic and can cause irreversible decline in cognitive and physical function (Whitby et al 2022). Chronic delirium occurs most commonly in people who have their diagnosis and treatment of delirium delayed, have moderate to severe frailty and have multiple chronic conditions, and in people with cognitive impairment.

Implications for kaumātua*

Kaumātua and/or their whānau/family may have a different interpretation of delirium and consider that it may not have a physical cause. This is closely related to the holistic view of

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health from a Māori perspective (Ministry of Health 2017). A disruption or disturbance in one dimension of a person's health affects the other dimensions.

From a Māori perspective, the behaviours observed in both hyperactive and hypoactive delirium may be due to a disturbance in the person's **wairua** (spirituality) or a breach of their personal **tapu** (see the *Guide for health professionals caring for kaumātua | Kupu arataki mō te manaaki kaumātua* for more information). It is important to acknowledge this cultural perspective and include holistic interventions when considering treatment of delirium.

Kaumātua and whānau/family may place equal importance on addressing wairua disturbance as treating physiological causes of delirium. For accuracy, wairua disturbances should only be interpreted from a Māori world view. In this situation, listening to kaumātua, whānau/family and other sources of cultural knowledge will be vital.

Complementary, culturally informed interventions to address wairua disturbance may include **karakia** (prayer), **pure** (cleansing rituals) and/or **whakanoa** (ritual that lifts or removes tapu).

Assessment

Everyone living in aged residential care should be considered at risk of developing delirium if they become acutely ill. A sudden change in mental status should always initiate an assessment for delirium. Worsening motor function is an important diagnostic clue for delirium, especially in people living with dementia. Using a tool to support delirium diagnosis is recommended (Morandi et al 2019).

Note: If some health providers, whānau/family or friends report witnessing confusion while others do not, the safest approach is to assume this is fluctuating delirium until proven otherwise.

Delirium assessment tools

RADAR: Recognising delirium as part of your routine

Authors suggest routine use of the RADAR tool (Morandi et al 2019; Voyer et al 2015).

When you gave the patient their medication:

1. was the patient drowsy?
2. did the patient have trouble following your instructions?
3. were the patient's movements slowed down?

The patient is considered positive for delirium when the assessor answers 'Yes' to at least one question.

Confusion assessment method (Inouye et al 1990)

Confusion assessment method	**Y**	**N**
1. Acute onset in change of mental state and/or fluctuating course • Acute change in mental status? • Abnormal fluctuating behaviour (ie, comes and goes or gets worse/better) during the day		
2. Inattention • Difficulty focusing, eg, being easily distracted or having difficulty keeping track of what was being said		
3. Disorganised thinking • Thinking disorganised or incoherent, eg, rambling or irrelevant conversation, unclear or illogical ideas or unpredictable switching from subject to subject		
4. Altered level of consciousness • Any of the following: hyperalert (vigilant), drowsy, largely asleep or difficult to rouse or unarousable		
Delirium is detected when the answer is **yes** to both questions 1 and 2 PLUS either 3 or 4		

The 4AT

This is a quick (≤ 2 minutes) validated screening tool. It measures: **A**lertness, **A**bbreviated Mental Test, **A**ttention and **A**cute change or fluctuating course (**www.the4at.com**).

4AT: Rapid clinical test for delirium and cognitive impairment	
1. Alertness	**Score**
This includes patients who may be markedly drowsy (eg, difficult to rouse and/or obviously sleepy during assessment) or agitated/hyperactive. Observe the patient. If asleep, attempt to wake with speech or gentle touch on shoulder. Ask the patient to state their name and address to assist rating.	
Normal (fully alert, but not agitated, throughout assessment)	0
Mild sleepiness for < 10 seconds after waking, then normal	0
Clearly abnormal	4
2. AMT4	
Age, date of birth, place (name of the hospital or building), current year.	
No mistakes	0
1 mistake	0
2 or more mistakes/untestable	4
3. Attention	
Ask the patient: 'Please tell me the months of the year in backwards order, starting at December.' To assist initial understanding, one prompt of 'What is the month before December?' is permitted.	
Achieves 7 months or more correctly	0
Starts but scores < 7 months/refuses to start	0
Untestable (cannot start because unwell, drowsy, inattentive)	4
4. Acute change or fluctuating course	
Evidence of significant change or fluctuation in alertness, cognition, other mental function (eg, paranoia, hallucinations) arising over the last 2 weeks and still evident in last 24 hours.	
No	0
Yes	4
Total	

4 or above: suggests possible delirium +/- cognitive impairment
1–3: possible cognitive impairment
0: delirium or severe cognitive impairment unlikely (but delirium still possible if '**4. Acute change or fluctuating course**' information incomplete)

Treatment

Prevention

The best 'treatment' for delirium is prevention – that is, implementing strategies that reduce the likelihood that the person will experience delirium. While this is ongoing best practice, it is particularly important to do when someone becomes acutely ill.

A tool called 'PINCHES ME kindly' sets out the nine aspects to address to prevent delirium in older people (Gee et al 2016). The acronym stands for: Pain, Infection, Nutrition, Constipation, Hydration, Exercise, Sleep, Medication and Environment (see the next page).

Treatment

In all cases, diagnosing and treating the underlying cause of delirium (eg, infection, dehydration, adverse effect of medication) is fundamental to potentially reversing symptoms of delirium.

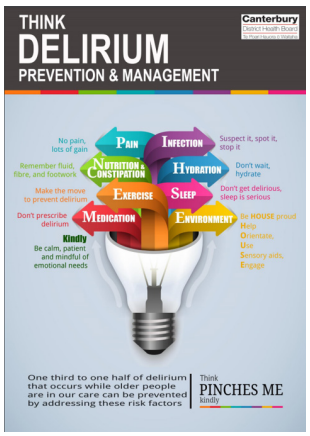
In addition, the delirium syndrome itself needs care and treatment.

- Non-pharmacological approaches are considered best practice. You should try them first and continue to use them even if medication for delirium symptoms is prescribed.
- Pharmacological treatment of delirium includes the use of antipsychotics and benzodiazepines. Medication is reserved for psychiatric symptoms that cause the person distress (eg, hallucination and delusions), and it is used for the shortest possible time (Morandi et al 2019).

Care planning

Because individuals differ in their experiences of delirium, care planning needs to be individualised and responsive to the older person's needs. The decision-support flowchart on the following page provides a generic approach that can be adapted to an individual's requirements.

Delirium prevention resource



Think Delirium prevention project – PINCHES ME kindly Canterbury District Health Board (Gee et al 2016)

www.researchgate.net/publication/303876489_THINK_delirium_Preventing_delirium_among_older_people_in_our_care_Tips_and_strategies_from_the_Older_Persons'_Mental_Health_Think_Delirium_Prevention_project

Decision support

Delirium suspected and positive screening tool

Acute delirium is life threatening. DO NOT ignore your clinical suspicion even if screening test is negative

↓

Initial check for life-threatening causes

Airway, Breathing, Circulation, Disability (stroke, hypo/hyperglycaemia), Exposure (hypothermia: ≤35°C = sepsis) or injury (unreported falls and fracture), infection (wounds), new medication

↓

Complete nursing assessment to identify, report to NP/GP and begin treatments of underlying causes: often more than one cause in the frail

- ☐ Presenting complaint: what has changed in last few days?
- ☐ Medical history: what conditions does patient have?
- ☐ Examination: do they look ill? Can you find pain?
- ☐ What are the vital signs?
- ☐ Is there a change in wairua? (Are they different to usual?)
- ☐ How much food and fluid consumed in last 3 days?
- ☐ Are bladder and bowels functioning as per usual routine?
- ☐ Reduction in ADLs or usual routines?
- ☐ Mobility reduced or fall occurred?
- ☐ Increase in PRN use or recent medication change?
- ☐ Environmental/situational change?

↓

Optimise conditions for brain recovery

- ☐ Glasses, hearing aids, dentures in situ
- ☐ Maintain routines (activities, whānau/family visits, music, TV shows)
- ☐ Hydration: 2-hourly drinks aim 1.5 L/24 hrs (or to fluid restriction)
- ☐ Offer regular appetising food and record
- ☐ Pain control
- ☐ Avoid constipation
- ☐ Sleep hygiene
- ☐ Daily mobility as able
- ☐ Avoid antipsychotics and benzodiazepines

↓

Detect and treat distress
Do they look frightened, anxious, restless?
Ask about distress

- ☐ Hallucination, delusion, fear
- ☐ Loss of control, loneliness, feeling trapped
- ☐ Urinary retention, pain, constipation, thirst, hunger
- ☐ Unmet care needs
- ☐ Culturally informed treatment of wairua disturbance

Refer NP/GP to follow up if you suspect psychosis – medication may be required

↓

Prevent complications

Monitor and manage chronic conditions – refer for decompensation
Nursing prevention of pressure injuries, falls, aspiration pneumonia, dehydration, deconditioning, mouth ulceration

↓

Communicate with resident, whānau/family and team

Explain delirium (it is distressing for all involved)
Review treatment options and goals of care (as appropriate)

↓

Monitor for recovery

Should resolve in 3–5 days. Screening tool to evaluate presence. Lasting longer than 5 days is associated with poor outcomes

↓

Rehabilitation during delirium

Engage in conversation, encourage whānau/family visits, minimise bed rest, maintain routines

↓

Follow-up assessment for changes to cognitive, social and physical function

Some hallucinations/delusions are so severe that people develop post-traumatic stress symptoms

↓

Update care plan, whānau/family and GP/NP

ADL = activities of daily living GP = general practitioner NP = nurse practitioner PRN = as needed (pro re nata)

Source: Based on 'Delirium 8' (Wilson et al 2020)

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Syncope and collapse
Tīrehe

The information in this guide is accurate to the best of our knowledge as of June 2023.

Definition

Syncope is a sudden transient loss of consciousness due to cerebral hypoperfusion, followed by spontaneous complete recovery, in a short period of time. There are three types: cardiac; orthostatic (postural) hypotension; and neurally mediated, also known as reflex syncope (Runser et al 2017; Thiruganasambandamoorthy et al 2020).

Collapse (also known as 'pseudo-syncope') is a sudden loss of consciousness due to causes that do not create cerebral hypoperfusion. In these cases, recovery time may be slower. Examples of causes of collapse include epileptic seizure, hypoglycaemia, hypoxia and poisoning.

Key points

- Clinically, syncope and collapse present in the same way and require the same initial response. It is the assessment of likely causes that separates the conditions.
- Frail older people are more susceptible to syncope, are less likely to have syncopal warning signs (prodrome) and often do not recall the event (Pirozzi et al 2013).
- Syncope causes falls. However, not all falls are due to syncope (Wong 2018).

Why this is important

Recurrent syncope has a negative effect on reported quality of life (McCarthy et al 2020). While syncope may have a simple reversible cause, it can also be a sign of a serious underlying condition (Runser et al 2017).

Implications for kaumātua*

Because a loss of consciousness can be frightening, it is important to take a holistic approach to assessing the impact of the syncopal episode on kaumātua. This may include finding out how they are feeling **ā wairua** (spiritually), **ā tinana** (physically) and **ā hinengaro** (mentally and emotionally). Kaumātua may experience **whakamā** (shame, embarrassment) related to syncope and may not report syncopal episodes to avoid burdening anyone else (see the *Guide for health professionals caring for kaumātua | Kupu arataki mō te manaaki kaumātua* for more information).

* Kaumātua are individuals, and their connection with culture varies. This guide provides a starting point for a conversation about some key cultural concepts with kaumātua and their whānau/family . It is not an exhaustive list; nor does it apply to every person who identifies as Māori. It remains important to avoid assuming all concepts apply to everyone and to allow care to be person and whānau/family led.

It is essential to provide kaumātua and **whānau**/family with all the information they need to understand the approach to assessing and treating syncope. You can support them by:

- including whānau/family in conversations
- providing whānau/family with opportunities to share their observations and insights and valuing their input
- setting aside enough time to discuss matters with all parties involved
- thoroughly discussing and explaining decision-making about any changes in the plan of care (eg, medication changes, investigations).

Assessment

A recommendation is to take a standardised approach to syncope, including in responding to the situation and taking a thorough history and physical exam (Runser et al 2017).

Among the three general syncope classifications (Pirozzi et al 2013), research suggests that cardiac and orthostatic syncope are the most frequent types in older people (de Ruiter et al 2018; Wong 2018). However, many factors can contribute to syncope and/or collapse (Wong 2018).

Type of syncope	Mechanism	Associated conditions and events
Cardiac* (impaired output)	Arrhythmias	Bradycardia, tachycardia, drug-induced rhythm
	Structural	Valvular disease
	Chronic disease	Heart failure
	Acute illness	Myocardial infarction
Orthostatic (postural) hypotension**	Autonomic system failure	Age-related changes in blood pressure regulation Parkinson's disease, Lewy body dementia, multiple system atrophy, diabetes, chronic renal failure, vitamin B12 deficiency
	Postprandial***	After eating meals
	Volume depletion	Bleeding, diarrhoea, dehydration (reduced thirst), pro-longed sitting (volume pooling in peripheries)
	Drug induced	Vasodilators, diuretics, anticholinergics, antihypertensive
	Acute illness	Sepsis, infection, electrolyte imbalance
Neurally mediated (reflex)	Vasovagal	Emotional stress
	Situation	Coughing, sneezing, after exercise, associated with defecation or urination

Note:

* Cardiac syncope is the classification most associated with mortality.

** Orthostatic (postural) hypotension is defined as a reduction of ≥ 20 mmHg systolic or ≥ 10 mmHg diastolic within 3 minutes of standing. In older people, this is often complicated by the presence of hypertension in the supine (lying) position (Wong 2018).

*** Postprandial hypotension is defined as a reduction of ≥20 mmHg systolic or systolic blood pressure of < 90 mmHg within 2 hours of starting a meal. It is associated with meals that are large or have a high carbohydrate content. It occurs more often in people with diabetes, hypertension or Parkinson's disease and those with polypharmacy and/or diuretics (Wong 2018).

Treatment

Treatment focuses on the initial response and on finding a reason for the loss of consciousness (see the '**Decision support**' section). It is important to be aware of the person's advance care planning preferences when responding to syncope or collapse.

Orthostatic hypotension treatments (Palma and Kauffman 2020)

Non-pharmacological treatments

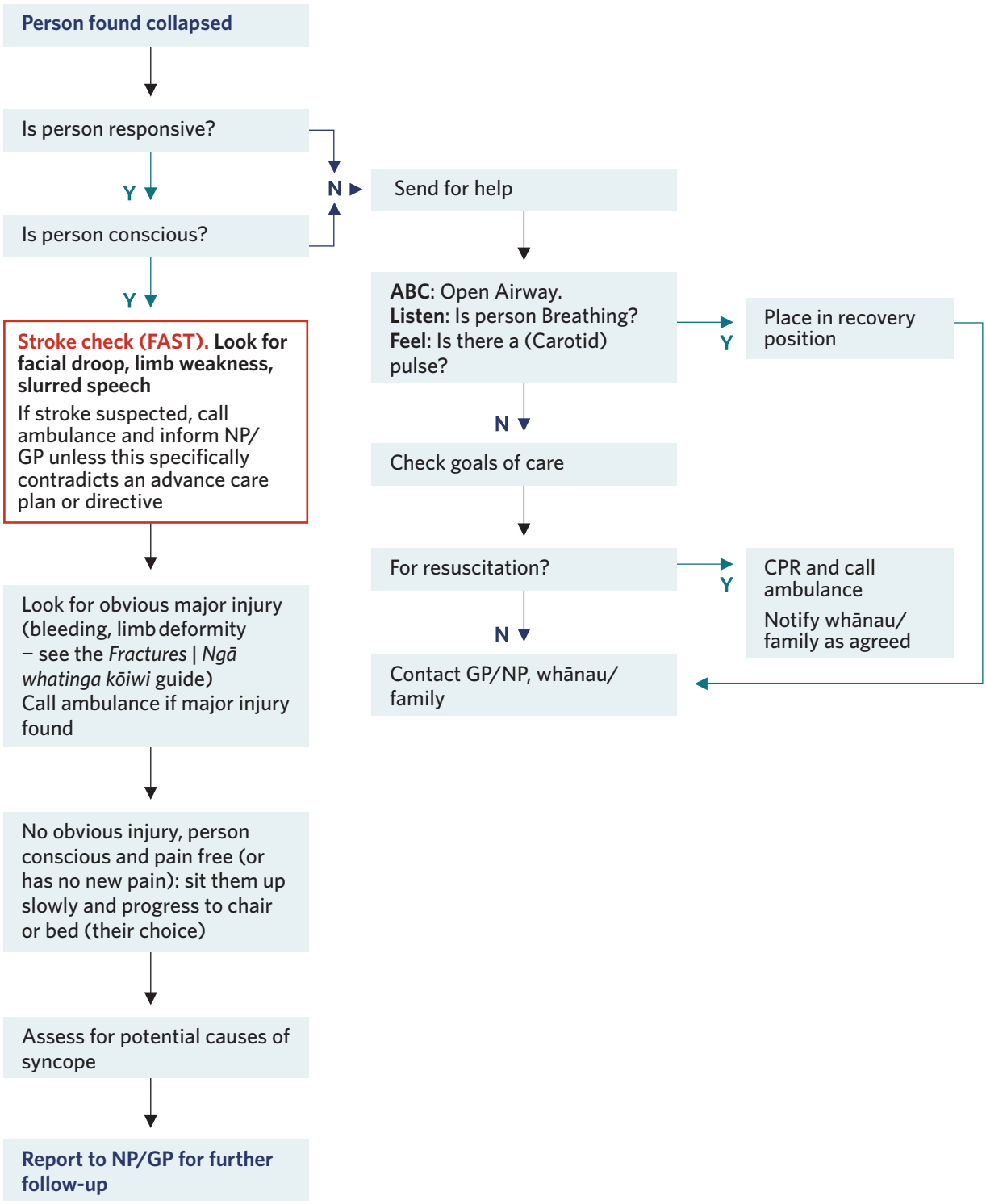
- Maintain activity as much as possible.
- Avoid simple sugars, alcohol and coffee.
- Bolus 500 ml water can raise blood pressure (lasts less than 1 hour).
- Change position slowly.
- Reduce blood pooling by elevating legs, leg exercises (toe raises, thigh contraction), physical activity (avoid prolonged sitting) and compression garments such as abdominal binders.
- Sleep with head of bed elevated 30 to 45 degrees.
- Possibly increase salt in diet – but **only** in discussion with general practitioner or nurse practitioner.

Pharmacological

- Access medication review for drugs that worsen hypotension (diuretic, antihypertensive, alpha-blockers) and potential treatments.
- Provide anaemia treatment.

Decision support

Responding to syncope or collapse



CPR = cardiopulmonary resuscitation

FAST = face, arm, speech, take action

GP = general practitioner

NP = nurse practitioner

Assessing for potential causes of syncope or collapse

Review history for potential causes of syncope

Collect eye witness accounts of syncope

Signs or symptoms before syncope
- ☐ Abdominal pain or nausea (vasovagal)
- ☐ Aura or clonic tonic movement (seizure)
- ☐ Palpitations or slow pulse (cardiac cause)
- ☐ Facial droop, arm weakness, slurred speech (TIA)
- ☐ Headache (subarachnoid haemorrhage)
- ☐ None (cardiac or vasovagal)

Precipitating factors
- ☐ Defecating, eating, coughing (situational)
- ☐ Emotional distress, fear, pain (vasovagal)
- ☐ Exertion (cardiac cause)
- ☐ Standing (hypotension)
- ☐ Unexplained fall (cardiac)
- ☐ Environmental (heat exhaustion, dehydration)
- ☐ Whānau/family (reported concerns and events, eg, panic attack)
- ☐ Behavioural (not eating or drinking)

Symptoms after syncope
- ☐ Amnesia (seizure or vasovagal)
- ☐ Incontinence, fatigue, tongue biting, confusion (seizure)
- ☐ Slow pulse (cardiac cause)
- ☐ Prolonged syncope (seizure, stroke, metabolic, sepsis)

Medical history
- ☐ Diabetes, Parkinson's disease (postural hypotension)
- ☐ Diabetes (hypoglycaemia)
- ☐ Heart disease (cardiac cause)
- ☐ Epilepsy (seizure management issue)
- ☐ Previous stroke (stroke, haemorrhage)
- ☐ Previous syncope with acute illness
- ☐ Anaemia, B12 deficiency

Medication
- ☐ Anti-arrhythmic or antihypertensive (cardiac syncope)
- ☐ Anticoagulants (brain bleed)
- ☐ Antipsychotic or antidepressant (cardiac syncope)
- ☐ Anticholinergic (stroke, haemorrhage)
- ☐ Diuretic (dehydration hypotension, electrolyte imbalance)
- ☐ Adverse effect of medication change

Physical exam
- ☐ Lying and standing blood pressure
- ☐ Pulse (rate and rhythm)
- ☐ Respiratory rate and oxygen saturation
- ☐ Temperature, sweating, respiratory
- ☐ Mental status (increased confusion, distraction, irritability)
- ☐ Respiratory wheeze, crackles or congestion (infection/CHF)
- ☐ Peripheral oedema (CHF)
- ☐ Central neurological signs or limb weakness
- ☐ Abdominal pain or swelling (constipation or mass)

Review available laboratory tests
- ☐ Any abnormalities or test overdue?

Prepare information for reporting to NP/GP

CHF = congestive heart failure
GP = general practitioner
NP = nurse practitioner
TIA = transient ischaemic attack

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Falls
Ngā hinga

The information in this guide is accurate to the best of our knowledge as of June 2023.

Definition

A fall is any unintentional change in position where the person ends up on the floor or at another level lower than their previous position. It includes slips, trips and falls that occur while others are helping (World Health Organization 2021).

Key points

- Falls can indicate an underlying acute event, exacerbation of a chronic condition or frailty progress. Unwitnessed falls may be a syncopal event.
- Fall prevention programmes that address a range of different risk factors (multifactorial) can reduce the risk of falling and prevent many falls (Gulka et al 2020).
- Preventing and reducing the risk of falls is everyone's business. It includes individual and population approaches (Cameron et al 2018; Health Quality & Safety Commission 2022f).
- Post-fall assessment is an important part of reducing future falls for the individual (Health Quality & Safety Commission 2022e).

Why this is important

Falls are the leading cause of unintentional injury in older people and are often a consequence of frailty (Health Quality & Safety Commission 2022a, 2022b). They can result in significant injury, functional decline (often related to a loss of confidence) and death (Health Quality & Safety Commission 2022e).

Key point

- In aged residential care (ARC), residents most at risk of falling are those needing help to transfer, those with impulsivity and people new to the facility.

Implications for kaumātua*

A Māori world view of ageing is based on a strength rather than a deficit model. Traditionally, kaumātua have a lot of **mana** (are held in high esteem).

Kaumātua may experience a sense of **whakamā** (shame, embarrassment) about their changing mobility and loss of independence. To avoid burdening others, they may not disclose falls, deny mobility challenges or be reluctant to use mobility aids or accept help.

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If you encounter these kinds of responses, try reframing the situation to reflect a strength-based perspective (focusing on abilities, not deficits). An approach such as the following may be helpful.

> We know how important your independence is to you, and we would like to support you to be independent for as long as possible. We also want you to have everything you need to keep yourself safe. Would you like to try this (mobility aid) to see if it helps you feel more comfortable/steady?

Whānau/family can be a useful source of valuable, culturally informed (mana-enhancing) interventions as they are invested in keeping their loved one safe. Involve them in care planning wherever possible.

See the *Guide for health professionals caring for kaumātua | Kupu arataki mō te manaaki kaumātua* for more information.

Assessment

Standard falls risk assessment tools are available (see your facility's policy or procedure). However, almost all people living in ARC are at risk of falling (Health Quality & Safety Commission 2022c).

Treatment

At the individual level

- Focus on identifying and managing the individual's risk of falling (physical environment and holistic).
- Provide strength, balance and gait training. Research shows it reduces the overall number of falls and fall events in people who have repeated falls in ARC (Gulka et al 2020).
- For kaumātua, consider culturally relevant and appealing activities that improve strength, balance and gait. These may include **kapa haka** (Māori performing arts), **tītī tōrea** (Māori stick game) and activities that contribute to the community they live in.

At the population level

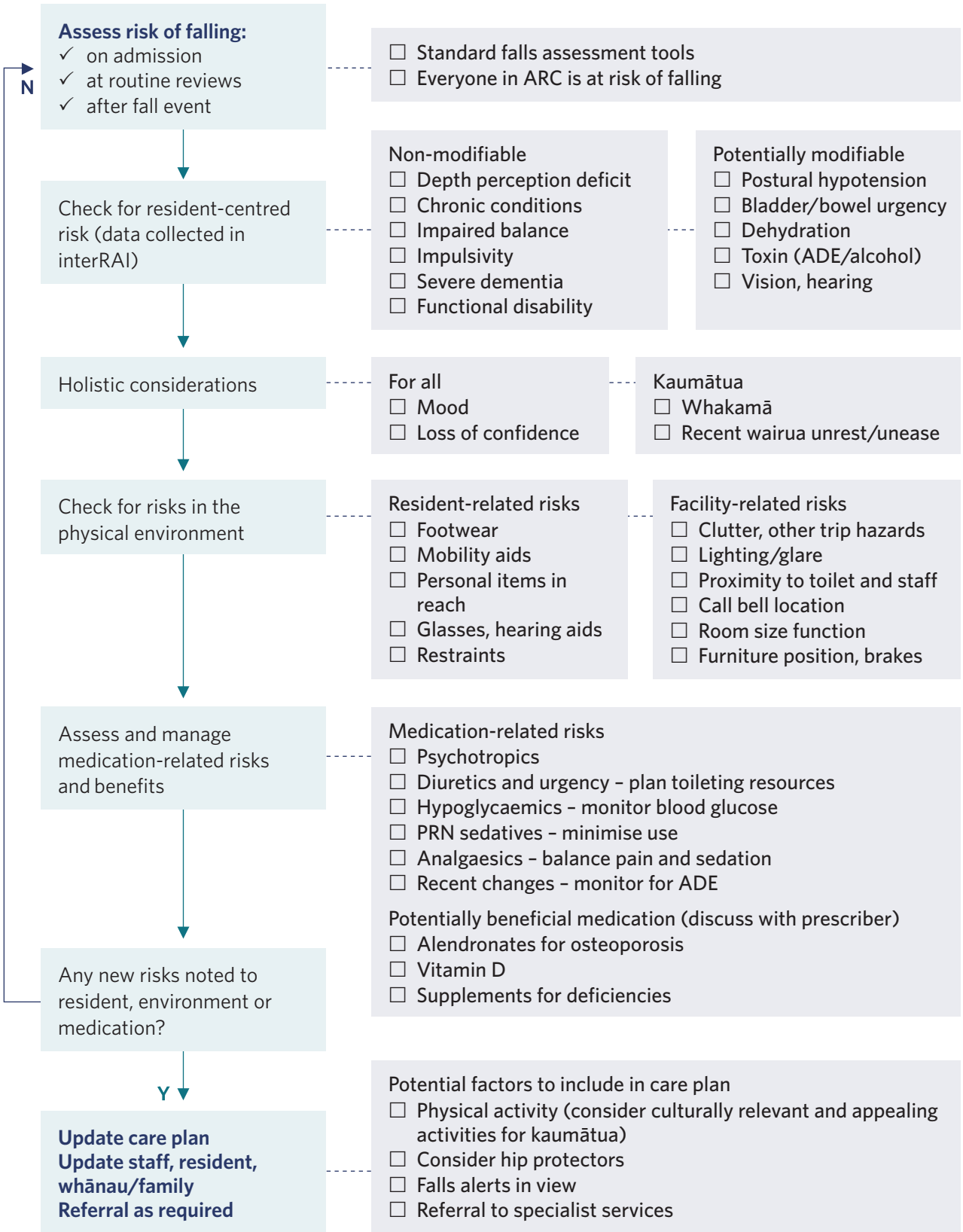
Implement a facility-wide falls prevention programme. As part of the programme, consider the built environment, equipment, staff education, exercise programmes and access to allied health professionals (Health Quality & Safety Commission 2022d).

Care planning

1. Plan individual care based on risks identified in falls risk assessment (see decision-support flowchart on the next page).
2. Optimise management of chronic conditions.
3. Remain alert for acute deterioration. (Falls can be a sign of acute deterioration.)

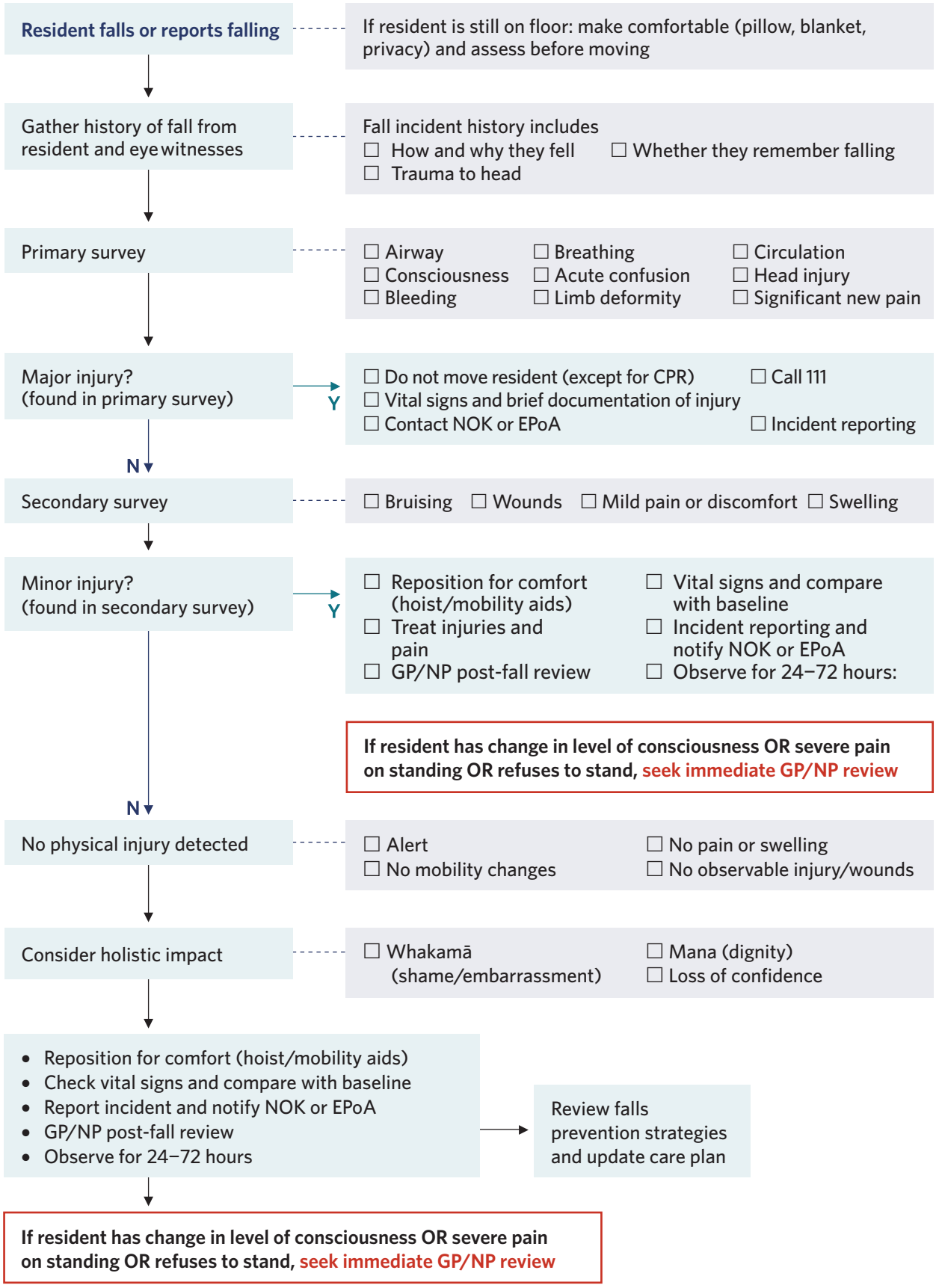
Decision support

Falls risk assessment (Cameron et al 2018; Health Quality & Safety Commission 2022c)



ADE = alcohol deprivation effect ARC = aged residential care PRN = as needed ('pro re nata')

Post-fall assessment (Hampshire County Council 2015; Health Quality & Safety Commission 2022e)



CPR = cardiopulmonary resuscitation
EPoA = enduring power of attorney
GP = general practitioner
NOK = next of kin
NP = nurse practitioner

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Fractures
Ngā whatinga kōiwi

The information in this guide is accurate to the best of our knowledge as of June 2023.

Definition

A fracture is a complete or incomplete disruption in the continuity of the bone structure. When the bone is broken, there is also damage to surrounding soft tissue, muscles, joints, tendons, nerves and blood vessels (Bezella 2021).

Most fractures that occur in residential aged care are 'fragility fractures' – that is, a fracture that occurs following low-energy trauma (hip fracture when falling from standing height and vertebral fractures from mild, often unnoticed trauma). The hip, spine and forearm are the most common locations of fragility fractures; however, they also occur in humerus, ribs, tibia (not ankle), pelvis and other femoral locations (International Osteoporosis Foundation 2022).

Key points

- Osteoporosis is the main underlying cause of fragility fractures.
- Those with a cancer history (breast, prostate, lung, melanoma) may experience low-force fracture due to previously undiagnosed metastatic disease.

Why this is important

Hip fractures are the most common osteoporotic fractures in men and women aged 85 years or older (International Osteoporosis Foundation 2022). An estimated 14 to 58 percent of older people die within 1 year of a hip fracture (Schnell et al 2010) and less than half get back to baseline function (Melton 2003).

Implications for kaumātua*

Studies show higher bone density and lower incidence of fractures in those of Polynesian descent, including Māori. Despite this, fractures may still occur in the kaumātua population (Brown et al 2020; Naot et al 2021; Reid et al 1986).

The assessment, treatment and care planning for fractures are the same for kaumātua as for other population groups. However, it may be beneficial to include culturally informed and appealing activities in the exercise regimen. By exploring these options in discussion with the kaumātua and their **whānau**/family, you can provide holistic, whānau/family-centred care.

* Kaumātua are individuals, and their connection with culture varies. This guide provides a starting point for a conversation about some key cultural concepts with kaumātua and their whānau/family. It is not an exhaustive list; nor does it apply to every person who identifies as Māori. It remains important to avoid assuming all concepts apply to everyone and to allow care to be person and whānau/family led.

Assessment

- For information on identifying acute fractures, see the decision-support flowchart '**Acute fracture management**'.
- Bone health: maintaining bone health is the best way to prevent fragility fractures. Osteoporosis New Zealand recommends using the FRAX (Fracture Risk Assessment Tool) or the Garvan 'Know your bones' tool to assess a person's risk of osteoporosis (and risk of osteoporotic fracture).
  - **FRAX** requires a bone mineral density (DEXA) scan for an accurate result. However, anyone who has a fractured bone with minimal trauma is considered to have osteoporosis. The tool is available from the Centre for Metabolic Bone Diseases at **www.sheffield.ac.uk/FRAX/tool.aspx?country=23**.
  - '**Know Your Bones**' is a web-based (**www.knowyourbones.org.au**) tool from the Garvan Institute of Medical Research and Healthy Bones Australia. It uses personal details, including risk factors related to health and lifestyle, to estimate fracture risk in the next 5 years. You can download an individual's report for future reference.

Treatment

Bone health: pharmacological (Best Practice Advocacy Centre New Zealand 2019)

- Bisphosphonates are first-line treatment.
  a. Oral bisphosphonates must be given on an empty stomach with a large glass of water, and the person must be able to sit or stand upright for 30 minutes after administration to avoid gastric ulceration.
  b. Intravenous bisphosphonates are offered in primary care. They may cause flu-like symptoms.
  c. As a group, bisphosphonates must be used with caution in people with renal impairment. (Registered nurses should review renal function with a general practitioner or nurse practitioner in people taking this medication.)
  d. Treatment duration: Review of treatment is recommended at 4–5 years, as most evidence comes from studies conducted over 3–5 years.
  e. Rare adverse effects include atypical femoral fracture and osteonecrosis of the jaw. **Immediately report jaw pain, swelling, lesions, loose teeth or mouth ulceration in people taking bisphosphonates**.
- Vitamin D supplementation is recommended for people at risk of vitamin D deficiency. It can be used alone or in combination with bisphosphonates (some bisphosphonate brands already contain vitamin D) (Osteoporosis New Zealand nd).
- Consider deprescribing for all medications that increase the risk of falling and for calcium supplements that are no longer recommended for bone health (New Zealand Formulary 2022).

Bone health: non-pharmacological

- Dietary support may include:
  a. protein (to maintain muscle mass) – generally 1.2 g per kg of body weight (bw) per day (as much as 1.5 g/kg/bw/day in malnutrition and reduced to 0.8–1 g/kg/bw/day in renal failure) (Deutz et al 2014)
  b. dietary sources of calcium (Osteoporosis New Zealand nd) – 1,300 mg per day for people aged 70 years and older (one standard yoghurt contains 250 mg calcium)
  c. a wide variety of fruit and vegetables.
- Support for exercise (stimulates bone growth and aids muscle strength) may include:
  a. designing regular weight-bearing exercise specifically for the individual
  b. for kaumātua, considering culturally informed and appealing activities that incorporate exercise. Examples are **kapa haka** (Māori performing arts) and **tītī tōrea** (a traditional Māori stick game) and activities that contribute to the community they live in.
- Fracture management: see the decision-support flowchart '**Acute fracture management**'.

Care planning

Fracture care follow-up management

- Hip fractures will often (not always) need surgical repair.
- Limb fractures are generally immobilised using one of a range of plaster or fibre-glass casts or a range of movement braces.
- Rib fractures are generally left to heal without immobilisation or specific treatment. (Pain management is important to encourage full expansion and contraction of the thorax during breathing.)

General care

- Follow instructions from the acute service. It is important to get specific instructions about weight-bearing status. If in doubt, contact the service for exact instructions.

Fracture care emergencies

Observe for and report **emergency** complications, in particular:

- deep vein thrombosis and fat emboli (especially in hip, mid-shaft femur and lower leg fractures), with increasing pain, swelling or change in colour, warmth, movement or sensation or sudden-onset shortness of breath
- acute compartment syndrome (especially in long bone fractures), with increasing pain not relieved by analgesia, sensory changes, pain on passive movement, limb pallor or cyanosis and loss of distal pulse.

Regular limb and cast care (each shift)

- Check limb warmth, colour, movement, sensation, capillary refill time (normal < 2–3 seconds), distal pulses.
- Assess skin integrity at the edges of the cast for signs of friction or rubbing.
- Observe for any of the following: localised burning, itching, swelling, odour or discharge.
- Check for any dents, cracks, soft spots or looseness.
- Consult with medical team before removing back slabs for wound or skin care.
- Always support the casted limb (colour and cuff, sling, pillows).
- Keep cast dry unless waterproof (consider using plastic bag over limb for showering).
- Do not poke things down the cast to relieve an itch.

Range of movement braces

- Follow instructions from the acute service. It is important to get specific instructions about the range of movement allowed and when you can remove the brace. If in doubt, contact the service for exact instructions.

Brace care

- Wash the soft, grey foam with warm soapy water in the washing machine. You can dry the foam in a tumble dryer.
- Keep the brace dry. Cover with a plastic bag in the shower or remove for showering if the provider has given you specific instructions on how to do it.

Rehabilitation

- Immobility associated with a fracture causes significant muscle wastage. The person will need a period of rehabilitation after a fracture. A multidisciplinary rehabilitation plan based on an individual assessment is likely to be needed and to impact all aspects of the comprehensive care plan. A physiotherapist assessment will probably be an important part of the rehabilitation plan.

Decision support

Bone health

Assess bone health at routine reviews and when fragility fracture occurs

↓

Use standard tool or assessment results to estimate risk

Osteoporosis NZ recommends FRAX or Garvan tools

↓

Personal risk factors

- ☐ Advanced age
- ☐ Gender
- ☐ Previous fracture
- ☐ Fracture aged 50+ years
- ☐ Falls
- ☐ Low body weight (BMI <20)

If available:

- ☐ Bone mineral density
- ☐ T-score

↓

Health-related risk factors

- ☐ Long-term steroids
- ☐ Early menopause
- ☐ Height loss >3 cm
- ☐ Malabsorption
- ☐ Rheumatoid arthritis
- ☐ Overactive thyroid
- ☐ Overactive parathyroid
- ☐ Chronic liver disease
- ☐ Chronic renal disease
- ☐ Treatment of breast cancer
- ☐ Limited sunlight exposure

↓

Lifestyle-related risk factors

- ☐ Smoker, smoking history
- ☐ Alcohol intake
- ☐ Low calcium intake
- ☐ Low serum vitamin D
- ☐ Low weight-bearing exercise

↓

Medication assessment

- ☐ Bisphosphonate (oral: alendronic acid, risedronate; intravenous: zoledronic acid)
- ☐ History of bisphosphonate (oral: treat 4–5 years then consider break; intravenous: three doses 18–24 months apart then consider break)

Treatment harm may outweigh benefit
Discuss with or refer to GP/NP

↓

Plan care to address modifiable risk

BMI = body mass index (weight [kg]/height [metres squared])

GP = general practitioner NP = nurse practitioner

Acute fracture management

Fracture suspected

- ☐ Witnessed fall
- ☐ Obvious physical symptoms
- ☐ Report of severe new-onset pain
- ☐ Cognitively impaired person refuses to weight bear or is newly combative/aggressive with personal care

↓

Make resident comfortable (pillow, blanket, privacy, trusted caregiver) and assess

↓

Primary survey

- ☐ **A**irway
- ☐ **B**reathing
- ☐ **C**irculation
- ☐ **C**onsciousness
- ☐ Acute **C**onfusion
- ☐ **H**ead injury
- ☐ Limb deformity
- ☐ Significant new pain

↓

Compromised ABCH → Y

Do not move resident (except for CPR)
Call 111 and next of kin or EPoA
Vital signs and brief documentation of injury

↓ N

Suspect fracture (limb deformity and/or significant new pain)

↓ Y

Delegate getting help and informing whānau/family: **(call 111 – this is an emergency)**

↓

Assess suspected fracture and document findings and follow up ambulance call

Expose skin and look for
- ☐ Deformity, rotation, shortening of limb
- ☐ Swelling, bruising affected area
- ☐ Color (pale limb, loss of circulation – EMERGENCY)

Check for
- ☐ Passive range of movement (can resident move limb)
- ☐ Can resident feel limb (sensation loss – EMERGENCY)
- ☐ Location, radiation and severity of acute pain
- ☐ Cause of pain, eg, pain on movement/weight bearing
- ☐ Broken skin (ie, open fracture – EMERGENCY)

Assess patient stability
- ☐ Vital sign changes ↓ Blood pressure ≤100 mmHg ↑ Respiratory rate ≥20 breaths per minute ↑ Pulse ≥100 bpm indicate an unstable resident – urgent action required

↓

First aid treatment of fracture

- ☐ Immobilise fracture (don't move; support with pillows)
- ☐ Record colour, warmth, movement sensation in limb every 30 minutes
- ☐ Vital sign monitoring (30- to 60-minute intervals)
- ☐ Calm secure environment
- ☐ Provide available pain relief

↓

Prepare for transfer to hospital

- ☐ Transfer documentation (important patient history)
- ☐ Copy acute observations
- ☐ Detail of last food/fluids consumed (may need surgery)

bpm = beats per minute CPR = cardiopulmonary resuscitation EPoA = enduring power of attorney

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Clinical care, conditions and management
Ratonga tauwhiro, ngā āhuatanga me te taha whakahaere

Care during the last days of life | Pairuri (palliative care)

Chronic obstructive pulmonary disease (COPD) | He mate puru ia auraki

Constipation | Kōroke

Dementia overview | Tirohanga whānui o te mate wareware

Depression | Mate pāpōuri

Diabetes | Mate huka

Heart failure | Manawa-hē

Leg ulcer care | Te maimoatanga o te kōmaoa o te waewae

Nutrition and hydration | Te taiora me te mitiwa

Scabies | Mate māngeongeo riha

Sexuality and intimacy | Taeratanga me te pā taupiri

Skin tears | Tīhore o te kiri

Pain | Mamae

Polypharmacy and deprescribing | Ngā rongoā maha me te whakakore tūtohu

Pressure injury | Whara pēhanga

Responsive and reactive behaviour | Ngā momo whanonga kātoitoi, tauhohe hoki

Urinary incontinence | Te turuturu o te mimi

Urinary tract infections | Te pokenga pūaha mimi

Wound assessment | Te aromatawai taotū

Wound care | Te maimoatanga ō ngā taotū

Care during the last days of life
Pairuri (palliative care)

The information in this guide is accurate to the best of our knowledge as of June 2023.

Definition

Last days of life are the hours or days during which death is imminent. *Te Ara Whakapiri: Principles and guidance for the last days of life* and its toolkit offer a guide to care at this time in New Zealand (Ministry of Health 2017).

Why this is important

People require health care from conception to interment (when they reach their final resting place after death). The quality of care during the last hours and days of life directly impacts on the dying person. Just as importantly, the way death and dying is managed impacts the experience of grief for all those left behind (Detering et al 2021).

Implications for kaumātua*

Underpinned by Te Whare Tapa Whā (Durie 1985), *Te Ara Whakapiri* takes a holistic approach to promoting the wellbeing of the person and their **whānau**/family as the end of life nears. From **te ao Māori** (Māori world view) the last days of life is believed to be the time when the person's **wairua** (spirit) moves across the **ārai** (veil) from the physical to the metaphysical realm (Nelson-Becker and Moeke-Maxwell 2020). This is considered a critical aspect of the life phase (Moeke-Maxwell et al 2014).

The individual and cultural preferences for Māori during the last days of life are diverse. It is 'essential that care administered at end of life is inclusive of their whānau/family and is culturally informed, relevant, and well-supported by health professionals' (Moeke-Maxwell et al 2019). For this reason, health professionals must create space for discussion with whānau/family about the last days of life both before the end of life and during the dying process. They should document preferences in the plan of care.

Tikanga

Because the needs of whānau/family will vary, it is best to allow them to lead. The following are some **tikanga** (Māori cultural customs/traditions) that whānau/family may choose to observe (see the *Guide for health professionals caring for kaumātua | Kupu arataki mō te manaaki kaumātua* for more information).

* Kaumātua are individuals, and their connection with culture varies. This guide provides a starting point for a conversation about some key cultural concepts with kaumātua and their whānau/family. It is not an exhaustive list; nor does it apply to every person who identifies as Māori. It remains important to avoid assuming all concepts apply to everyone and to allow care to be person and whānau/family led.

- Gathering together with **waiata** (songs) and **karakia** (prayers/incantations) is a common way in which whānau/family express **aroha** (love, compassion, empathy) at this time.
- Someone stays with the dying person or **tūpāpaku** (deceased) at all times.
- People cannot take food or drink into the room of the dying person or tūpāpaku. Doing so breaches the separation and balance of **tapu** (sacred, restricted, prohibited) and **noa** (ordinary, neutral, unrestricted).
- After the person's death, it is common for mourners to lift the tapu and restore noa by sprinkling themselves with **wai** (water). Have a bowl of water available outside the room containing the tūpāpaku so that **manuhiri** (visitors) can bless themselves after leaving the deceased person's space.
- After the person's death, there will be a time when the wairua must settle. Whānau/family will generally have intuition about when this has happened. After this time, they may wish to wash, prepare and dress their loved one.

After the person's death, the whānau/family may wish to lift the tapu of the room or space where their loved one lived. This process is called a **takahi**. A leader will say karakia while sprinkling the room or area with wai.

Spiritual concerns

Kaumātua may experience spiritual distress in the last days of life. Nelson-Becker and Moeke-Maxwell (2020) provide a helpful table of examples and useful responses (see the **appendix** of this guide).

Assessment

The diagnosis of dying is made only after a clinical assessment confirms that the presenting situation is not reversible. An irreversible situation may be absolute (eg, end-stage disease) or it may occur because the older person is unwilling to consent to treatments (eg, deciding against hospitalisation or invasive treatments). In aged residential care, a registered nurse often completes the first assessment and refers to the primary care provider (general practitioner or nurse practitioner) for support with the diagnosis and management plan.

Care planning

Care focuses on managing the physical and holistic symptoms associated with the dying process, such as the following.

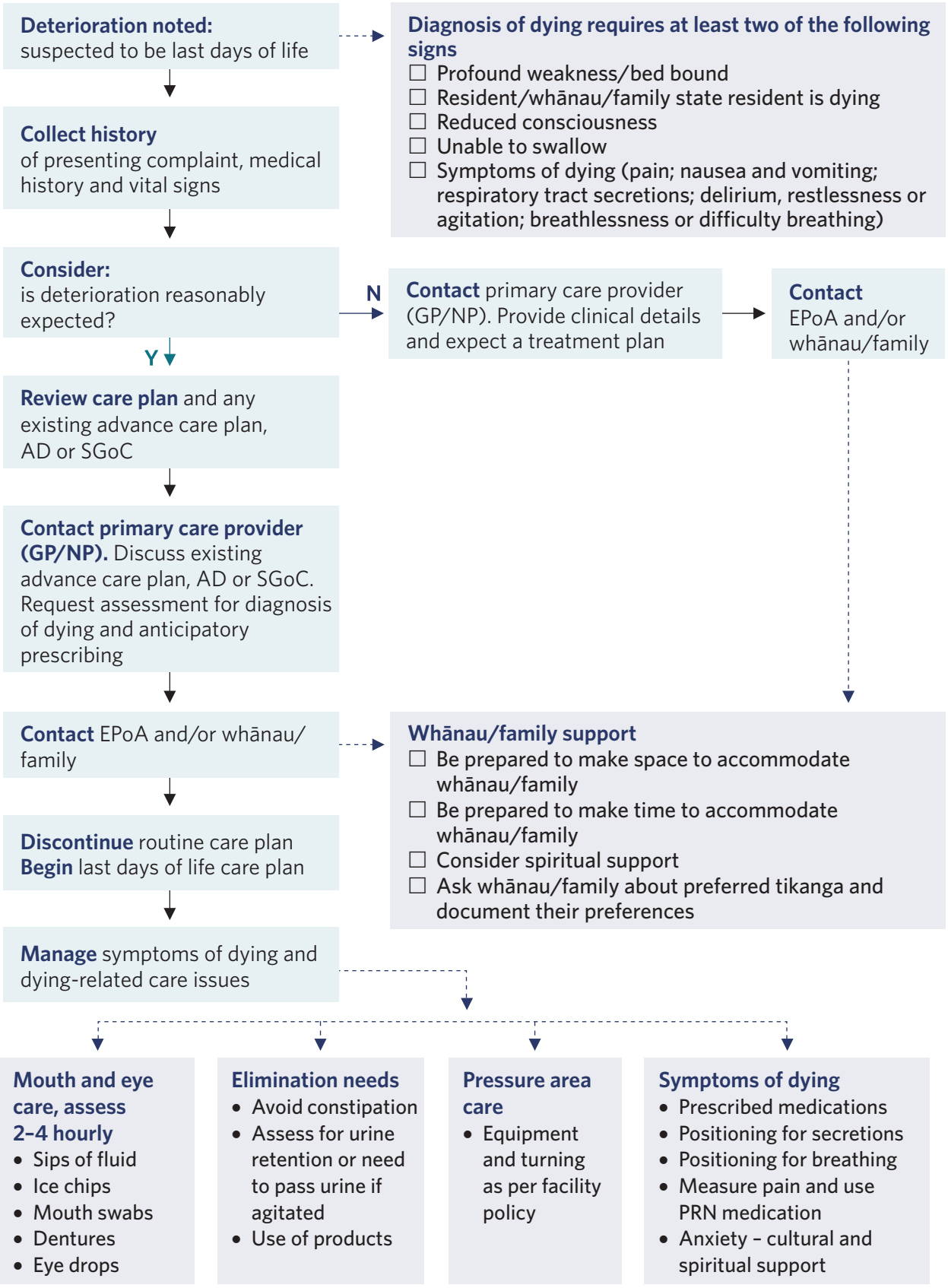
Physical care may involve:

- medication management – making changes to the plan and using anticipatory prescribing
- responding to the common symptoms of dying:
  - pain
  - nausea and vomiting
  - respiratory tract secretions
  - delirium, restlessness or agitation
  - breathlessness or difficulty breathing
- continuing care – responding to mouth care, pressure area care and elimination needs
- environmental management (temperature, noise).

Holistic care may involve:

- guiding loved ones through the dying process
- acknowledging the emotional impact on whānau/family and loved ones
- providing space for gathering
- continuing to provide wairua or spiritual support throughout the process
- accepting the expression of grief in whatever form it takes.

Decision support



AD = advance directive
EPoA = enduring power of attorney
GP = general practitioner
NP = nurse practitioner
PRN = as needed (pro re nata)
SGoC = shared goals of care

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Appendix: Examples of spiritual distress and possible responses

Spiritual concern	Primary condition	Illustration	Response examples
1. Anger toward God or others	Projects anger toward religious figures or clergy, inability to forgive	*Why would God allow this cancer? I've been good*	Listen, encourage sharing of feelings to process them, begin to transform suffering through touching it and dialogue
2. Belief that a miracle will occur	May reflect ethnic or religious group's beliefs and expectations	*I have always done what you ask, God; please do this for me*	Listen, provide realistic support
3. Collective experience of marginalisation during large-scale conditions such as pandemic, war	Scale of personal loss is magnified under unfolding societal conditions	*My loved ones are unable to visit; my needs and the needs of my group are overlooked*	Offer reasonable reassurance, facilitate contact and communication
4. Communication of direct spiritual needs	Majority group culture does not understand or respond to Indigenous needs, as one example	*All whānau/family and health care staff wash their hands when entering/exiting room of the dying to spiritually 'cleanse' spiritual energy*	Work to facilitate requests, ensure tapu (restrictions/sacredness) maintained
5. Despair, desolation	Inconsolable	*No one can forgive me for this*	Ensure safety; explore reasons. Support value and worth; look for avenues of hope

Spiritual concern	Primary condition	Illustration	Response examples
6. Dying away from home, ancestral land	Discusses sense of dislocation, sad	*I want to return home*	Build connections with symbols/objects from home, ask about underlying need
7. Existential concerns	Poses questions about life meaning, what will happen after death, what is the purpose of suffering	*My life has no meaning. What happens when I die?*	May respond with thoughtful questions; share texts from patient traditions if known; proverbs, prayers, songs, poetry for insight
8. Forgotten	Worried that one's death won't matter	*No one will care when I die*	Gently challenge and confront belief; what matters is present life and how one lives it, even if there is no witness
9. Guilt/shame	Deep regrets, lack of self-worth	*I'm so sorry I hurt him. I was never good enough*	Acknowledge feelings and awareness, use cognitive restructuring
10. Isolation or alienation	Shows feelings of loneliness	*I feel so alone*	Problem-solve together and refer for support
11. Immediate spiritual concern	Specific thought, feeling or action related to what is spiritual or a religious community	*I will be judged as a failure by God*	Listen, explore, stay within client/patient belief system
12. Legacy	Worry about how whānau/family may continue after death	*How can I provide for my whānau/family physically, emotionally, spiritually*	Explore whānau/family resilience, explore inter-connecting life tasks separately
13. Loss/grief	Feels deep sorrow loss of good health/home, loss of other support systems	*I don't know how to go on without my sister. I wish I could still walk every day*	Silence for holding space; mindful presence; meditation; breathe together
14. Tapu and noa cultural values	Need to achieve a balance between tapu (restricted, sacred, set apart or forbidden) and noa (safety)	*I am at risk, since tapu may be breached by those who do not understand*	Take cues from whānau/family, learn about cultural values, arrange conditions to facilitate safety
15. Relationship with God/doubt	Does not sense God's presence or presence of the Ultimate	*Where is God now? Why can't I feel him/her?*	Reflect content of thought; summarise change over time – places of challenge and growth
16. Religious or spiritual struggle	Displays deep level of discomfort with spiritual questions which are pervasive	*Why am I feeling this way?*	Accompany; refer to religious or spiritual leaders for specific competencies

Source: Nelson-Becker and Moeke-Maxwell 2020

Chronic obstructive pulmonary disease (COPD)
He mate puru ia auraki

The information in this guide is accurate to the best of our knowledge as of June 2023.

Definition

Chronic obstructive pulmonary disease (COPD) is a generic term covering three conditions: chronic bronchitis, emphysema and chronic airflow obstruction, all of which result in limited flow of air through the lung that worsens over time. Unlike asthma, this limitation is not reversible with treatments. Primary symptoms are cough, sputum production, shortness of breath and wheeze (Hancox et al 2021).

Key points

- Exacerbations are common and have a significant mortality risk.
- Long-term COPD causes heart disease: 20–23 percent of people with COPD also have heart failure (Yang et al 2022).
- Long-term COPD affects every aspect of a person's life.

Why this is important

Severe COPD impacts on every aspect of the person's life and contributes significantly to the state of frailty. In later states, quality of life often is the priority.

Implications for kaumātua

Breath and breathing are significant in Māori culture. **Te reo Māori** has several words for breath, many of which link breath and breathing to **te taiao** (the natural world) and to Māori creation stories. While these cultural constructs do not change the occurrence, cause or treatments of breathlessness or COPD, it is important to understand them because experiencing breathlessness may contribute to anxiety or **wairua** (spiritual) unrest (see the *Guide for health professionals caring for kaumātua | Kupu arataki mō te manaaki kaumātua* for more information).

* Kaumātua are individuals, and their connection with culture varies. This guide provides a starting point for a conversation about some key cultural concepts with kaumātua and their whānau/family. It is not an exhaustive list; nor does it apply to every person who identifies as Māori. It remains important to avoid assuming all concepts apply to everyone and to allow care to be person and whānau/family led.

Assessment

COPD is diagnosed and severity of disease is assessed by symptoms and lung function.

State	Symptoms	FEV_1
Mild	• Few symptoms • Breathless with moderate exertion • Little effect on daily activity • Cough and sputum production	60–80% of predicted
Moderate	• Breathless walking on flat • Increased limitation on daily activity • Recurrent chest infections • Exacerbations requiring oral corticosteroid and/or antibiotics	40–59% of predicted
Severe	• Breathless on minimal exertion • Daily activities severely impacted • Exacerbations increasing in frequency and severity	< 40% of predicted

Note: Forced expiratory volume (FEV_1), measured by spirometry, is the amount of air that can be forced out of the lungs over 1 second.

Treatment

Non-pharmacological

- Provide support for smoking cessation.
- Provide physical activity and nutritional support (pulmonary rehabilitation where available).
- Provide culturally informed, complementary therapies such as **Hikitia te Hā** (**te ao Māori** breathing exercises: **www.allright.org.nz/tools/hikitia-te-ha**) or **waiata** (singing), which promote breath control. Whānau/family or a cultural advisor may recommend other therapies.
- Support sputum clearance.
- Support patient and **whānau**/family to understand the disease process.
- Develop an individual management or action plan (Hancox et al 2022).
- Develop an individual breathlessness plan (Hancox et al 2022).
- Discuss goals of care.

Pharmacological

Routine inhaled medication

Many different inhaled medications for COPD are used in combination for different severity of disease and primary presenting issues. Important nursing roles in managing COPD regimes are:

- inhaler reconciliation – given patients often have multiple inhalers (from different treatment stages), this involves checking that the regimen the patient is following matches the regimen prescribed
- supporting inhaler use, management, technique (including spacer) and infection control
- monitoring and reporting COPD symptoms (because this is a progressive disease so changes in treatment may be needed).

Although treatment may vary between individuals, generally treatment escalates through steps to get maximum control of COPD symptoms.

1. Provide short-acting relief of breathlessness.
    a. Choices are short-acting beta2 agonist (SABA) or short-acting muscarinic agonist (SAMA) or a combination (SAMA salbutamol or terbutaline, SAMA ipratropium).
2. Introduce long-acting muscarinic antagonist (LAMA).
    a. Examples are tiotropium, glycopyrronium and umeclidinium.
    b. SABA can continue.
    c. Ipratropium stops – except in emergency situations.
3. Replace LAMA with a combination of LAMA with long-acting beta2 agonist (LABA).
    a. Examples are glycopyrronium/indacaterol, umeclidinium/vilanterol and olodaterol/tiotropium.
4. Use inhaled corticosteroids for people with severe disease.
    a. Examples include fluticasone and budesonide.

Identifying inhalers

- bpac^{nz} offers an easy-to-follow guide for prescribing decisions and a picture-based inhaler guide that is helpful for staff, patients and whānau/family (**bpac.org.nz/copd-tool**).
- The New Zealand Respiratory Guidelines provide an inhaler identification chart (**www.nzrespiratoryguidelines.co.nz/inhaler-identification.html**).

Immunisations

- Annual influenzas
- Pneumococcal vaccination – recommended but not funded (Yang et al 2022)
- COVID-19

Long-term oxygen therapy

- Access through a specialist respiratory service. It is prescribed to improve survival and quality of life by reducing right heart strain. It must be used for at least 16 hours a day at the prescribed dose to be effective. It is delivered by nasal cannula (Barnett et al 2022; Branson 2018).

Care planning

Continuing care for COPD

Severe COPD impacts all aspects of a person's health and wellness. Help the older person save their breath for doing the things that are most important to them. Care planning includes, but is not limited to, nutrition and hydration, bowel management, skin and bone health, strength and balance, anxiety (particularly panic attacks) and social isolation (Yang et al 2022).

For kaumātua, consider culturally informed holistic interventions including physical activities **kapa haka**, waiata, **karakia** and/or te ao Māori breathing exercises (Hikitia te Hā: **www.allright.org.nz/tools/hikitia-te-ha**). Whānau/family or a cultural advisor may recommend other interventions.

Acute exacerbation

Cases of acute exacerbation always require a general practitioner (GP) or nurse practitioner (NP) review. Symptoms include difficulty breathing, increased sputum production, response to infection and hypoxia. Treatments are aimed at addressing symptoms. They include bronchodilators, corticosteroids and antibiotics and sometimes oxygen therapy, opioids and benzodiazepines (Yang et al 2022).

Short-term emergency oxygen in COPD exacerbation

- Emergency oxygen is only used for cases of low oxygen saturation (SpO_2), not simply because the person has a sensation of breathlessness or raised respiratory rate. Oxygen is a prescription medication and must be prescribed.
- When SpO_2 is less than 88 percent, use 1–2 litres of oxygen via nasal cannula or 2–4 litres of oxygen via a 24 or 28 percent venturi mask.
- Measure SpO_2 frequently and titrate oxygen to reach an SpO_2 range of 88–92 percent (Barnett et al 2022; Branson 2018).

  Warning: Avoid simple oxygen face masks for oxygen flow rate of less than 5 litres per minute as they put the person at risk of breathing in carbon dioxide (Barnett et al 2022).
- This situation requires URGENT medical review (call NP or GP).

  Note: Individuals with end-stage disease may vary in their care needs, where they have been assessed by a GP or NP and have a plan in place.

Inhaled bronchodilator

When a bronchodilator is required (eg, salbutamol), a metered dose inhaler and spacer are recommended in the first instance. Some people are established users of an air-driven nebuliser, which may be the required delivery method. Nasal prongs can remain in place during bronchodilator therapy (Barnett et al 2022).

Oxygen-driven nebulisation is not recommended.

Patient positioning

Patients should be allowed to position themselves according to their preference (forcing them to change position will add to stress). Maximising physical support with pillows, at the back of a chair or over a bed table, will save energy for breathing (Barnett et al 2022).

Opioids for breathlessness

Regular low-dose oral morphine (< 30 mg daily) can be used to treat breathlessness in advanced COPD. Evidence suggests that once-daily slow-release morphine is ideal. However, Yang et al (2022) report that patients may prefer immediate-release morphine and recommend low dose with slow up-titration to effect.

Benzodiazepines

Benzodiazepines may be considered as additional support, although evidence for their effectiveness is limited (Yang et al 2022).

Decision support

Routine review

Routine review of management 3 monthly

Inhalers
- ☐ Check inhalers being used, technique, expiry dates, dose remaining
- ☐ Review respiratory rate and oxygen saturation over last 3 months
- ☐ Number of exacerbations since last review
- ☐ Changes to weight, function, skin, cognition
- ☐ Mood and social interaction

↓

Any worsened COPD?

Discuss with GP/NP – treatment may be able to be adjusted

↓

Review other indicators and plan accordingly to maximise quality of life

Consider:
- ☐ Weight loss – dietary change
- ☐ Mood and possible therapy or medication
- ☐ ADL function – support, save breath for fun
- ☐ Breathlessness strategies – physiotherapy

↓

Review shared goals of care or advanced directives related to COPD

ADL = activities of daily living
COPD = chronic obstructive pulmonary disease
GP = general practitioner
NP = nurse practitioner

Exacerbation COPD

Exacerbation COPD
Gather history of presenting complaint

- ☐ When did it start?
- ☐ What does it feel like?
  'unable to catch my breath' (more common in COPD);
  'hard work to breathe' (reported in cardiac and respiratory conditions)
- ☐ Do they have cough, increased or thick mucous, fever?
- ☐ Are they using inhalers, nebuliser, fan more often?
- ☐ Positioning (more propped up in bed or staying in La-Z-Boy all night)
- ☐ Severity – is this impacting dressing, eating, talking?
- ☐ Anxiety, fear, managing to control breathing?

If this is a **significant change from baseline**, call GP/NP **– HIGH RISK**

Medical history: could this be something else?

Consider conditions such as:

- ☐ MI
- ☐ Heart failure
- ☐ Anaemia
- ☐ Terminal illness
- ☐ Pulmonary embolism

Has medication changed in the last 2 weeks?

Consider:

- ☐ Changes to routine inhalers?
- ☐ Change to antithrombotic medication?
- ☐ New medication, or existing medication toxicity?

Complete a physical exam

Inspection

- ☐ Does patient look well/ill?
- ☐ Are they confused?
- ☐ Has consciousness changed?
- ☐ Is skin pale/flushed/cyanotic/mottled?
- ☐ Are they working hard to breathe?
- ☐ Are they tripoding?
- ☐ Are they purse-lipped breathing?
- ☐ Can they speak in full sentences?
- ☐ Are neck veins congested/swollen?
- ☐ Pitting oedema lower legs?

Palpation

- ☐ Pitting oedema lower legs/sacrum?

Percussion

- ☐ Chest dull or resonant?

Auscultation lungs

- ☐ Air moving in and out of all lobes?
- ☐ Wheeze present? Where? Loud? During inspiration or expiration?
- ☐ Crackles? Where? Coarse or fine? During inspiration or expiration?

Measure vital signs and compare to person's baseline

ALERT SIGNS

- ☐ Respiratory rate ≥26 breaths/minute
- ☐ Oxygen saturation ≤93%
- ☐ Pulse ≥100 bpm
- ☐ Temperature <35.5°C or >37.2°C
- ☐ Systolic blood pressure ≤100 mmHg

Review assessment data. Collate data into SBAR format for handover to GP/NP

- ☐ **Worsening SOB from baseline needs review by GP/NP**
  Your assessment information is critical for GP/NP to determine urgency and potential treatment options.
  DO NOT DELAY referral to GP/NP

Nurse-initiated therapies for comfort

- ☐ PRN respiratory/anxiety medication
- ☐ Prescribed oxygen to reach patient's baseline saturation
- ☐ Fresh air/fan
- ☐ Prop patient up to open lungs
- ☐ Reduce exertion
- ☐ Provide reassurance and frequent welfare checks
- ☐ Guided purse-lipped breathing

Initiate prescribed therapies or if end of life diagnosed, refer to end-of-life pathway

bpm = beats per minute
COPD = chronic obstructive pulmonary disease
GP = general practitioner
MI = myocardial infarction
NP = nurse practitioner
PRN = as needed (pro re nata)
SBAR = situation, background, assessment, recommendation
SOB = shortness of breath

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Constipation
Kōroke

The information in this guide is accurate to the best of our knowledge as of June 2023.

Definition

Constipation describes a set of difficulties associated with defecation that a person experiences more than a quarter of the time. These difficulties include hard, lumpy, difficult-to-pass stools, straining, the feeling of incomplete emptying, infrequent bowel opening (fewer than three times a week without laxatives) and the need to manually assist defecation. Constipation may be acute (lasting less than 1 week) or chronic (lasting for 3 months or more). The need for regular aperients (laxatives) is diagnostic for underlying constipation (Aziz et al 2020).

Key points

- Constipation occurs in up to half of all people living in aged residential care (De Giorgio et al 2015; Mounsey et al 2015).
- Chronic constipation is best managed with a long-term plan and ongoing review.

Why this is important

Constipation has a significant impact on quality of life. While nurses in aged residential care commonly manage the problem, it can also progress to a bowel obstruction – a **life-threatening condition**.

Implications for kaumātua*

Some kaumātua may experience a sense of **whakamā** (shame, embarrassment) about their constipation and therefore not disclose their difficulty in passing stools. One reason for this may be that the kaumātua is a private person so finds it difficult to discuss such topics. See the *Guide for health professionals caring for kaumātua | Kupu arataki mō te manaaki kaumātua* for more information.

It is essential to give kaumātua and whānau/family all the information they need to fully participate and engage in preventive interventions and treatment. This might include explaining the importance of physical exercise, fibre-rich food and adequate hydration, and supporting appealing options that align with cultural preferences (eg, **kapa haka** to keep active, consuming kiwifruit products or traditional **Māori** herbal remedies).

* Kaumātua are individuals, and their connection with culture varies. This guide provides a starting point for a conversation about some key cultural concepts with kaumātua and their whānau/family. It is not an exhaustive list; nor does it apply to every person who identifies as Māori. It remains important to avoid assuming all concepts apply to everyone and to allow care to be person and whānau/family led.

Using familiar, culturally acceptable terms when discussing constipation and bowel habit may help the kaumātua to communicate more freely.

Kupu (words) to discuss constipation

Māori term and pronunciation	English translation
Tūtae, **hamuti**	Stool, faeces
Tiko	Defecate
Turuturu	Leak
Kope	Pad
Wharepaku	Toilet
Uaua	Difficult
Mārō	Hard
Ngohengohe	Soft, pliable

Assessment

The caregiver is often the one who identifies constipation. It is the nurse's responsibility to respond to that report using a diagnostic reasoning process: taking the history, conducting a physical examination and often treating with prescribed 'as needed' (PRN) medication. As part of this process, it is important to:

- assess bowel habit with the Bristol stool chart
- distinguish between constipation and bowel obstruction (potentially life threatening) and recognise any need for referral
- consider likely causes of constipation
- have a good knowledge of the different laxatives available (see table in '**Laxatives**' section) to administer PRN treatment successfully.

Treatment

Constipation: population approach

1. Avoid constipation (Aziz et al 2020).
    a. Provide fluid rounds to encourage intake.
    b. Provide additional fluid support on hot days.
    c. Build regular physical activity into facility routines.
    d. Undertake routine dietary review of facility menu for fibre and stimulant content.

Constipation: individual approach

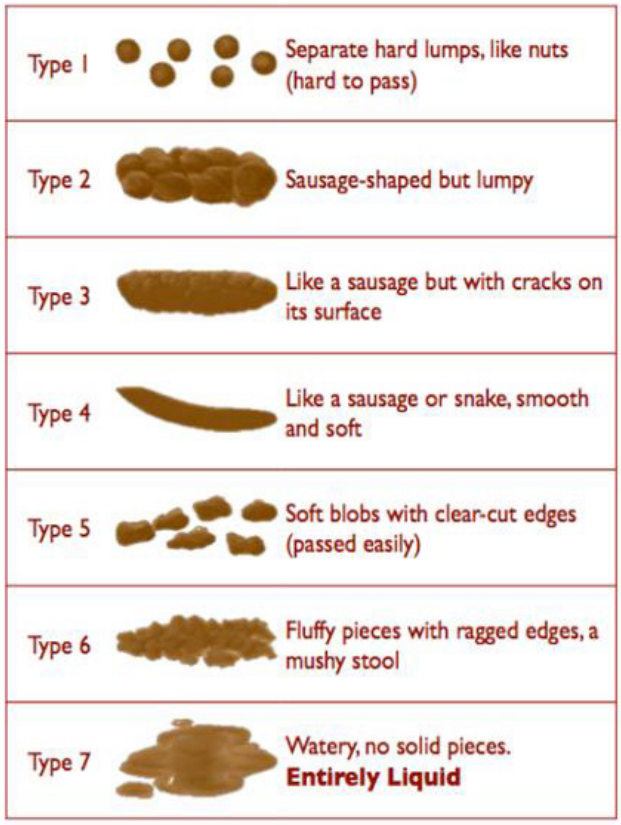
1. Avoid constipation.
    a. Assess and address key causes of constipation.
    b. Consider appropriate laxative management.
    c. Discuss laxative management with prescriber: regular laxatives may be required.
    d. Monitor bowel function to titrate laxative.
2. Treat acute constipation.
    a. Assess and address key causes of constipation: consider recent changes.
    b. Consider appropriate laxative selection from PRN medication.
    c. Escalate to general practitioner (GP) or nurse practitioner (NP) if acute constipation is not resolved in 3 days.
    d. Monitor bowel function to titrate laxative.
3. **Be aware of risk of bowel obstruction**. Severe constipation can evolve into a bowel obstruction, which is a clinical emergency that requires urgent assessment.
    a. A cognitively impaired resident may not report or may not be able to report bowel function. If their behaviours change, investigate for constipation.
    b. Where a resident has episodes of loose bowel motions, assess for severe constipation with overflow.
    c. When assessing nausea, vomiting or abdominal pain, always investigate bowel function as well.

Care planning

In the care plan, include:

1. fluid intake, adjusted during warm weather
2. physical activity as tolerated (including incidental walking, eg, to toilet)
3. individual dietary supplements (eg, dried fruit, grapes)
4. selection of fibre-rich food from standard menu (eg, porridge rather than toast for breakfast)
5. regular and PRN laxatives.

Bristol stool chart



Source: **www.continence.org.au/bristol-stool-chart**

Laxatives

Do not give laxative if you suspect a bowel obstruction

Laxative type	Examples and key information
Osmotic laxative Pulls fluid into the large bowel or retains fluid in large bowel. Stool is softened. Takes 24–96 hours to work as it must reach the large bowel to have an effect (bpac^{nz} 2019).	• Macrogol (Molaxole) may cause more diarrhoea than lactulose, but less gas (bpac^{nz} 2019). Can be used for faecal impaction. Is more effective than lactulose (Mounsey et al 2015). • Lactulose (Iaveac) is generally safe but may cause bloating, gas and loose stools (Aziz et al 2020).
Bulk-forming laxative Increases stool size and stimulates peristalsis.	• Psyllium husk (Konsyl-D). Must be taken with ≥ 500 mL fluid. Onset of action is 12–72 hours. • Because of increased risk of bowel obstruction, do not give to residents who: – are on fluid restriction (bpac^{nz} 2019) – are taking opioids – have Parkinson's disease, stroke or paraplegia or other conditions that slow bowel transit.
Stimulant laxative Increases gut movement. Can cause abdominal cramp (New Zealand Formulary 2022b), diarrhoea and hypokalaemia. Recommended treatment for opioid-induced constipation (bpac^{nz} 2019).	• Docusate sodium and sennoside (Laxsol) combination product softens stool and stimulates peristalsis. Takes 6–12 hours to work.
Rectal preparation	**Examples and key information**
Stimulant suppository	• Glycerol: Insert into rectum touching mucus membrane; irritates bowel, stimulating peristalsis. Acts in 15 minutes to 1 hour (New Zealand Formulary 2022a). Prolonged use can cause atonic bowel. • Bisacodyl: Takes about 20 minutes to work.
Osmotic enema	• Sodium citrate (Micolette): Expect result in 10–15 minutes (may take longer). • Phosphate (Fleet): Generally reserved for surgical bowel preparation. Use with caution as directed by GP/NP because it can cause electrolyte disturbances.

Decision support

Bowel management to avoid constipation

Assess and manage constipation risk during routine review and following significant changes in routine

↓

Collect baseline bowel pattern (frequency, timing, straining, life-time habit, self-management)

Includes residential care history if routine review.
Use of laxative, bowel charting, episodes of acute constipation, toileting routines/habits
NB Pain or bleeding with defecation needs further investigation

↓

Assess stool consistency and volume (Bristol stool chart – 7-day detailed data collection)

↓

7-day food and fluid monitoring

↓

7-day physical activity record

↓

Identify constipation risks from medical history

Medical conditions increasing risk of constipation
- ☐ GI (haemorrhoids, bowel disease or prolapse)
- ☐ GU (catheter, vaginal prolapse)
- ☐ Neuro (Parkinson's, stroke, spinal cord injury, MS)
- ☐ Surgery GI or pelvic region
- ☐ COPD
- ☐ Hypothyroidism
- ☐ Functional limitation
- ☐ Cognitive impairment

↓

Identify constipation risks from medication

Medications increasing risk of constipation
- ☐ Diuretics (dehydration)
- ☐ Opioids (slow bowel transit)
- ☐ Antidiarrhoeal
- ☐ Antihypertensives
- ☐ Antispasmodic
- ☐ Parkinson's medication
- ☐ Anticholinergics
- ☐ Iron supplements

↓

Consider impact of functional limitations (immobility) and cognitive impairment (poor recall) on constipation risk

↓

Consider need for digital rectal examination (history of haemorrhoids, bleeding or chronic constipation warrants an examination)

Any examination of kaumātua should follow principles of tapu and noa (see the *Guide for health professionals caring for kaumātua | Kupu arataki mō te manaaki kaumātua*)

↓

Develop care plan to address risk factors identified relating to diet, function and medication. Include referral to other health professionals

- ☐ Keep records of bowel function
- ☐ Regular physical activity (within limitations)
- ☐ Dietary fibre
- ☐ Fluid intake
- ☐ Discuss key risk medication with GP/NP
- ☐ Optimum management of chronic conditions
- ☐ Self-care activities (eg, supplementary foods or fluids, rituals or habits)

Source: Based on RNAO (2020)

COPD = chronic obstructive pulmonary disease
GI = gastrointestinal
GP = general practitioner
GU = genitourinary
MS = multiple sclerosis
NP = nurse practitioner

Responding to acute constipation

Constipation suspected:
No bowel movement in 1–3 days or bowel open, Bristol Stool Chart type 1 or 2

Consider in context of usual bowel habit

↓

Is this a new secondary cause (ie, associated with new bleeding or pain on defecation, abdominal pain, nausea or vomiting, delirium, weight loss or changed bowel habit)?

Y → Contact GP/NP for review

N ↓

Review history
Has anything changed (medically, functionally or mentally) in the resident's diet, fluid intake, medication regime that could cause constipation?

Complete abdominal examination

☐ Inspect abdomen for distention or bulges
☐ Auscultate bowel sounds
☐ Palpate (lightly and deeply)

Any time you find something abnormal, contact GP/NP before progressing with intervention

Auscultation
Normal bowel sounds: 5 to 35 clicks and gurgles per minute in right lower quadrant

Abnormal bowel sounds (refer to GP/NP)
Fewer than 5 per minute in each quadrant
High-pitched tinkling sounds

Palpation
Press lightly over all areas of the abdomen, then deeply in the same places. A normal abdomen is described as soft and non-tender. Any tenderness or hard masses are unusual findings that you need to discuss with GP/NP

↓

Abnormal physical exam

Y → Contact GP/NP for review

↓

Fluid intake to reach 1.5 to 2 L in 24 hrs (provided there is no fluid restriction)
Start fluid chart
Add simple dietary stimulants
Give PRN laxative (osmotic agent or stimulant laxative) – can take 24 hours to work

Dietary stimulants include Kiwi Crush, apple and date mix, grapes, prunes, kiwifruit

↓

Bowel moved by day 4?

Y → Refer to managing constipation pathway, update care plan

N ↓

Abdominal examination, including digital rectal examination for faecal impaction
Follow facility protocol and discuss with nurse leader and/or GP/NP (eg, suppositories, multiple macrogol or enema)

Digital rectal examination (requires consent):
Lie resident on left side with knees flexed
Inspect anus for haemorrhoids/prolapse/tears
Lubricate gloved index finger and insert into anus. Feel for faecal mass. Inspect finger for mucus blood and faecal matter on withdrawal

Overflow diarrhoea is often faeces-coloured liquid. Explusion is often uncontrollable (incontinence). It is not accompanied by abdominal pain or fever

↓

Bowel moved by day 5? ▲

N ↓

Physical examination as per day 4
Review history: Any new confusion, appetite loss, nausea or vomiting, overflow diarrhoea?

Y → **Rapid escalation to GP/NP**

N ↓

Discuss with GP/NP today and continue daily report to GP/NP until bowel opens

Bowel obstruction
Hard, swollen abdomen. Auscultation: high-pitched tinkling sounds, no clicks or gurgling sounds, no stool or gas expelled from bowel. Generally resident presents distressed and unwell, feels sick or vomits, has a painful abdomen and may be confused or disorientated

GP = general practitioner NP = nurse practitioner PRN = as needed ('pro re nata')

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Dementia overview
Tirohanga whānui o te mate wareware

The information in this guide is accurate to the best of our knowledge as of June 2023.

Definition

Dementia is an umbrella term used to describe the impaired ability to think that is different from a usual consequence of ageing (Alzheimers New Zealand nd; Vuong et al 2019). It results in both cognitive and functional limitations. Dementia affects memory, orientation, comprehension and calculation. It compromises a person's judgement as well as their ability to understand written and verbal language and to communicate. These limitations eventually result in a lack of mental capacity.

Key points

- Dementia is a progressive terminal illness (Mitchell et al 2009).
- The experience of dementia is different for everyone. Progression is variable, and what a person can do changes day to day (Alzheimers New Zealand nd).
- Both the person living with dementia and their loved ones go through numerous losses related to the disease process. It is important to consider the person and their **whānau**/family when providing care.
- To meet goals of care, the care team, whānau/family need to regularly review the progression of dementia (Mitchell et al 2009; Murray et al 2005).

Why this is important

People living with dementia experience a broad range of symptoms related to their disease. Understanding the disease process can help the health team adapt their approach to best support the person and their whānau/family.

Implications for kaumātua*

Research on dementia in **Māori** is very limited. However, the evidence available indicates that dementia presents up to 10 years earlier in Māori compared with New Zealand Europeans and that Māori have an increased risk of dementia because they have a higher prevalence of modifiable risk factors (Cullum et al 2020).

Māori may interpret **mate wareware** (dementia) in a way that is different from a western medical view. Whānau/family may interpret the causes 'within historical, cultural and

* Kaumātua are individuals, and their connection with culture varies. This guide provides a starting point for a conversation about some key cultural concepts with kaumātua and their whānau/family. It is not an exhaustive list; nor does it apply to every person who identifies as Māori. It remains important to avoid assuming all concepts apply to everyone and to allow care to be person and whānau/family led.

social contexts rather than as physical illness or disease' (Dudley et al 2019). In some instances, they may interpret it as part of a spiritual journey on which kaumātua are preparing to join their **tīpuna** (ancestors) and a normal part of growing old rather than a disease or illness (Dudley et al 2019). It is important to consider and support these viewpoints when providing holistic care.

Research (Dudley et al 2019) found factors that can have a positive impact on those with mate wareware are:

- using **te reo Māori** (which may have been the first language of the kaumātua but they were suppressed from using it as a child)
- participating in cultural activities and events that are seen as **rongoā** (medicine) to slow or prevent progression of the disease
- maintaining kaumātua independence and involving them in activities for as long as possible.

While kaumātua with dementia may live in aged residential care, it is still important to give their whānau/family all of the information, knowledge and resources they need to best support their ongoing involvement in the care of their loved ones.

Assessment

Diagnosis

Diagnosis is based on a comprehensive clinical assessment by a general practitioner, nurse practitioner, geriatrician or old-age psychiatrist. To have a diagnosis of dementia, the person must have a history of significant cognitive decline (attention, planning, inhibition, learning, memory, language, visual perception, spatial skills or social skills) that interferes with independence in everyday activities (Hugo and Ganguli 2014).

Common observable deficits include:

- attention – finding it difficult to focus in environments that contain multiple stimuli (eg, TV, radio and conversation)
- executive function – being unable to perform previously familiar tasks, needing help with day-to-day decisions, loss of initiative and poor judgement
- learning and memory – struggling to recall, being repetitive in conversation and behaviour, needing reminders to complete task (eg, eating) and being confused about time and place
- language expression and comprehension – using terms such as 'that thing' and 'you know what I mean', and sometimes failing to recall names of close friends and family
- social skills – being insensitive to social standards with little insight and so becoming socially withdrawn or isolated
- motor and visual function – losing ability to use tools, write or do other previously familiar activities (eg, knitting) and getting lost.

Dementia types

Common types of dementia (Hugo and Ganguli 2014)

Alzheimer's disease	**Symptoms** Early stage – memory loss, difficulty finding words, poor judgement; later stages often include behaviours that challenge, irritability, agitation, wandering, gait disturbances, dysphagia, incontinence	**Pathology** Progressive loss of synapses and neurons, and accumulation of amyloid plaques and neurofibrillary tangles
Vascular dementia	**Symptoms** History of stroke or transient ischaemic attacks (TIA), poor attention and executive function, gait disturbance, incontinence, personality changes	**Pathology** Cerebrovascular disease ('white matter changes'), often a stepwise progression but can be rapid
Mixed dementia	Most commonly, a combination of Alzheimer's disease and vascular dementia	
Fronto-temporal lobe	**Symptoms** Personality and behaviour change (eg, withdrawal, loss of interest in activities, poor personal hygiene, social disinhibition). Can include a loss of speech and empathy and rigid behaviours	**Pathology** Atrophy of the frontal and temporal lobes of the brain. Gradual progression, early-onset dementia
Dementia with Lewy bodies, Parkinson's disease	**Symptoms** Impaired attention, visuospatial awareness and executive functioning, hallucinations, delusions and depression. Repeated falls and syncope, loss of consciousness (resolves), poor autonomic regulation (vital sign fluctuation, sweating, impaired peristalsis)	**Pathology** Presence of Lewy bodies in brain, progression is gradual. In dementia with Lewy bodies, cognitive impairment appears before movement disorder

Staging

Global Deterioration Scale/Reisberg Scale (abbreviated) (Dementia Care Central 2020)

Late stages	Signs and symptoms	Duration
Stage 5	• Major memory deficiencies • Needs help with activities of daily living • Does not know time, date or location	1.5 years
Stage 6	• Cannot carry out activities of daily living without help • Forgets names of family and whānau/family members as well as recent and major life events • Difficulty counting down from 10, difficulty speaking • Urinary incontinence • Personality and emotional changes, delusions, compulsions and anxiety	2.5 years
Stage 7	• Cannot speak or communicate • Requires help with most activities, loss of motor skills, cannot walk	1.5 to 2.5 years

Treatment

Supporting someone living with dementia should include meeting their basic needs such as maintaining nutrition and hydration and managing activities of daily living. Engaging the person in meaningful activity and supporting them to maintain as much independence as possible are key to their quality of life. Currently dementia has no cure. However, some medications can slow the progression of the disease.

Reaching a prognosis is particularly difficult, and most tools are no more effective than clinical judgement. However, one study found that pneumonia, febrile episodes and eating problems were common in the last 3 months of life (Mitchell et al 2009).

Care planning

Person-centred care (Fazio et al 2018)

Person-centred care, a term first used by Kitwood (Kitwood and Bredin 1992; Fazio et al 2018), remains the best-supported and most well-researched approach to care for people with dementia. The following are key themes of this approach.

1. The person living with dementia is more than a diagnosis. Get to know them and support them to uphold their values, beliefs, interests, abilities, likes and dislikes.
2. It is important to see the world from the perspective of the person living with dementia. Recognise and accept their behaviour as a form of communication. Validating their feelings can help the person connect with their reality.
3. Every experience or interaction is an opportunity for meaningful engagement. This should support their interests and preferences and allow for their choice (eg, of foods, music, clothes, activities). Remember all people with dementia can experience joy, comfort and meaning in life.
4. Build and nurture authentic, caring relationships that demonstrate respect and dignity. Focus on the interaction when completing tasks. Supportive relationships are about 'doing with' rather than 'doing for'.
5. Create a supportive community that allows for comfort and celebrates success and occasions.

Whānau/family care

The person living with dementia may be unable to plan for the future. It is important to ensure whānau/families have an understanding of the clinical progression of dementia so they can help plan for future care needs, including end-of-life care.

Further resources

Dementia STARs education series **www.nzdementia.org/Dementia-STARs**.

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Depression
Mate pāpōuri

The information in this guide is accurate to the best of our knowledge as of June 2023.

Definition

Depression is one of the most common psychiatric disorders in older people. It is not a normal part of ageing. It is a serious disabling mood disorder that can affect the way a person feels, behaves and thinks.

It causes distress and anxiety, impacts on functional ability, reduces physical activity and can cause memory problems. Depression induces thoughts of worthlessness, helplessness and suicidal ideation (Blackburn 2017; Zenebe et al 2021).

Key points

- Studies suggest about 30 percent of older people worldwide have depression (Hu et al 2022; Zenebe et al 2021).
- Depression is underdiagnosed in older people (Zenebe et al 2021).
- Depression can lead to suicide. Around the world, older adults have the highest rate of suicide among all age groups (De Leo 2022; Stanley et al 2016).

Why this is important

Depression increases the risk of mortality and negatively impacts on quality of life (Sivertsen et al 2015).

Implications for kaumātua*

Depression impacts on every aspect of kaumātua wellbeing, including their spiritual and physical health and their connection with **whānau**/family as well as their mental health. For kaumātua, the experience of depression may involve more spiritual unease, unrest or disturbances so you need to interpret their behaviour carefully (bpac^{nz} 2010). People with cultural knowledge or whānau/family may be helpful in recognising these culturally specific manifestations.

Complementary, culturally informed interventions to address depression may include **karakia** (prayer) and/or **pure** (cleansing rituals).

* Kaumātua are individuals, and their connection with culture varies. This guide provides a starting point for a conversation about some key cultural concepts with kaumātua and their whānau/family. It is not an exhaustive list; nor does it apply to every person who identifies as Māori. It remains important to avoid assuming all concepts apply to everyone and to allow care to be person and whānau/family led.

Maintaining wellness for Māori (Russell 2018)

Concepts for maintaining wellness are not unique to kaumātua. However, having a strong sense of connection and cultural identity is a cornerstone of their mental wellbeing. Key aspects include:

- **whakawhanaungatanga** and belonging (connections with the people that are important to them, being able to **manaaki** [take care of or look after] others)
- feeling positive about life (having a sense of purpose, hope, things to look forward to, feeling connected)
- cultural connectedness (Māori culture is important to Māori, but not all Māori feel connected to their culture and need help to reconnect)
- cultural identity (a secure cultural identity comes from cultural and social connection).

See the *Guide for health professionals caring for kaumātua | Kupu arataki mō te manaaki kaumātua* for more information.

Assessment

Diagnosis of depression (Truschel 2022) DSM-5 Diagnostic Criteria

Major depressive disorder includes five or more of the following symptoms that last more than 2 weeks. At least one of those symptoms should be either (1) depressed mood or (2) loss of interest or pleasure.

The symptoms are:

1. depressed mood most of the day, nearly every day
2. markedly diminished interest or pleasure in all, or almost all, activities most of the day, nearly every day
3. significant weight loss when not dieting, weight gain or a decrease or increase in appetite nearly every day
4. a slowing down of thought and a reduction of physical movement (observable by others, not merely subjective feelings of restlessness or being slowed down)
5. fatigue or loss of energy nearly every day
6. feelings of worthlessness or excessive or inappropriate guilt nearly every day
7. diminished ability to think or concentrate, or indecisiveness, nearly every day
8. recurrent thoughts of death, recurrent suicidal ideation without a specific plan, or a suicide attempt or a specific plan for dying by suicide.

Risk factors for depression (Maier et al 2021; Sivertsen et al 2015; Zenebe et al 2021)

- Female sex
- Increasing age
- Being single or divorced
- Bereavement/grief or loss
- Loneliness/social isolation
- Chronic illness or poor health
- Chronic pain
- Cognitive impairment
- Loss of function
- Loss of independence
- History of depression
- Childhood traumatic experiences
- Multiple medications
- Addiction (alcohol, drug, prescribed medication)
- Relocating to a residential care environment

Risk factors for suicide (De Leo 2022)

- Older men over 80 years of age
- Chronic pain
- Functional dependence
- Loneliness and feelings of abandonment
- Loss of meaning in life
- Frailty (Bickford et al 2021; Shah et al 2022)

Screening

Geriatric depression scale (short form)

Choose the best answer for how you have felt over the past week	Answer		Score
1. Are you basically satisfied with your life?	Yes (0)	**No (1)**	
2. Have you dropped many of your activities and interests?	**Yes (1)**	No (0)	
3. Do you feel that your life is empty?	**Yes (1)**	No (0)	
4. Do you often get bored?	**Yes (1)**	No (0)	
5. Are you in good spirits most of the time?	Yes (0)	**No (1)**	
6. Are you afraid that something bad is going to happen to you?	**Yes (1)**	No (0)	
7. Do you feel happy most of the time?	Yes (0)	**No (1)**	
8. Do you often feel helpless?	**Yes (1)**	No (0)	
9. Do you prefer to stay at home, rather than going out and doing new things?	**Yes (1)**	No (0)	
10. Do you feel you have more problems with memory than most?	**Yes (1)**	No (0)	
11. Do you think it is wonderful to be alive now?	Yes (0)	**No (1)**	
12. Do you feel pretty worthless the way you are now?	**Yes (1)**	No (0)	
13. Do you feel full of energy?	Yes (0)	**No (1)**	
14. Do you feel that your situation is hopeless?	**Yes (1)**	No (0)	
15. Do you think that most people are better off than you are?	**Yes (1)**	No (0)	
BOLD indicators of depression. Score: 0–4 normal; 5–8 mild; 8–11 moderate; 12–15 severe		**TOTAL**	

Cornell Scale for Depression in Dementia (more reliable for people with increasing levels of cognitive impairment)

Symptom/sign	Answer				Score
A Mood-related signs					
1. Anxiety; anxious expression, rumination, worrying	A	0	1	2	
2. Sadness; sad expression, sad voice, tearfulness	A	0	1	2	
3. Lack of reaction to pleasant events	A	0	1	2	
4. Irritability; annoyed, short-tempered	A	0	1	2	
B Behavioural disturbance					
1. Agitation; restlessness, handwringing, hair-pulling	A	0	1	2	
2. Retardation; slow movements, slow speech, slow reactions	A	0	1	2	
3. Multiple physical complaints (score 0 if gastrointestinal symptoms only)	A	0	1	2	
4. Loss of interest; less involved in usual activities (score 0 only if change occurred acutely, ie, in less than 1 month)	A	0	1	2	
C Physical signs					
1. Appetite loss; eating less than usual	A	0	1	2	
2. Weight loss (score 2 if greater than 2.3 kg/5 pounds in 1 month)	A	0	1	2	
3. Lack of energy; fatigues easily, unable to sustain activities	A	0	1	2	
D Cyclic functions					
1. Diurnal variation of mood; symptoms worse in the morning	A	0	1	2	
2. Difficulty falling asleep; later than usual for this individual	A	0	1	2	
3. Multiple awakenings during sleep	A	0	1	2	
4. Early-morning awakening; earlier than usual for this individual	A	0	1	2	
E Ideational disturbance					
1. Suicide; feels life is not worth living	A	0	1	2	
2. Poor self-esteem; self-blame, self-deprecation, feelings of failure	A	0	1	2	
3. Pessimism; anticipation of the worst	A	0	1	2	
4. Mood-congruent delusions; delusions of poverty, illness or loss	A	0	1	2	
Scoring system: A = unable to evaluate; 0 = not present; 1 = mild to intermittent; 2 = severe Score > 12 = probably depression					
Refer to secondary services for suicidal ideas or moderate-to-severe depression					

Treatment

Good evidence indicates that a non-pharmacological approach alone or in combination with antidepressant therapy is effective treatment for depression. There is limited evidence that pharmacological therapy alone protects people from suicide (De Leo 2022).

Psychotherapy approaches

- Undertake **life review**, a process of recalling, evaluating and assigning meaning to personal memories. It may involve talking only or may include using photographs and images to stimulate thinking. Research shows conversation improves psychological wellbeing (Al-Ghafri et al 2021).
- Provide **cognitive behavioural therapy** with a trained facilitator. It helps the person reinterpret situations and events and come up with solutions to them (Blackburn 2017). New Zealand research specific to use with Māori is available (Bennett et al 2016).
- Provide **social support** and encourage participation in social activities (Shah et al 2022).
- Recognise risk of depression or suicidal ideation and **refer to specialist services** for help (Holm et al 2021).
- Connect people living in care with **volunteers from the community** (developing social support bonds) (Gleeson et al 2019).

Physical therapy

- Participating in regular exercise of moderate intensity, including aerobic and strength-based training, has a positive impact on depression in older people (Schuch et al 2016). Culturally appealing activities such as **kapa haka** (Māori performing arts) may encourage participation (Nikora et al 2022).
- Physical activity is considered protective and so is also recommended for those who do not have depression (Bigarella et al 2022; Maier et al 2021).
- It has a positive impact on people with suicidal ideation (Stanley et al 2016).

Pharmacology

Antidepressants are usually started at a low dose and increased over 1 to 2 months. They require regular monitoring for efficacy, adverse effects and ongoing need.

First-line treatments (bpac^{nz} 2017)

Medication	Monitor for adverse effects
Citalopram Escitalopram Sertraline Fluoxetine	• Sexual dysfunction • Gastrointestinal disturbance • Anxiety, restlessness and agitation, fatigue/apathy, insomnia • Hyponatraemia: presenting as dizziness, nausea, lethargy, confusion, cramps and seizures
Mirtazapine	• Sleepiness • Increased appetite and weight gain • Constipation • Agranulocytosis (rare)

Second-line treatments (bpac^{nz} 2017)

Medication	Monitor for adverse effects
Venlafaxine	• Sexual dysfunction • Headache • Sweating • Gastrointestinal symptoms • Hypertension
Amitriptyline Clomipramine Dosulepin (Dothiepin) Imipramine Nortriptyline	• Sedation, fatigue or agitation • Constipation, dry mouth, tremor • Tachycardia, postural hypotension, bradycardia, seizures

Decision support

Depression assessment

Describe presenting complaint

- ☐ Describe symptoms noted: onset, duration, character
- ☐ Are there any associated symptoms?
- ☐ What (if anything) makes it better or worse?
- ☐ Any self-care or treatments?
- ☐ How bad is it?

Are there risk factors or triggers for depression?

Risk factors include:

- ☐ being lonely
- ☐ chronic illness
- ☐ cognitive impairment
- ☐ history of childhood trauma
- ☐ bereavement
- ☐ functional loss
- ☐ previous history of depression
- ☐ addiction

Note: Reports of multiple non-specific ailments can be a presentation of depression

Review medical history

- ☐ Chronic conditions: heart failure, COPD, drug or alcohol addiction, chronic pain, degenerative neurological conditions (eg, Parkinson's, dementia, Huntington's, multiple sclerosis)
- ☐ History of mental health diagnosis in whānau/family
- ☐ Blood results: anaemia, thyroid dysfunction, B12 or folate deficiency, nutritional deficits

Review medication for items that may impact mental health

- ☐ Any recent medication changes
- ☐ Any change to PRN medication use
- ☐ Any medication that can lower mood: opioids, benzodiazepines, prednisone, sedatives, antihypertensives (refer to NZ Formulary to check medications and medication interactions)

Check DSM-5 criteria and/or administer Geriatric Depression Scale **or** Cornell Depression in Dementia Scale

DSM-5: low mood and/or loss of pleasure and:

- ☐ Significant weight loss or gain
- ☐ Slowed thought or slower physical movement
- ☐ Fatigue or loss of energy
- ☐ Feelings of worthlessness or inappropriate guilt
- ☐ Diminished thinking or concentration, or indecisiveness
- ☐ Recurrent suicidal ideation with/without a specific plan

Consider suicide risk:
ask directly if they have suicidal thoughts and a plan to kill themselves

If resident presents with suicidal ideation and/or has a plan to self-harm or take their life:

- ☐ contact GP/NP now (no delays) and have staff stay with resident
- ☐ if resident in immediate danger, contact emergency services, ambulance and/or mental health services for older adults or crisis assessment team (**contact numbers from Te Whatu Ora public hospitals**)

- ☐ Consider cause of behaviour such as refusal to eat or maintain health – this can be an expression of suicidal intent

Review and implement non-pharmacological strategies

- ☐ Kaumātua culture (social connections, identity, manaaki others)
- ☐ Regular aerobic and weight-bearing exercise
- ☐ Social support and activity
- ☐ Reminiscent or life review therapy
- ☐ Refer to cognitive behavioural therapy or formal counselling
- ☐ Consider online apps and resources and national helplines

Administer and monitor any medications prescribed

- ☐ Record and report adverse effects or improvements
- ☐ Antidepressants can increase suicide risk

Ongoing review of need for antidepressant medication

- ☐ Work with NP/GP – provide assessment information to enable safe deprescribing

COPD = chronic obstructive pulmonary disease
DSM = Diagnostic and Statistical Manual of Mental Disorders
GP = general practitioner
NP = nurse practitioner
PRN = as needed (pro re nata)

Further resources

Centers for Disease Control and Prevention. Depression is not a normal part of growing older. URL: **www.cdc.gov/aging/depression/index.html**.

National Institute on Aging. Depression and older adults. URL: **www.nia.nih.gov/health/depression-and-older-adults**.

Te Hiringa Hauora | Health Promotion Agency. Māori | Depression and anxiety. URL: **depression.org.nz/get-better/your-identity/maori**.

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Diabetes
Mate huka

The information in this guide is accurate to the best of our knowledge as of June 2023.

Definition

Diabetes mellitus (DM) is a term used to describe a group of conditions that result in hyperglycaemia (high blood glucose) from either a lack of insulin production or insensitivity to insulin that is produced (New Zealand Formulary 2022a).

- Type 2 diabetes mellitus (T2DM) occurs in over 90 percent of DM cases. It involves both reduced insulin production and insulin insensitivity. People with T2DM are treated with a range of hyperglycaemic tablets and/or insulin.
- Type 1 diabetes mellitus (T1DM) occurs where a loss of beta-cells in the pancreas results in a lack of insulin production. People with T1DM need insulin to survive.

Why this is important

An estimated 300,000 people in New Zealand have DM. Pacific peoples have the highest rate, followed by Indian and Māori populations. New Zealand Europeans have the lowest rate of DM (Te Whatu Ora 2023). Long-term diabetes causes a wide range of complications, including loss of vision, kidney disease, heart disease, chronic wounds and amputations. In the short term, extremes of blood glucose levels (hypo and hyperglycaemia) result in significant illness and mortality.

Implications for kaumātua*

Compared with New Zealand Europeans, Māori are two to four times more likely to be diagnosed with T2DM and to experience diabetes-related complications. They also have higher rates of mortality associated with diabetes (Mullane et al 2022; Yu et al 2021).

Māori have a holistic view of health and wellbeing. As diabetes affects every aspect of life, it is important to consider care from this perspective, rather than focusing solely on the disease of diabetes. A holistic approach takes account of the person's spiritual and emotional wellbeing, and includes their **whānau**/family. Research shows that providing care in which people and whānau/family feel culturally safe, taking a whānau/family-centred approach and using Māori principles, approaches and perspectives can all have a positive impact on the health of kaumātua (Tane et al 2021). See the *Guide for health professionals caring for kaumātua | Kupu arataki mō te manaaki kaumātua* for more information.

* Kaumātua are individuals, and their connection with culture varies. This guide provides a starting point for a conversation about some key cultural concepts with kaumātua and their whānau/family. It is not an exhaustive list; nor does it apply to every person who identifies as Māori. It remains important to avoid assuming all concepts apply to everyone and to allow care to be person and whānau/family led.

The following are two key aspects to consider in your approach to care.

- The sharing of **kai** (food) is closely connected to **manaakitanga** (hospitality, reciprocity) and **whanaungatanga** (connectedness), which are central constructs in **te ao Māori** (Māori world view). For this reason, food and nutrition have spiritual and social significance, beyond physical sustenance.
- Some kaumātua and whānau/family may see symptoms associated with hypoglycaemia as **wairua** (spiritual) unrest or disturbance. Where they do, supporting holistic interventions is essential. (See the *Delirium | Mate kuawa* guide for more information.)

Assessment

The aim of day-to-day assessment is to keep older people safe. Its main focus is on managing blood glucose levels and diabetes medication and responding to sick days.

Blood glucose level (BGL) targets

Frail older people are at greater risk from hypoglycaemia (which can cause falls, cognitive decline, dementia, myocardial infarction, stroke and death) than the longer-term health outcomes of diabetes. Because of this, treatment focuses more on quality of life than on risk of future problems and so BGL targets are less tightly controlled.

Target HbA1c ranges in older people (bpac^{nz} 2019):

- older people (not frail): HbA1c of 58–64 mmol/mol
- older people with frailty: HbA1c up to 70 mmol/mol.

Where an older person with frailty exceeds the target of HbA1c up to 70 mmol/mol, they have a greater chance of glycosuria, dehydration, hyperglycaemic hyperosmolar syndrome, candidiasis, urinary tract infections and poor wound healing.

BGL monitoring frequency in stable disease

The general recommendation is to measure HbA1c 6 monthly. (Discuss individuals with their general practitioner [GP] or nurse practitioner [NP].) More frequent monitoring is recommended if HbA1c is below 58 or above 70.

Suggested capillary blood glucose level (CBGL) testing regimes

(Health Hawke's Bay 2023)

DM treatment/medication	CBGL testing frequency
Diet, metformin, pioglitazone	CBGL testing not recommended
Sulphonylureas	Once a week: Before breakfast and before bed
Insulin (basal only) Lantus	Two consecutive mornings per week: Before breakfast
Insulin (fixed dose) Protaphane or Humulin NPH	2 days a week: Before each meal
Insulin (basal/bolus) Humalog or Novorapid or Aidpra **plus** Lantus or Protaphane / Humulin NPH or HumalogMix or NovoMix'30'	1 day a week: Before each meal and 2 hours after a meal but may require more frequent monitoring. Discuss with GP, NP or diabetes service

Note: Where a person's condition or glycaemic medication regime (insulin or tablet) changes, increase the testing frequency.

Hypoglycaemia (CBGL 4 mmol/L or less)

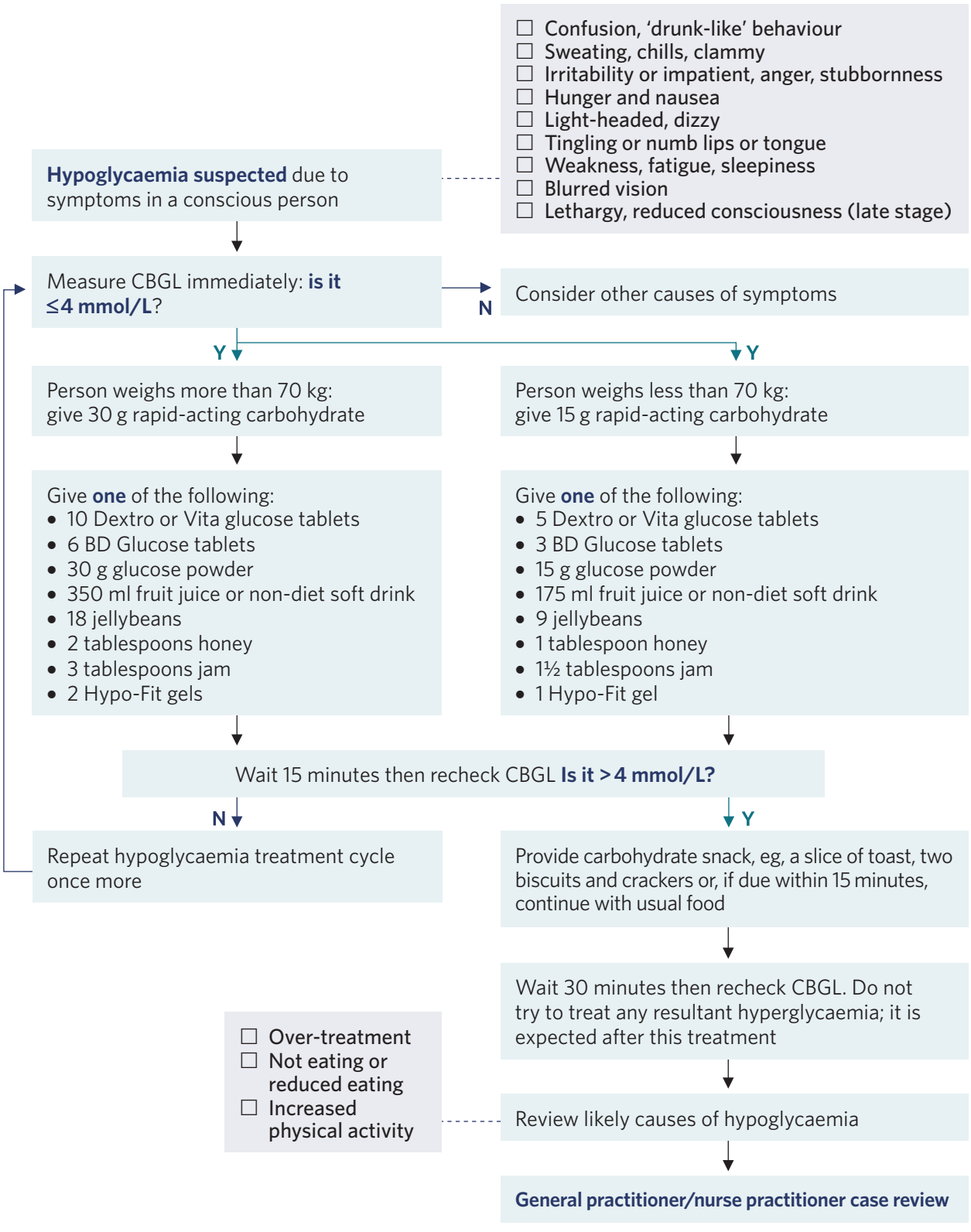
Hypoglycaemia happens in minutes to hours and needs a rapid response. It can present as confusion, dizziness, weakness and/or visual disturbances, rather than the more common tremors, sweating and 'drunk-like' confusion.

Note: Be aware that people with lifetime diabetes who have experienced multiple hypoglycaemic episodes can get hypo-unawareness. Here, the person gets few symptoms until BGL is very low (eg, 1.5–2 mmol/L) and consciousness changes.

Hypoglycaemia decision support

(New Zealand Society for the Study of Diabetes 2022a)

Where a person is unconscious or unable to cooperate, check capillary blood glucose level (CBGL). If ≤4 mmol/L, administer buccal glucose gel or 1 mg glucagon intramuscular injection (according to local policy) and call ambulance or urgent care provider

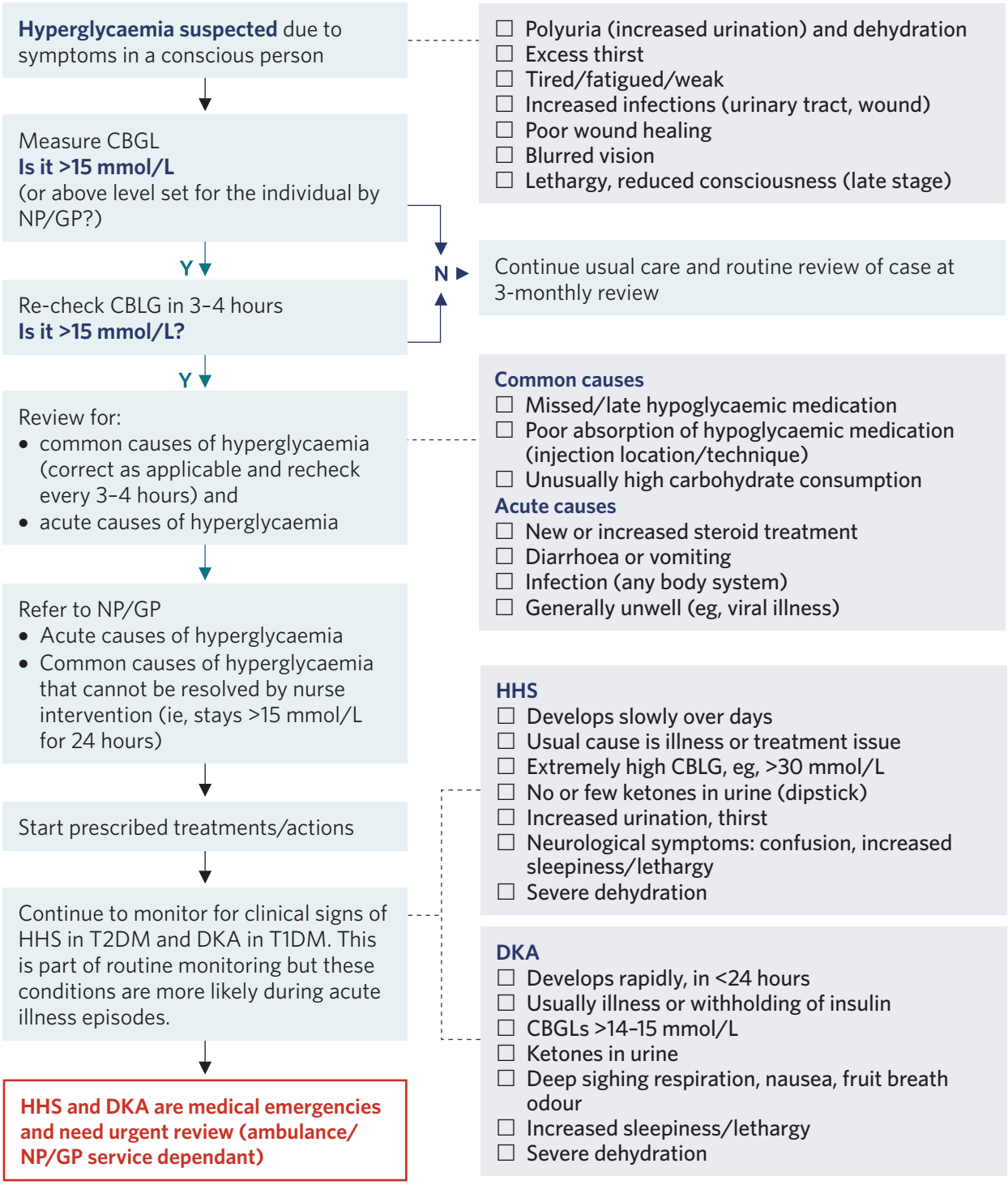


Note: If CBGL < 4 mmol/L after two treatment cycles and person is symptomatic, get urgent support.

Hyperglycaemia

For frail older adults, a before-breakfast CBGL of approximately 8–10 mmol/L is generally acceptable provided they are not experiencing symptoms (bpac^{nz} 2019).

Hyperglycaemia decision support



CBGL = capillary blood glucose level
DKA = diabetic ketoacidosis
GP = general practitioner
HHS = hyperosmolar hyperglycaemic state
NP = nurse practitioner
T1DM = type 1 diabetes mellitus

Sick day advice (New Zealand Society for the Study of Diabetes 2022b)

T1DM

Do not withhold basal insulin from people with T1DM, as this can result in diabetic ketoacidosis. Liaise with GP, NP or diabetes service for sick day advice.

T2DM (Health Hawke's Bay 2023; New Zealand Society for the Study of Diabetes 2022b)

Acute illness (colds, infection, diarrhoea, vomiting) usually causes hyperglycaemia, but reduced oral intake may lead to hypoglycaemia.

Increase CBGL monitoring (three to four times a day).

- Expect CBGL to be between 8 and 15 mmol/L when sick.
- If CBGL stays above 15 mmol/L for 24 hours, refer to GP or NP.
- If CBGL is less than 8 mmol/L, give fruit juice or full-sugar fizzy drinks.
- If CBGL is higher than 8 mmol/L, give water or low-carbohydrate fluid to drink.

Maintain food and fluid intake.

- Chart food and fluid intake.
- Provide one glass of fluid per hour. Aim for about 1,500 mL in 24 hours.
- Provide usual food if person able to tolerate. If unable to tolerate, consider custard, jelly, yoghurt, ice cream (if diarrhoea, avoid dairy) and use soup, bread, Marmite/Oxo broth.

General advice is to give usual diabetes tablets or insulin during sick days **except**:

- do not give the sodium-glucose co-transporter 2 inhibitor (SGLT2i) empagliflozin
- do not give metformin or acarbose if person has diarrhoea or vomiting
- you may need to withhold sulfonylureas if person is not eating
- you may need to reduce basal or premixed insulin (by 20–30 percent) if person is not eating.

Contact GP or NP:

- to investigate cause of acute illness
- if in doubt about administering DM medications
- if diarrhoea or vomiting lasts more than 12 hours
- if CBGL stays above 15 mmol/L for 24 hours.

Treatment

T1DM

People with T1DM need basal insulin every day to avoid diabetic ketoacidosis. Engaging older people with T1DM with a diabetes service is recommended.

T2DM

Non-pharmacological

- Physical activity helps reduce blood sugar and is an effective frailty intervention. Culturally appropriate activities may be more appealing to kaumātua.
- A balanced diet including traditional cultural foods without undue restrictions is recommended. Full-fat products are recommended for people struggling to maintain weight.
- Weight loss **is not** recommended in frail older adults.

Pharmacological

DM pharmacological management escalates through a series of steps. Below is a brief overview of medication considerations. For more details, see the websites of the **New Zealand Formulary** and the **New Zealand Society for the Study of Diabetes**.

First-line medication

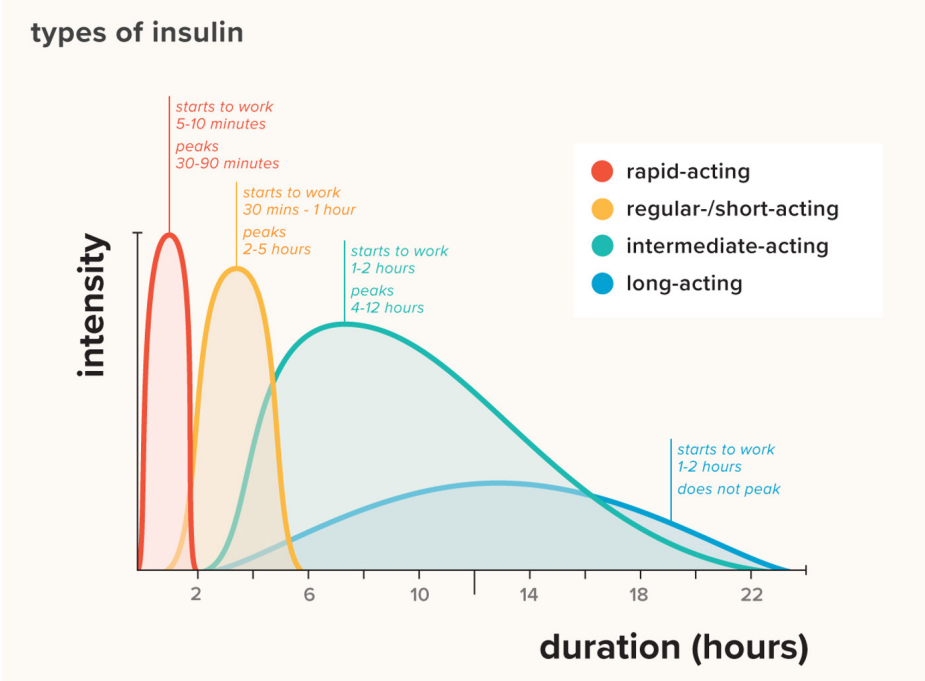
- **Metformin**: Diarrhoea is a common adverse drug effect (ADE), and the dose requires adjustment in the presence of renal impairment.

Second-line medication

- **SGLT2i**: **Empagliflozin** comes combined with metformin or as a separate tablet. Common ADEs include polyuria, skin reactions, urinary tract infection or urogenital infection (thrush). Rare ADEs include diabetic ketoacidosis (CBGLs may be normal) and necrotising fasciitis of the perineum. In practice, genital hygiene, including refreshing pads, is important.
- Long-acting glucagon-like peptide-1 (**GLP-1**) agonists: Give **dulaglutide** or **liraglutide** as a weekly injection. Common ADEs include reduced appetite, nausea, diarrhoea or constipation and, less commonly, vomiting. Rare ADEs are myalgia, muscle weakness, Stevens-Johnson syndrome and thrombocytopenia.
- Dipeptidyl peptidase-4 (**DPP-4**) inhibitor: **Vildagliptin** comes either combined with metformin or as a separate tablet. Rare ADEs are angioedema when also taking angiotensin-converting enzyme (ACE) inhibitors, and liver dysfunction (test before treatment and every 3 months in first year of treatment). Do not use with GLP-1 receptor blockers.

Third-line medication

- **Thiazolidinedione**: **Pioglitazone** increases the risk of heart failure and bone fractures.
- **Sulfonylureas** may be **gliclazide** or **glipizide** or **glibenclamide**. A common ADE is hypoglycaemia, especially if the person is not eating.
- **Insulin** is required in later stages of T2DM. It comes as short-, intermediate- or long-acting medication. Introduce it in steps based on its effectiveness (Ministry of Health 2022; New Zealand Society for the Study of Diabetes 2022a):
  1. basal insulin (intermediate or long acting)
  2. add a separate bolus (short-acting) insulin with largest meal or mixed insulin (short and long acting) with largest meal or, if the person has multiple similar-sized meals in a day, split the dose
  3. insulin bolus with meals.



Source:
Healthline **www.healthline.com/health/type-2-diabetes/insulin-chart**

Care planning: monitoring

DM affects multiple systems of the body. Routine monitoring is an important part of the care plan. Appropriate target ranges for parameters are a balance between best outcome for DM and quality of life in frailty.

Blood pressure targets (Diabetes Canada Clinical Practice Guidelines Expert Committee 2018)

- Systolic blood pressure target is < 140–150 mmHg.
- Avoid < 130 mmHg, which has been associated with falls in frail older adults.

Dyslipidaemia (bpac^{nz} 2021)

In people with frailty and less than 5-year life expectancy, treating dyslipidaemia is unlikely to be beneficial.

Kidney disease

In annual review of glomerular filtration (estimated glomerular filtration rate < 60 mL/min is an indicator of disease), liaise with GP or NP for medication review.

Foot care (bpac^{nz} 2021)

- Provide good-fitting shoes and skin care (use moisturiser) and keep nails short. Conduct neurovascular examination of feet each year. Refer to care via specialist service for older adults with high-risk feet. For new foot wound or infection, contact GP or NP urgently.
- For the New Zealand diabetes foot screening tool from Manatū Hauora, go to: **www.health.govt.nz/our-work/diseases-and-conditions/diabetes/about-diabetes/diabetes-related-conditions**.

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Heart failure
Manawa-hē

The information in this guide is accurate to the best of our knowledge as of June 2023.

Definition

Heart failure is a complex clinical syndrome, where changes to the structure or function of the heart reduce cardiac output. With or without treatment, heart failure progresses over time so older adults are more at risk than their younger counterparts (bpac^{nz} 2022).

Key points

- Overall, heart failure affects at least 10 percent of people aged over 70 years. Within this group, about 50 percent die within 5 years of diagnosis.
- Up to a third of people living in residential care have heart failure (Daamen et al 2015).
- Māori and Pacific peoples experience an earlier onset of heart failure and a higher rate of morbidity and mortality than other New Zealand ethnic groups (bpac^{nz} 2022).

Why this is important

Heart failure is both chronic and progressive. However, treatment can relieve symptoms and improve function and quality of life (Daamen et al 2016). Understanding disease stage supports conversations about treatment and care options. Management of heart failure can be complicated by frailty and other chronic conditions, such as diabetes and chronic respiratory disease (Riley 2015).

Implications for kaumātua*

The burden of cardiovascular disease (CVD) disproportionately affects Māori compared with New Zealand Europeans (Ministry of Health 2018). The reasons are related to ongoing inequities in health and in experiences of social determinants of health (Miner-Williams 2017; Selak et al 2020). Due to the higher incidence of CVD in Māori, it is likely that there will be kaumātua in aged residential care who have heart failure. Providing them with appropriate care is vital.

A Māori view of health is holistic. When caring for kaumātua with heart failure, it is important to consider care from this perspective, rather than focusing solely on the disease of heart failure. A holistic approach takes account of the person's spiritual and emotional wellbeing and includes their **whānau**/family.

* Kaumātua are individuals, and their connection with culture varies. This guide provides a starting point for a conversation about some key cultural concepts with kaumātua and their whānau/family. It is not an exhaustive list; nor does it apply to every person who identifies as Māori. It remains important to avoid assuming all concepts apply to everyone and to allow care to be person and whānau/family led.

The following are aspects to consider in your approach to care.

- Kaumātua and whānau/family may see symptoms associated with heart failure as a normal or expected part of ageing. If they do, it is essential to give them all the information they need to fully participate and engage in treatment and ongoing management.
- For effective management of CVD, health professionals must have a trusting relationship with kaumātua and whānau/family (bpac^{nz} 2008; Kerr et al 2010).
- **Whakawhanaungatanga** (building meaningful connections) is critical in establishing these relationships. See the *Guide for health professionals caring for kaumātua | Kupu arataki mō te manaaki kaumātua* for more information.

Whānau/family can be a useful source of valuable, culturally informed (**mana**-enhancing) interventions as they are invested in the health and wellbeing of their loved one. Involve them in care planning wherever possible.

Assessment

Nursing assessment of heart failure includes identifying potential new cases, maximising the health of those with heart failure and responding to acute exacerbations.

Identifying new heart failure

- New-onset heart failure can be difficult to identify because classic symptoms, such as dyspnoea, fatigue and reduced exercise tolerance can be caused by other conditions (bpac^{nz} 2022).
- People with heart failure are more likely to have a history of cardiac disease, fatigue, irregular heart rate, oedema in lower limbs, rapid weight gain and breathlessness when lying flat (orthopnoea) or that causes sudden waking from sleep (paroxysmal nocturnal dyspnoea) (Daamen et al 2015).
- ANEWLEAF is a tool that can help identify acute exacerbation of heart failure if that occurs as part of a new heart failure diagnosis or as a result of unmanaged disease (Heckman et al 2018).

A	Agitation/anxiety (especially if new)
N	Nights bad: trouble breathing, urinating more
E	Oedema (swelling in which you can leave a fingerprint indentation)
W	Weight gain (from water retention)
L	Light-headed, dizzy
E	Extreme trouble breathing when lying flat
A	Abdomen bloated, abdominal pain, not hungry
F	Fatigue, tired

- The most common primary care diagnostic test for heart failure is N-terminal pro-brain natriuretic peptide (NT-ProBNP). In people aged 75 years and over, a level of more than 210 pmol/L (1,800 pg/ml) makes heart failure likely (bpac^{nz} 2022).

Identifying an acute exacerbation of heart failure*

- Use the tool ANEWLEAF (see above).

Other signs

- Look for evidence of fluid overload, pitting lower limb and/or sacral oedema. Listen for audible 'wet' breath sounds (Riley 2015). Check the person's weight: an increase of ≥ 2.5 kg in 1 week or ≥ 1–2 kg in 24 hours is significant.
- Measure vital signs. Most people will have normal or high blood pressure in the early stages of an acute exacerbation (Mebazaa et al 2015).
- Shortness of breath is a key sign – see the first table below.

Breathlessness in heart failure (adapted from Mebazaa et al 2015)

	Mild to moderate shortness of breath		Severe shortness of breath
Rate	< 20 breaths/minute	> 20 breaths/minute	> 24 breaths/minute at rest and using accessory muscles
Saturation	> 95%	94%	≤ 93%
Activity	Dyspnoea with walking (state distance)	Dyspnoea with usual activity	Dyspnoea at rest
Speech	Unable to finish a whole sentence	Short sentences or a few words only	Unable to speak, nodding only
Position	Using pillows in bed	Sitting upright	Unable to lie down due to shortness of breath (refusing to go to bed)
Cyanosis	No cyanosis	Some lip and fingertip cyanosis	Severe cyanosis with cold sweat

Staging diagnosed heart failure

- Disease staging reference: New York Heart Association (NYHA) classification

NYHA class	Description	Symptoms
1	No symptoms	No obvious symptoms with ordinary physical activity
2	Mild	Comfortable at rest and Dyspnoea, fatigue or palpitations with physical activity
3	Moderate	Comfortable at rest and Dyspnoea, fatigue or palpitations with minimal activity
4	Severe	Dyspnoea, fatigue or palpitations at rest and worse with activity

* Some heart failure patients present with chest pain or syncope. See the guides to *Acute deterioration | Te tipuheke tārū* or *Syncope and collapse | Tīrehe*.

- The definition of advanced heart failure from the American College of Cardiology Foundation and American Heart Association is:
  - more than two hospitalisations in 1 year
  - progressive deterioration in renal function
  - unintended weight loss (cardiac cachexia)
  - unable to tolerate angiotensin-converting enzyme (ACE) inhibitors or beta-blockers because of hypotension and/or worsening renal function
  - needing more than 160 mg of furosemide (or equivalent) daily
  - hyponatraemia.
- Although the mortality rate with heart failure is high, no particular tool is any better at estimating life expectancy than clinical experience. Conversations about advance care planning or shared goals of care are part of caring for someone with heart failure.

Treatment

Pharmacological

The mainstay of treatment is pharmacological. Use a loop diuretic to improve symptoms of fluid overload and an ACE inhibitor, a beta-blocker and spironolactone to decrease the chance of mortality and hospitalisation. Individuals will vary in their response to medicines; however, provided there are no contraindications, medications are usually titrated to the most effective dose (Atherton et al 2018).

Monitoring for medication benefits and potential harms

- Weigh daily, ideally first thing in the morning and the same time every day. If the person gains ≥ 1–2 kg in 24 hours or ≥ 2.5 kg in 1 week, they require general practitioner or nurse practitioner review.
- If diuretic has been changed, weigh daily. Review and report results against target weight and timeframe. Alert prescriber when targets are either not met or exceeded.
- Review laboratory results. Look for low sodium, low haemoglobin and decreasing estimated glomerular filtration rate (Atherton et al 2018).
- Be alert for signs and symptoms of gout (Atherton et al 2018).
- Be alert for heart failure symptoms when any medication is changed (eg, corticosteroids increase the risk of fluid overload and antidepressants can worsen hyponatraemia).

Fluid balance

- To help fluid management, restricting fluid to 1.5 L per day is common. Also recommended is to limit sodium intake to no more than 2 g per day (Atherton et al 2018).

General health

- All treatments for frailty are relevant to this group.

Care planning

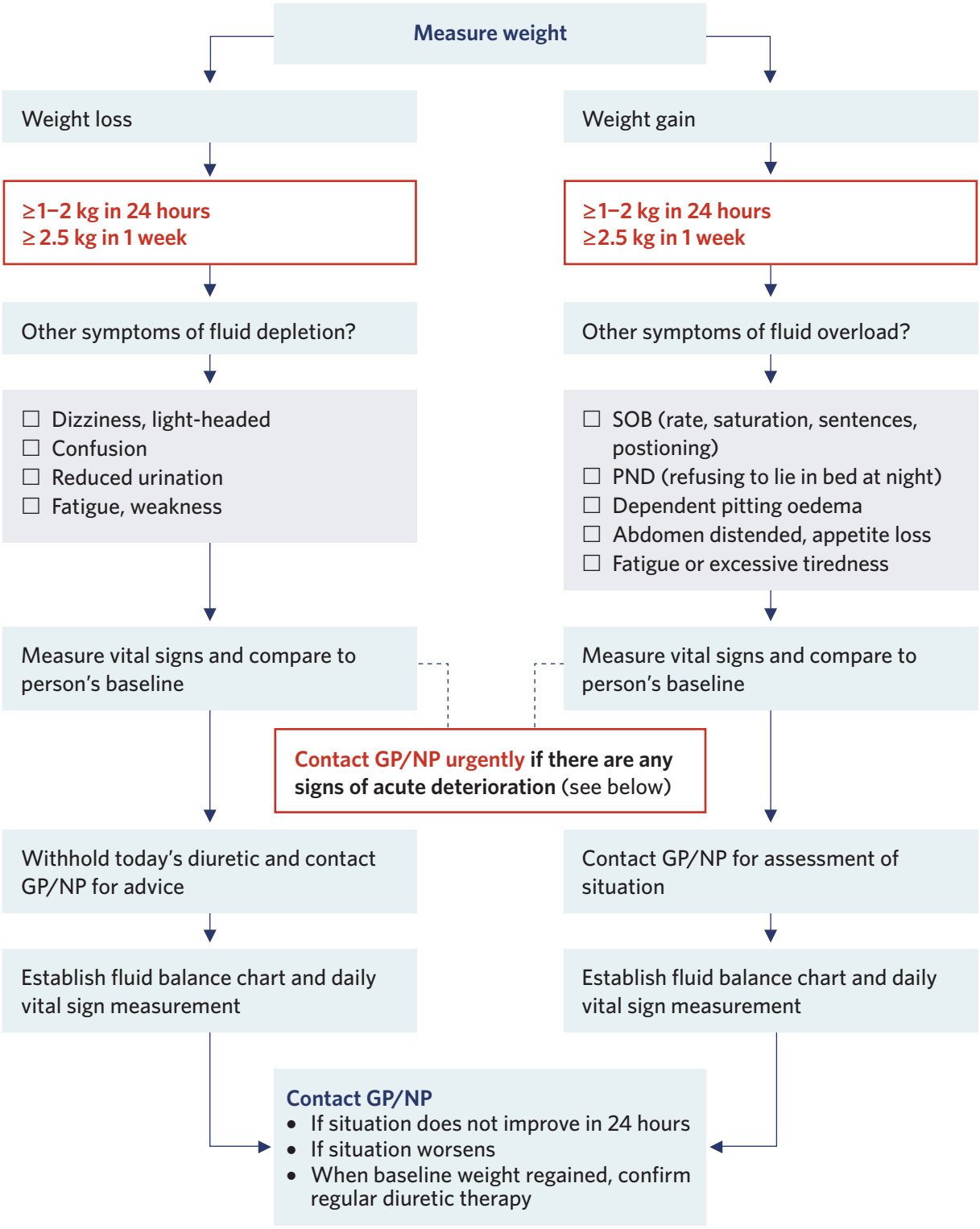
Heart failure is a progressive chronic condition that worsens frailty. Interventions aimed at delaying or improving symptoms of frailty (physical activity, nutrition, social care), along with medication management, apply to this group.

Further resources

Chronic Disease Management in Long-term Care: Heart failure. Provincial Geriatrics Leadership Ontario webinar. URL: **rgps.on.ca/resources/chronic-disease-management-in-long-term-care-heart-failure**.

Decision support

Diuretic management



Vital signs – these ranges indicate acute deterioration

- ☐ Respiratory rate: ≥ 25 or < 10 breaths per minute
- ☐ Oxygen saturation ≤ 93%
- ☐ Systolic blood pressure ≤ 100 mmHg
- ☐ Pulse ≥ 100 or ≤ 50 bpm
- ☐ Temperature > 37.2°C **or** ≥ 1°C above baseline **or** < 35°C

bpm = beats per minute
GP = general practitioner
NP = nurse practitioner
PND = paroxysmal nocturnal dyspnoea
SOB = shortness of breath

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Leg ulcer care
Te maimoatanga o te kōmaoa o te waewae

The information in this guide is accurate to the best of our knowledge as of June 2023.

Definition

Leg ulcers are chronic lower-leg wounds that do not heal in an expected and timely manner. Leg ulcers tend to start with trauma but are a result of underlying damage to veins, arteries or both. Venous leg ulcers are the most common (40–85 percent) followed by those with arterial aetiology (5–30 percent), mixed venous and arterial ulcers (10–20 percent) and other causes (5–25 percent). It is not uncommon for all leg ulcer types to take 6 months or more to heal (Harding et al 2015).

Key points (Carville 2012)

- The gold standard treatment for venous leg ulcers is compression therapy. Before that can occur, a full diagnostic work-up is required. Only health professionals with specialist knowledge and skills should apply full compression therapy.
- Arterial leg ulcers generally require specialist diagnostic tests and often surgical intervention to resolve the underlying cause.
- Mixed leg ulcers (with both venous and arterial causes) also require specialist review.

Why leg ulcers are important

Leg ulcers cause pain and disability and can reduce quality of life. They require specialist assessment for optimum outcomes.

Implications for kaumātua*

Māori have a holistic view of health and wellbeing, so it is important to treat the 'whole person' rather than just 'the hole in the person'. The Māori cultural principles of **mana** (dignity, prestige, status), **tapu** (sacred, prohibited, restricted) and **noa** (neutral, ordinary, unrestricted) apply to leg ulcer care, just as they do to wound assessment. Observing these principles upholds the mana of kaumātua and contributes to providing holistic care (see the *Wound assessment* guide for a more detailed explanation).

It is important to give kaumātua and their **whānau**/family all the information they need to participate in treatments such as compression therapy, leg exercises and elevation (Jull et al 2018). Leg ulcers heal slowly, can be large and/or malodorous and may be a source of **whakamā** (shame, embarrassment) for kaumātua. Be particularly aware of the risk that some kaumātua may under-report pain due to whakamā.

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Whānau/family may have culturally informed interventions that support wound treatment from a holistic perspective. These may include using **rongoā Māori** (traditional Māori medicines) and in some cases **pure** (cleansing rituals). Explore these options on an individual, case-by-case basis.

Assessment

Venous leg ulcers develop when pressure in lower-limb veins increases, most often due to damaged vein valves. When these valves are damaged, blood flows back towards the ankle and the pressure in the vein increases, causing oedema and fragile blood capillaries and skin. If trauma occurs in this situation, it is likely to lead to leg ulceration (Hughes and Balduyck 2022).

Arterial leg ulcers develop where damaged or blocked arteries result in decreased blood flow to tissue. Skin can break down after trauma or spontaneously. Some leg ulcers have both venous and arterial causes.

Key point

- If new lower-leg wounds fail to heal or make significant progress in 6 weeks, consider a referral to a wound care service for diagnosis and treatment planning. Specialist services complete a full assessment, including ankle brachial pressure index to determine aetiology and develop an associated treatment plan.

Wound characteristics (Harding et al 2015)

Table 1: Characteristics of the main types of chronic lower-limb wounds

Type	Location	History	Ulcer characteristics	Other findings
Venous leg ulcer 	Gaiter region of the leg; most commonly around the medial malleolus	Varicose veins DVT Other venous disease Trauma Surgery	Irregular sloping margins Usually shallow Fibrinous, granulating base Variable size: from small to encircling the leg High exudate levels May be painful; pain relieved by elevation of the limb	Periwound/lower limb oedema Ankle flare Varicose veins Varicose eczema Lipodermatosclerosis Hyperpigmentation Atrophie blanche
Arterial leg ulcer 	Toes, feet or lateral or pretibial aspects of the lower leg	Intermittent claudication/ rest pain Cardiac or cerebrovascular disease	Punched out, sharply demarcated edges Painful Small and deep Necrotic wound base Dry/low exudate levels Gangrene may be present	Surrounding skin is often dry and shiny with loss of hair Weak or absent foot pulses

Table 2: Lower-leg changes associated with venous hypertension and chronic venous insufficiency

Oedema		Swelling of the limb that may indent if finger pressure is applied (pitting oedema); due to increased capillary permeability
Ankle flare		Fan-shaped pattern of dilated veins around the malleoli on the medial or lateral aspects of the ankle and foot; due to dilation of veins in these areas because of venous hypertension
Hyperpigmentation		Reddish brown discolouration of the skin; due to the deposition of haemosiderin in the skin
Lipodermatosclerosis		Areas of painful, tight skin with hardened subcutaneous tissues just above the ankle; due to the infiltration of fibrin and inflammation and result in the leg shape resembling an inverted champagne bottle
Atrophie blanche		White areas with decreased capillary density, often associated with lipodermatosclerosis
Varicose eczema		Itchy, erythematous, weeping and scaled areas of skin that may be painful; due to inflammation triggered by oedema resulting from venous hypertension

NB: Skin changes associated with chronic venous insufficiency may coexist. Photos courtesy of Giovanni Mosti, Rut Öien, Patricia Senet and Wolfgang Vanscheidt.

Source: Harding et al (2015)

Treatment

- Arterial leg ulcers often require surgical intervention, so referral to specialist services is required.
- For venous leg ulcers and some mixed ulcers, compression therapy is the gold standard treatment. This requires specialist assessment and training. Do not use compression therapy without a formal assessment from an appropriately qualified wound specialist; it could increase risk of ischaemia.
- There are multiple modes of compression therapy that wound specialist services can advise on and provide. Service provision varies, so contact your local Te Whatu Ora district for more information (New Zealand Wound Care Society 2013b).
- Compression hosiery can be prescribed to help prevent the development of venous leg ulcers in at-risk people and to avoid recurrence of healed ulcers. The patient wears it during the day. You can remove it overnight but should reapply it before the person's feet touch the floor to avoid leg swelling, which makes application difficult. Slack (worn-out) hosiery will not work correctly; to access a replacement, make a referral to the prescribing wound service (New Zealand Wound Care Society 2013a).

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Nutrition and hydration
Te taiora me te mitiwai

The information in this guide is accurate to the best of our knowledge as of June 2023.

Definition

Eating and drinking are fundamental to life. To maintain health, people need to consume a diet that meets the energy and nutrient needs of the body. Human bodies are about 55 percent water, and normal bodily functions rely on adequate hydration (Popkin et al 2010).

Key points

- Age-related changes, cognitive decline and frailty combine to increase the risk of malnutrition and dehydration in older people (Hooper et al 2016; Lukito 2021).
- Cognitive, bladder and bowel function are sensitive to nutrition and hydration status.
- Both food and fluids provide nutrition and hydration. Total water intake includes food sources such as fruit and vegetables (Masot et al 2020), while some liquids such as soups and supplements provide nutritional value.

Why this is important

For people living in aged residential care (ARC), dehydration increases the risk of mortality and rates of delirium and is associated with reduced cognitive function and speech difficulties (Hart et al 2020). In addition, a lack of dietary protein can contribute to sarcopenia (loss of skeletal muscle and strength), which is associated with a loss of function and is a key marker of worsening frailty.

Implications for kaumātua*

Consider three key interacting Māori cultural beliefs when supporting kaumātua with eating and drinking:

- **mana** (dignity, prestige, status) – kaumātua have a lot of mana, which increases as they age
- **tapu** (sacred, prohibited, restricted) – as mana increases, so does tapu (Mead 2016)
- **noa** (neutral, ordinary, unrestricted).

Eating and drinking

Kai (food) is very important in Māori culture; it is believed to originate from the **atua** (gods).

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- Kai nourishes the **tinana** (the body), **hinengaro** (mind), **wairua** (spirit) and **whānau** / family (community).
- Kai is a key way of demonstrating **manaakitanga** (hospitality, caring for others).
- People share kai as part of **whanaungatanga** (connecting) and belonging to a collective.
- Specific **tikanga** (customary practices or behaviours) are associated with kai.

Tikanga around kai

Maintaining a separation and balance between tapu and noa is vital. When this is not maintained, a breach of tapu occurs, and traditionally this is thought to incur the wrath of the atua (gods). A breach of tapu can be significant for kaumātua and their whānau/family.

Kai and **wai** (water) are considered noa, while people and their bodily fluids are considered tapu. Items that touch the body, particularly the head (eg, hairbrush, toothbrush, clothing, bedding) carry tapu from the individual. This tapu can be neutralised, but until that happens, such items should be kept away from food.

The following guidelines can help maintain balance in food-related tapu and noa.*

- Store food in food-only areas. (Do not mix food and non-food items.)
- Use receptacles for food and water for eating and drinking purposes only.
- Do not pass food over the head of kaumātua.
- Keep food surfaces (tables, benchtops) exclusively for purposes related to food.
  - Do not put bedding, clothing, toiletries, hairbrush, flannels or urinals on food tables.
  - Do not put food on beds, chairs or other non-food surfaces.
  - Do not sit on tables, benchtops or surfaces used for food or medication.

Mātauranga Māori

As well as observing tikanga (above), you can promote **mātauranga Māori** (Māori knowledge) around kai and **wā kai** (mealtimes) by inviting or offering a blessing of kai with **karakia** (prayer) before eating. Creating opportunities to share kai with whānau/family and offering kai Māori (traditional foods) are other ways to support mātauranga Māori.

Example of a blessing for food**

Listen to audio of this karakia

Te reo Māori (Māori language)	English
Whakapaingia ēnei kai	Bless this food
Hei oranga mō a mātou tinana	To nourish our bodies
Me ō mātou wairua hoki	And our spirits
Āmene	Amen

* Tapu and noa are key concepts that apply to many areas of life, not just to eating and drinking.
** This just one example of a karakia. Check with kaumātua about their preferred karakia.

Troubleshooting

If you notice that the kaumātua has a change in their relationship with kai (they are not eating or drinking), the reason may be either acute ill health or a tikanga breach (eg, the kaumātua may not consider 'breakfast in bed' a treat if the tray is placed on the bed).

Tapu, noa and mana

Upholding the mana of kaumātua includes observing tapu and noa (as above) as well as supporting them to maintain as much independence as possible with eating and drinking. For example, use light-weight but normal-looking cups and glasses before resorting to adaptive equipment, and use clothes protectors on the lap or tucked in the collar like a napkin.

For further information on any of the above concepts, refer to the *Guide for health professionals caring for kaumātua | Kupu arataki mō te manaaki kaumātua*.

Assessment

It is recommended that registered nurses in ARC remain alert to the possibility of dehydration in the people living in their care facility (Bunn and Hooper 2019). Dehydration is often associated with low fluid intake, particularly when someone is ill. Medication changes, environmental issues such as high environmental temperatures (summer or heatwave) and proximity of fans, heating and air-conditioning units all impact on hydration status.

Hydration assessment

- Water intake predicts hydration status. However, there is no globally accepted evidence on which to base a recommended daily dose (volume) of water for frail older people living either at home or in ARC (Hart et al 2020; Masot et al 2020).
- The European Society for Clinical Nutrition and Metabolism (ESPEN) and the European Food Safety Authority (EFSA) hydration guidelines are the most widely accepted, and they make age-related recommendations. They recommend a daily (24-hour) fluid intake of 1.6 litres for women and 2 litres for men (Masot et al 2020).
- Gaspar (2011) provides a nomogram to tailor fluid levels based on height and weight (see **page 150**). According to this scale, those over 75 years of age who are of average height and weight should drink 1.7 litres if female and 1.9 litres if male a day (assuming no contraindications such as a medically initiated fluid restriction). This is similar to the ESPEN and EFSA recommendations.
- Evidence indicates that drinking less than the recommended level, particularly 1 litre or less per day, worsens the effect of chronic conditions (Botigué et al 2019).
- Some evidence indicates that having a low fluid intake (< 1 litre) in a day despite help from care staff is a marker of acute deterioration and impending end of life (Kawakami and Hamano 2020).

- Observable signs of dehydration can be unreliable markers of hydration status. Such signs include dry mouth and tongue, skin turgor, capillary refill time > 3 seconds and concentrated urine (Bunn and Hooper 2019).
- Dehydration can cause acute confusion, change in speech and memory and acute fatigue and hypotension (Hart et al 2020). Dehydration also contributes to constipation.

Nutritional assessment

It is recommended that you assess nutritional status using a standardised tool.

- The Mini Nutritional Assessment – Short Form is relatively quick to administer and is freely available from the developer from **www.mna-elderly.com**. It was developed specifically for use in older people and has been used in practice and research for over 25 years (Guigoz and Vellas 2021).
- A nutritional assessment is also included in the interRAI Long-Term Care Facilities assessment.

Hydration population approach

Older people often have a reduced thirst sensation, so it is recommended to set a routine for encouraging fluid intake. Some examples are:

- happy hour with 'mocktails'
- scheduling regular rounds that offer tea, coffee and other hot drinks (considering mug size and weight)
- social drinking (non-alcoholic) – such as making sharing a drink part of whānau/family visits
- including water bottle holders on walking frames and wheelchairs so drinks are always to hand (plus encouraging participation through diversional therapy to 'make your own water bottle cover')
- conducting an internal audit of drinks in reach
- a hydration staff champion
- disguised drinking (ice blocks, jelly, fruit with high water content)
- for warm and hot days, having additional rounds of 'special' drinks (eg, iced diet lemonade).

Hydration individual approach

At times, older people living in ARC do become dehydrated. If someone does, it is important to consult with a general practitioner (GP) or nurse practitioner (NP) because the person may need treatment such as subcutaneous or intravenous fluids alongside oral rehydration.

- Studies report subcutaneous fluids are effective for mild to moderate dehydration with minimal complications (Broadhurst et al 2020; Caccialanza et al 2018). A dextrose/saline solution is recommended, with a GP or NP prescribing a volume of up to 2 litres over 24 hours (Woodward 2013).
- Intravenous fluids are generally restricted to acute hospital care.

Nutritional supplements and diet modification

- A food-first approach is recommended to improve nutritional status. This includes monitoring food intake closely, increasing calorie-dense foods and increasing the frequency of snacks. However, if an older person loses more than 5 percent of their body weight in 3 to 6 months, or 10 percent in 1 month, they are likely to need a referral to a dietitian for further assessment and diet modification, along with a GP or NP review.
- People with swallowing difficulties are likely to need diet modification. The international Dysphagia Diet Standardisation Initiative is the best resource to access for describing modified diets (**iddsi.org**).

Note: Be aware of the concepts of tapu and noa so you don't inadvertently discourage hydration. As a result of any breach of tapu, the person may not want to drink.

Care planning

Hydration

- Develop an individual strategy to maintain hydration. Consider setting a fluid goal (within any fluid restrictions). Consider the impact of physical activity, cognition and personal preferences.
- Combine drinking with a fun activity, such as 'high tea', 'happy hour' and whānau/family visits (Hart et al 2020).
- Use fluid intake charts only when clinically indicated.

Nutritional

- The Mini Nutritional Assessment provides a treatment guide for assessed level of need.

Māori culture

- Identify surfaces for food, oral medication and inhaled medications only (observe tapu and noa principles). Topical medications should not share the same surface as food.
- Ask what the kaumātua prefers for blessing of food before eating (and who will provide it).
- Find out their preferred place to eat (eg, dining room or sitting in chair rather than 'breakfast in bed').
- Ask about their food and drink preferences when they are sick (as it's important to stay well-nourished and hydrated during this time).

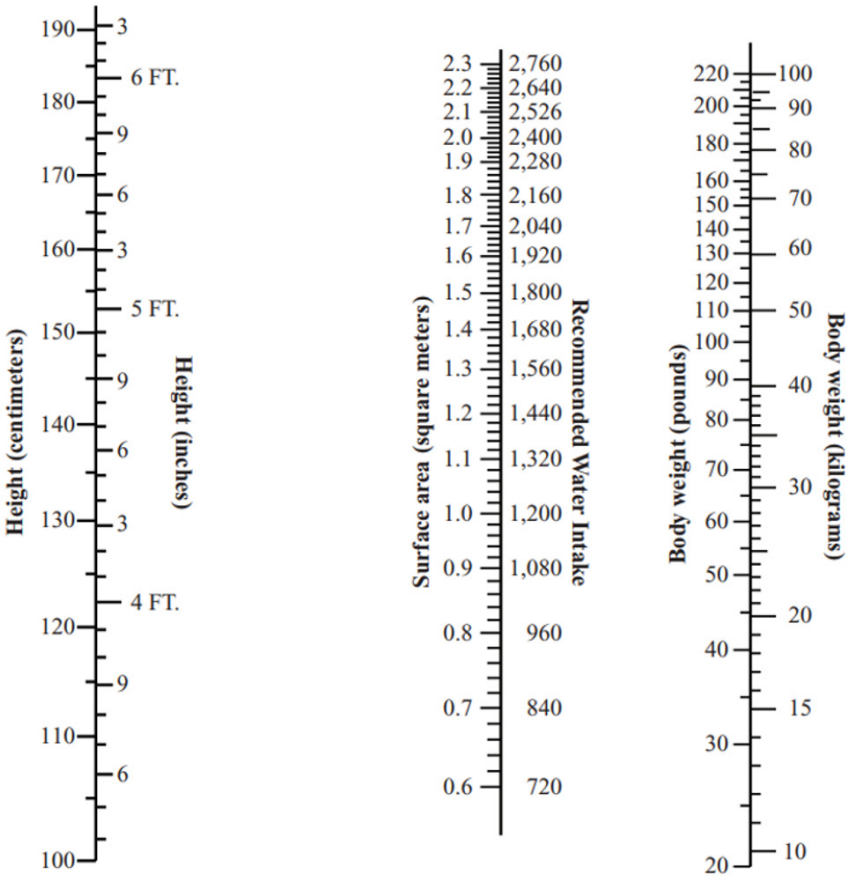
Other cultural preferences

- Ask about traditions, preferences and protocols. Many cultures have food-specific practices.

Nomogram

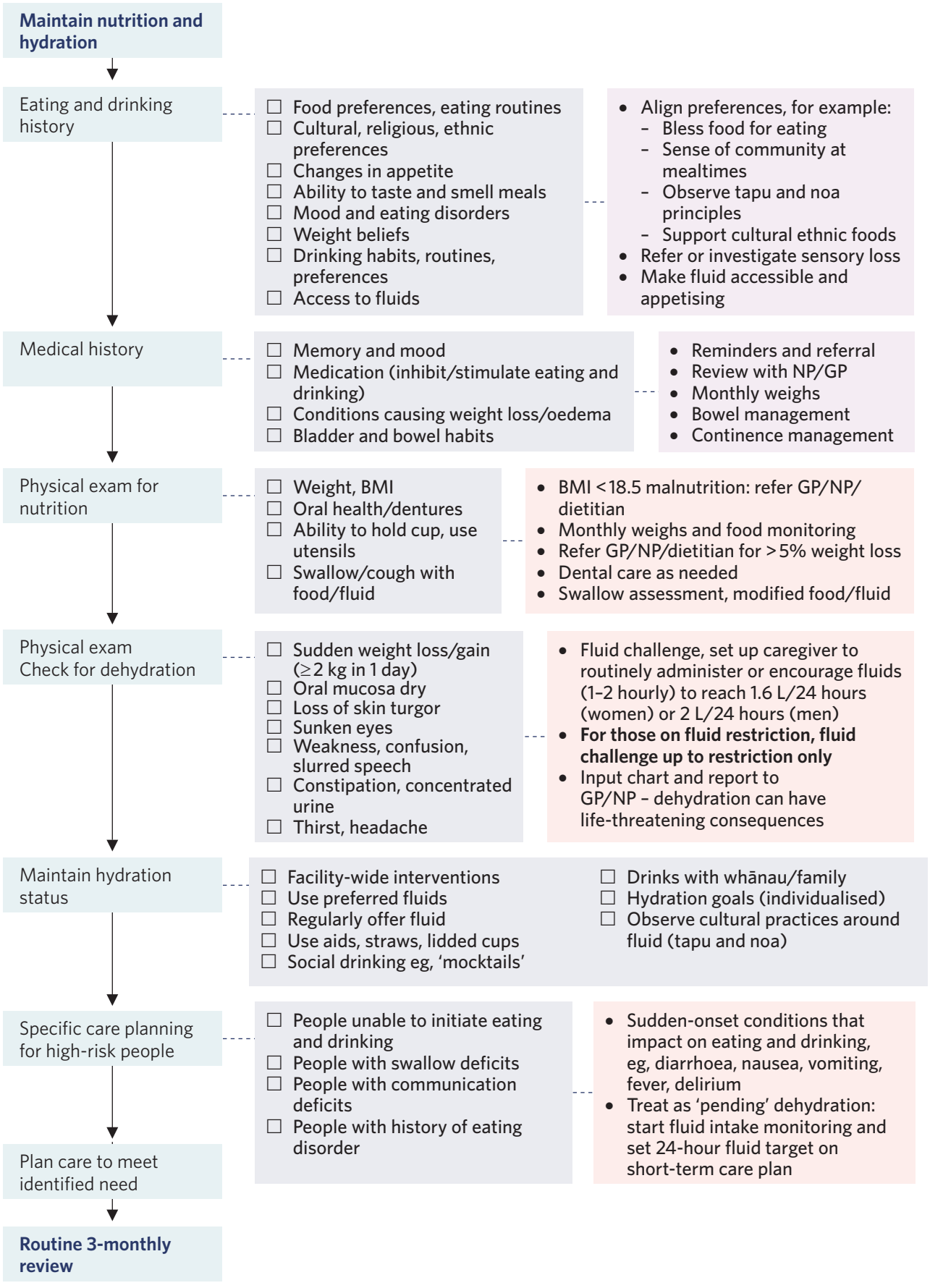
Recommended water intake in ARC (Gaspar 2011)

- To use the nomogram, find the person's height (left scale) and weight (right scale) draw a line joining the two points, then read the recommended fluid intake off the centre scale.



Source: Gaspar 2011

Decision support



BMI = body mass index GP = general practitioner NP = nurse practitioner

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Scabies
Mate māngeongeo riha

The information in this guide is accurate to the best of our knowledge as of June 2023.

Definition

Scabies is a contagious skin infestation of the scabies mite *Sarcoptes scabiei* variety *hominis.* It is characterised by an intensely itchy rash that is an allergic reaction to the presence of the mite in the stratum corneum (just under the skin) (Chandler and Fuller 2019).

Key points

- After mating, female mites burrow into the skin and lay two to three eggs every day until death (1–2 months). Eggs take 2–4 days to hatch. Maturation and ability to reproduce occur in 10–13 days, repeating the lifecycle.
- Mites survive for about 3 days away from a human host.
- Scabies treatments do not kill scabies eggs.

Why this is important

Older adults are the age group most vulnerable to scabies. Scabies rash can take 4–6 weeks to develop, during which time infestation can spread by skin-to-skin contact throughout an aged residential care (ARC) setting. Some older people do not develop a classic rash, which delays diagnosis further.

Implications for kaumātua*

To assess for scabies, you need to enter the personal space of the kaumātua, which is considered **tapu** (sacred, protected). To avoid causing distress and potential damage to tapu and **mana** (dignity, status, prestige), ask for permission to enter tapu space (Mead 2016). Touching the head is considered very intimate; take particular care to seek permission before doing so.

Kaumātua may experience **whakamā** (shame, embarrassment) about having scabies, particularly if it is around the groin, genitalia or breasts. For this reason, they may be reluctant to report issues.

Kaumātua and **whānau**/family may have traditional remedies to help relieve itching and skin irritation. For example, **kawakawa** balm is known for its antibacterial and anti-inflammatory properties. This guide identifies complementary therapies (additional tools). Explore these on a case-by-case basis and support them where appropriate.

* Kaumātua are individuals, and their connection with culture varies. This guide provides a starting point for a conversation about some key cultural concepts with kaumātua and their whānau/family. It is not an exhaustive list; nor does it apply to every person who identifies as Māori. It remains important to avoid assuming all concepts apply to everyone and to allow care to be person and whānau/family led.

See the *Guide for health professionals caring for kaumātua | Kupu arataki mō te manaaki kaumātua* for more information.

Assessment

The following are the four main types of scabies (Chandler and Fuller 2019).

- **Classical scabies**: Most common type, with about 5–15 mites. Intense itchy rash, usually on palms, soles, fingers and toes. Worse when hot (at night and after shower/bath).
- **Nodular scabies**: Chronic infestation. Clusters of firm nodules under arms and genital areas may persist after successful treatment.
- **Crusted (hyper infestation)**: Thousands of mites. Thick skin scaling, palms, finger webs, soles of feet. Most contagious and causes outbreaks in ARC.
- **Complicated**: Scabies with secondary skin infection.

Diagnosis

Recommendation: If in any doubt about the diagnosis, refer to a dermatologist for a review.

In an ARC setting, health professionals generally use clinical signs and symptoms to make a diagnosis. Consensus criteria for diagnosis of scabies are available (Engelman et al 2020).

Confirmed scabies – if there is at least one of:

- mites, eggs or faeces on light microscopy of skin samples
- mites, eggs or faeces visualised on an individual, using a high-powered imaging device
- mites visualised on an individual, using dermoscopy.

Clinical scabies – if there is at least one of:

- scabies burrows
- typical lesions affecting male genitalia
- typical lesions in a typical distribution and itch and positive contact history.

Suspected scabies – if there is at least one of (and if other differentials are less likely):

- typical lesions in a typical distribution **and** itch **or** positive contact history
- atypical lesions or atypical distribution **and** itch **and** positive contact history.

Supporting the diagnosis (bpac^{nz} 2022; Maguire 2022)

History

Intensely itchy rash on the trunk, limbs or hands, which is worse when hot. In ARC, suspect scabies when a new rash affects two or more people (residents or staff), with the aim of minimising risk of transmission.

Itch is important to diagnosis. However, the onset of itch varies:

- first scabies infestation: 4–6 weeks from infestation to itch
- previous scabies: hours to 1 day from infestation to itch (people are sensitised)
- crusted scabies: minimal or no itch.

Itch may also persist for several weeks after treatment.

Examination: People with scabies often scratch skin, and secondary infections and eczema can be present.

- **Hypersensitivity rash**: You will find it on trunk and limbs, especially forearms and waist. Polymorphic: scattered erythematous papules (red bumps), pustules and urticated plaques (hive-like). Folliculitis (pimples), impetigo (sores) and eczema (dry or blistered patches) are common in persistent cases of scabies. Long-standing infestation leads to clusters of larger nodules in armpits, groins, genitalia and breasts.
- **Burrows**: It is best to use dermoscopy (magnification) to find burrows on the wrists, finger web spaces and/or sides and soles of feet. Burrows in any of these locations are diagnostic.

Diagnostic tests: There is no standard diagnostic test for scabies.

- **Classical scabies**: Skin scrapings are not recommended because, with so few mites on one person, it is hard to find any (Hewitt et al 2015).
- **Crusted scabies**: Dermoscopy is recommended. If that is not available, skin scraping can be useful (given thousands of mites are on one person).

Treatment

None of the available treatments is effective against eggs. Treatments applied correctly have the same efficacy (Dressler et al 2016). The logistics of treating a whole ARC facility mean oral medication is more likely to be effective when treating multiple people simultaneously.

Classical scabies – healthy, mobile individuals

- Apply topical 5% permethrin cream or lotion to all skin surfaces.
- Wash off after 8–12 hours.
- Repeat application after 7–10 days (this is enough time for eggs to become mites).
- Treatment requires total skin coverage on all affected people on the same day. In ARC, the logistics required to achieve this may mean treatment failure is a risk and ivermectin may be a more practical treatment (bpac^{nz} 2009).

Classical scabies – debilitated, bed-bound or immobile people

- Administer ivermectin (oral) 200 mcg/kg.
- Repeat after 7–10 days.

Crusted scabies

Recommendation: Consult a dermatologist and skin check everyone in the ARC setting.

- It may be necessary to repeat ivermectin treatment cycles until no burrows are detected.
- It may be necessary to combine permethrin and ivermectin treatments.

Oral ivermectin (Stromectol) dosage: Available as 3 mg tablets; special authority required

Patient weight (kilograms)	25–35	36–50	51–65	66–79
Number of tablets	2	3	4	5

Treatment notes

- In ARC, when scabies is diagnosed in **any resident or staff member**, check the skin of all residents, staff and visitors, at least in the care unit where it is discovered (see the Decision Support Tool on **page 159**).
- Simultaneously treat all affected individuals and their close contacts because some people with scabies may not have developed a rash yet.
  Note: **Close contacts** are people providing direct personal care, people with regular skin contact (eg, hugging, holding hands), intimate contacts and co-habitants.
- In ARC, treatment of residents and staff may be limited to one part of the facility (eg, dementia unit) if residents and staff do not routinely move between care units.
- Coordinating treatment and environmental decontamination is the key to successful eradication of scabies from ARC, even if it takes a few days to develop a plan.
- Public health may be able to help with contact tracing – refer to your local service.

Infection prevention and control

Scabies prevention in ARC

Outbreaks of scabies in ARC are a major headache, so prevention is always preferable. Recommended practice is to check the skin of all new residents in the first day or two of admission and refer skin issues to a general practitioner or nurse practitioner for assessment.

To reduce the risk of a facility-wide outbreak, consider new itchy rashes affecting more than one person (resident or staff) to be an infestation until proven otherwise.

Scabies infestation

Contact precautions: The scabies mite is transmitted by direct skin-to-skin contact with an infested person or contaminated surface. In addition to standard precautions, the following contact precautions are recommended.

- Isolate residents with scabies until they have had their first treatment.
- Direct care staff should wear disposable gloves and long-sleeved gowns when providing personal care for a person with scabies and for handling potentially contaminated clothing, linen and equipment. Continue with these precautions until first treatment (classical scabies) or second treatment (crusted scabies) is completed.
- Laundry staff: Ideally, seal contaminated linen in dissolvable laundry bags and place it in a washing machine without opening the bags . If this is not possible, laundry staff must wear disposable gloves and long-sleeved gowns when handling contaminated linen.
- Limit the number of visitors during treatment. If that is not possible, visitors should also use contact precautions (disposable gloves and long-sleeved gowns) when visiting residents with crusted scabies.

Environmental decontamination

Mites can live in the environment for about 3 days. Killing mites requires extremes of temperature or separating them from the host. Decontamination avoids reinfestation.

Personal environment

On the morning after treatment, decontaminate bedding, towels and curtains (if regularly handled by someone with crusted scabies) by both:

- a hot wash (50°C or 120°F for at least 10 minutes) **and**
- a hot dry (hottest tumble dryer setting for 20 minutes).

Decontaminate clothing worn immediately before treatment and any items that are regularly handled by the person. Either hot wash and dry as above or if not possible seal dry clothing in a plastic bag and store it at room temperature for 7 days or in a freezer (–20°C) for 12 hours. Note bedding, towels and curtains may also be decontaminated using this method if hot wash is not possible.

Seal cosmetics in a plastic bag for 2 weeks to decontaminate. This timeframe is longer because moist environments prolong mite life (Michigan Department of Community Health 2005).

General environment

Vacuum soft furnishing and carpets in the facility. Where residents' furnishings are not impervious, cover them for 7 days.

Wipe hard surfaces and residents' equipment with a solution of detergent and water.

Photos to support diagnosis from DermNetNZ.org

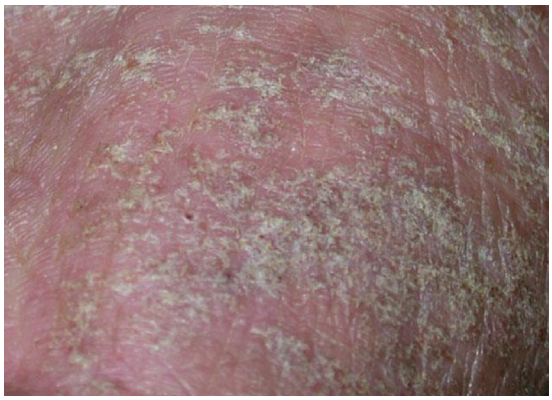
Classical scabies

Polymorphous rash – papules, hive-like plaques, scratch marks in classical scabies

Extensive burrows in classical scabies (late diagnosis)

Crusted scabies

Thick crusting



Numerous scaly burrows

Nodular scabies

Persistent scabies nodules – these are often seen most clearly in the groin

Complicated (infected) scabies

Pustules indicate infected scabies burrows

Decision support

Treatment

Treat all affected staff and residents, and close contacts, in the same 24-hour period

Off-duty staff and affected visitors need treatment before they come back into the facility, to prevent reinfestation

5% permethrin topical treatment
Apply to whole body, including scalp, neck, face and ears
Focus on getting cream/lotion in webs of fingers and toes, under nails, in the umbilicus and in skin folds, including perineum and external genitalia

Head, neck, face and ears are particular areas of infestation in frail older people

Leave in place for 8 to 12 hours
Reapply to skin washed during this time (eg, hands)
Wash off all skin surfaces (usual personal care methods)

Permethrin is an insecticide and needs prolonged contact to be effective

Repeat treatment in 7 to 10 days

Permethrin is not effective against eggs, and repeated treatments are needed to cover any area of skin missed during first application

OR

Ivermectin treatment
Classical scabies: calculate dose based on body weight
Repeat in 1 to 2 weeks

Repeated doses have cure rate of 98%, single dose cure rate is 70% in immunocompromised people. Not effective against eggs

Severe crusted scabies
May need more than two treatments of ivermectin and permethrin

May need specialist advice.
Work with GP/NP to access specialist assessment

Treat associated symptoms
Pruritus (itch) antihistamines, emollients and/or steroid creams can be useful. Discuss specifics with GP/NP. Suggestions include:

- crotamiton cream 10% (itch-soothe), a weak scabioid
- emollients: cetomacrogol

Treating itch reduces chance of secondary infection, avoids behavioural disturbance and helps sleep

Secondary bacterial infections may be present and need assessment and treatment, typically antibiotics

Secondary infections can lead to cellulitis, pneumonia and septicaemia

Complete skin check 1 week after second treatment
If scabies not improving, ask GP/NP to reassess

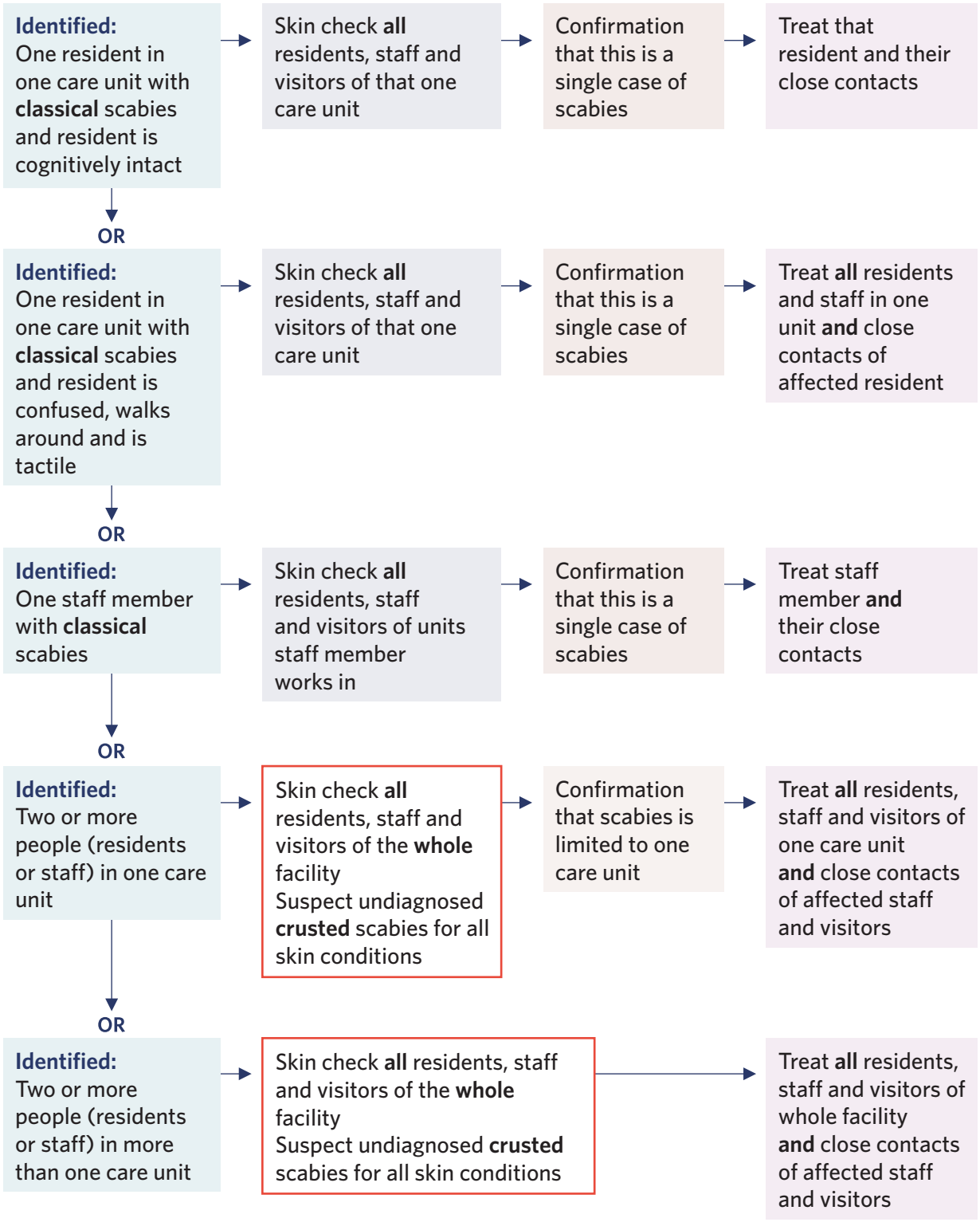
To detect unsuccessful treatment early and avoid reinfestation of the facility

Documentation and surveillance
Document individual rash, itch and skin condition weekly
If itch persists or has increased at 6 weeks, suspect treatment failure and get a reassessment
Keep log of outbreak for at least 6 weeks

Rash and itch can last 6 weeks
Treatment failure in one person can lead to reinfestation of facility

GP = general practitioner NP = nurse practitioner

Deciding on the extent of treatment



Note: A **care unit** is a discrete area of a facility where staff and residents remain separate from the rest of the facility.

If two or more people are present with scabies, an outbreak is likely. Your facility may need dermatology and contact tracing support from a local public health unit.

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Sexuality and intimacy
Taeratanga me te pā taupiri

The information in this guide is accurate to the best of our knowledge as of June 2023.

Definition

Sexuality is a core aspect of being human. It includes sex, gender identities and roles, sexual orientation, eroticism, pleasure, intimacy and reproduction. The individual experience or expression of sexuality varies and is influenced by cultural, legal and political situations, religious and spiritual beliefs as well as biological, psychological and social situations (Macleod and McCabe 2020).

Sexual health is defined as 'a state of physical, emotional, mental and social well-being in relation to sexuality' (McAuliffe et al 2020).

Key points

- The freedom to express sexual identity is a fundamental human right protected by New Zealand law.
- A person's expression of sexuality and gender identity can be fluid and change throughout life. Sexual and gender diversity is not a new phenomenon. However, it has become more visible as it has become more widely accepted in New Zealand society.
- The need for love and affection continues throughout life (Bauer and Fetherstonhaugh 2016).

Why this is important

Being able to express one's sexuality brings people psychological and physical comfort irrespective of age (McAuliffe et al 2020). If this basic human need is unrecognised, this can create barriers for an older person in expressing and maintaining sexual health (McAuliffe et al 2020).

A New Zealand study about sexuality in aged residential care (ARC) described loneliness as a key issue when life partners are separated. It also recognised the tension that occurs when the older person's sexual behaviour does not meet the expectations of their **whānau**/family (Henrickson et al 2020).

LGBTQI+ is an umbrella term for lesbian, gay, bisexual, transgender, queer, intersex and all other people who do not identify as heterosexual. Older people who identify as LGBTQI+ are less likely to have children than their heterosexual counterparts so may lack whānau/family support (Srinivasan et al 2019). These people are also known as the Rainbow

community. They may be estranged from whānau/family or continue to conceal their sexuality or gender identity from whānau/family, friends and health staff because they are afraid of discrimination, stigmatisation and isolation.

Implications for kaumātua*

Māori culture traditionally is very accepting of all genders, sexuality and diverse relationships. The inclusion of such topics can be seen in **whakairo** (carvings) and heard in **waiata** (songs) and **pūrākau** (stories). This acceptance may not have been the experience of all kaumātua who identify as **takatāpui**. Many members of the Rainbow community, both Māori and others, have experienced marginalisation, discrimination and stigma, which can impact on their quality of life (Srinivasan et al 2019).

The term takatāpui embraces all Māori with diverse gender, sexuality and sex characteristics. The term takatāpui can be used in the Māori language to refer to anyone who is gender, sex or sexuality diverse. However, typically only Māori would use this term to self-identify when speaking English. Takatāpui is a uniquely Māori concept that has its own **wairua** (spirituality) and **whakapapa** Māori (Māori genealogy).

A Māori view of health is holistic. For this reason, it is important to acknowledge cultural identity as well as gender and sexuality identities as part of the provision of holistic care.

Assessment

Sexuality and aged residential care

The Sexuality Assessment Tool was developed to help providers to self-assess their policy and processes related to sexuality in care (Bauer et al 2013).

Keep in mind

Sex work is a legal, regulated profession in New Zealand that can offer a service to people living in ARC. Research suggests use of this service is relatively common in ARC but providers generally do not publicise it due to reputational concerns (Henrickson et al 2022).

Consent and cognitive impairment

Having a diagnosis of cognitive impairment or dementia should not prevent someone from forming new relationships. As long as both parties have the capacity to consent, such relationships should be respected. However, capacity to consent within the sexual and intimacy context needs in-depth exploration and understanding (Hendrickson et al 2020).

* Kaumātua are individuals, and their connection with culture varies. This guide provides a starting point for a conversation about some key cultural concepts with kaumātua and their whānau/family. It is not an exhaustive list; nor does it apply to every person who identifies as Māori. It remains important to avoid assuming all concepts apply to everyone and to allow care to be person and whānau/family led.

When assessing new relationships, consider the following and **if in doubt seek expert advice:**

- decision-making capacity
- memory and people recognition (is this a case of mistaken identity?)
- verbal and non-verbal expressions of consent
- ability to understand physical and emotional risks involved in intimate relationships
- transgender people with memory loss may experience gender confusion and need particular support to maintain or respond fluidly to gender identity (Baril and Silverman 2019)
- how expectations of whānau/family and health staff may impact on gender and sexually diverse people (possibly increasing the pressure on them to conform to social norms) (Barrett et al 2015).

Approach to sexual disinhibition

Sexual disinhibition can occur in anyone with injury to the brain (trauma, tumour, dementia). Behaviours such as handholding and hugging are considered normal activities; however, where such behaviour is unwanted, it can be damaging to both parties. When assessing whether any intimate behaviour is appropriate, consider the following:

- What form does the behaviour take? (Describe it.)
- In what context does it occur?
- How often does it occur?
- What factors contribute to it?
- Is it really a problem? If so, for whom?
- What is the level of risk? (See the 'Decision support' section.)
- Are the people involved able to provide informed consent?

Gender and sexual diversity

Older people belonging to the Rainbow community are likely to be accessing services, even if they do not self-identify openly. So ask them the following:

- How do you identify? (Gender identities are fluid: Marshall et al 2015.)
- What do you like to be called?
- What terms do you use to refer to yourself? (For example, if they use the term 'gay', do not use the term 'homosexual'.)
- Who are the important people in your life?
- Do you have a partner?
- How you like to dress and groom?
- What activities do you like to participate in? (Do not make assumptions about what they enjoy.)

Keep in mind

- Do not confuse a person's gender diversity and gender expression with sexual orientation.
- Use the person's preferred pronouns. If you don't know their preferences, ask.
- Make yourself aware of support services and refer to or invite in expertise.
- Reflect on your own perspective and understanding of the subject matter.

Care planning

Each care plan should identify preferred pronouns, important relationships and gender-affirming activities such as dressing and grooming.

Further resources

Introductory online course on supporting transgender people: **genderminorities.com/2021/05/11/supporting-transgender-people-online-course**.

Growing up takatāpui (intimate companion of the same sex): **takatapui.nz/growing-up-takatapui#resource-intro**.

Best practice links in sexuality from Dementia New Zealand: **www.nzdementia.org/Best-Practice-Resources/In-residential-care/Sexuality-in-residential-care**.

Rainbow Tick New Zealand provides training and organisational development for working with the Rainbow community: **www.rainbowtick.nz/#offer**.

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Decision support adapted from Steele (2007)

Intimate behaviour and cognitive impairment

- Assess behaviour, remembering that self-determination is a human right as long as there is evidence of consent
- Work in collaboration with power of attorney, whānau/family to support people with consensual relationships
- Use organisational policy to guide practice
- When consent is lacking or you suspect it is lacking, protecting the person is the key responsibility – see risk levels

Level one: Intimacy and courtship

- Kissing, hugging, handholding, fondling, cuddling
- Consensual

No risk when both consent

- ☐ Considered a socially appropriate relationship
- ☐ May make staff, whānau/family feel uncomfortable
- ☐ Recognise need for intimacy

Level two: Verbal sexual talk

- Flirting, suggestive language
- Not aggressive

Low risk

- ☐ May make people uncomfortable – respectfully redirect
- ☐ Avoid punitive responses

Level three: Self-directed sexual behaviour

- Masturbating
- Exposure

Low risk

- ☐ Provide privacy
- ☐ If it occurs in front of others, consider effect
- ☐ Find creative solutions, eg, sexual toys and services

Level four: Physical sexual behaviours

- Directed toward others with consent

Moderate risk

- ☐ People still have capacity to make decisions in early stages of dementia or cognitive impairment
- ☐ Staff should watch for signs of unwelcome behaviour – eg, do partners look distressed or panicked?
- ☐ Is this consistent with the person's life story?
- ☐ Find creative solution to provide dignity and privacy (follow organisational policy)
- ☐ Are partners able to say no and refuse advances? **If not, consider this level five**

Level five: Non-consensual, overt physical sexual behaviours

- Aggressive or repeated sexual advances that others reject and do not want

High risk

- ☐ Entering another's room to touch them (rare occurrence)
- ☐ Protect person experiencing or exposed to unwanted behaviour
- ☐ Treat all involved with dignity and respect
- ☐ Report action following organisational policy
- ☐ Refer person making advances to GP/NP and/or Mental Health Services for Older Adults

GP = general practitioner NP = nurse practitioner

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Skin tears
Tīhore o te kiri

The information in this guide is accurate to the best of our knowledge as of June 2023.

Definition

Skin tears are traumatic wounds where typically the epidermis separates from the dermis as a result of friction and/or shearing forces. In a full thickness skin tear, both the epidermis and dermis separate from the underlying structures (Carville et al 2007; LeBlanc et al 2011).

Key points

- Due to ageing, the epidermis thins overall and the junction between the dermis and epidermis flattens. This junction becomes more fragile and susceptible to damage from moisture, friction and trauma.
- Loss of sebaceous (oil-secreting) glands makes skin drier and more easily damaged.
- Maintaining skin health and avoiding injury are key to preventing skin tears.

Why this is important

Skin tears are painful, impact on quality of life and can lead to chronic wounds.

Implications for kaumātua*

Skin tears can happen for kaumātua as for all residents. If a skin tear does happen, it is important to give kaumātua and their **whānau**/family all the information they need to help them participate in treatment and activities to prevent further skin tears. Whānau/family can offer valuable, culturally informed interventions and help to motivate kaumātua to participate in them as they are invested in the outcome for their loved one.

Assessment

Prevent skin tears by assessing and managing risk factors for them, including through general history, patient handling, skin care and use of dressings (sticky tapes and bandaging).

If a skin tear occurs, use a classification system to determine its severity and establish a treatment plan. There are two key classification systems: the STAR (Skin Tear Audit Research) and the ISTAP (International Skin Tear Advisory Panel). We have reproduced STAR images, and the reference list contains a link for ISTAP.

* Kaumātua are individuals, and their connection with culture varies. This guide provides a starting point for a conversation about some key cultural concepts with kaumātua and their whānau/family. It is not an exhaustive list; nor does it apply to every person who identifies as Māori. It remains important to avoid assuming all concepts apply to everyone and to allow care to be person and whānau/family led.

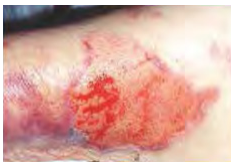
STAR classification system

Category 1a
A skin tear where the edges **can** be realigned to the normal anatomical position (without undue stretching) and the skin or flap colour **is not** pale, dusky or darkened

Category 1b
A skin tear where the edges **can** be realigned to the normal anatomical position (without undue stretching) and the skin or flap colour **is** pale, dusky or darkened

Category 2a
A skin tear where the edges **cannot** be realigned to the normal anatomical position and the skin or flap colour **is not** pale, dusky or darkened

Category 2b
A skin tear where the edges **cannot** be realigned to the normal anatomical position and the skin or flap colour **is** pale, dusky or darkened



Category 3
A skin tear where the skin flap is completely absent

Source: Curtin University of Technology 2010

Preventing skin tears

Prevent skin tears

Wounds that do not heal in 6 weeks should be classified as leg ulcers

Assess general skin tear risks and address those risks

- ☐ History of skin tears
- ☐ Poor nutrition or hydration
- ☐ Impaired vision or sensation
- ☐ Involuntary movement
- ☐ Cognitive impairment
- ☐ Prolonged corticosteroid use
- ☐ Wound location

- High vigilance
- Monitor and maintain
- Manage environment to avoid injury
- Loose clothing, avoid trauma
- Manage environmental risks
- Discuss with GP/NP

Assess patient handling risks and address those risks

- ☐ Impaired mobility and ADL dependence
- ☐ Prevent friction and sheer

Caregiver:
- keeps fingernails short
- does not wear rings that may catch skin
- takes care when applying clothing
- takes care with wheelchairs and footplates
- follows facility-wide manual handling techniques

Assess skin condition and address concerns

- ☐ Recognise fragile skin
- ☐ Manage dry skin

- Beware of pet or self scratches
- Cover fragile skin
- Apply emollient twice a day
- Wash with soap substitute

Assess risk of adhesive dressings

- ☐ Avoid adhesives as able
- ☐ Dressing removal plan

- Fix with tubular dressing, avoid tape
- Use adhesive solvent
- Peel off dressing in direction of hair growth

ADL = activities of daily living GP = general practitioner NP = nurse practitioner

Treatment

This flowchart sets out the initial response to skin tears. Refer to the *Wound care | Te maimoatanga ō ngā taotū* guide for information on ongoing wound management.

Stop bleeding
- Apply pressure and elevate if required

↓

Reposition flap after checking for foreign bodies or debris (remove by irrigation)
- ☐ Use damp cotton tip or gloved finger to gently reposition
- ☐ If flap is difficult to reposition, apply moistened swab for 5–10 minutes and then try again
- ☐ Do not overstretch flap when repositioning

↓

Assess skin tear
- ☐ Location
- ☐ Size
- ☐ Wound bed (is it viable?)
- ☐ Volume exudate
- ☐ Presence of bleeding or bruising
- ☐ Integrity of surrounding skin
- ☐ Associated pain

↓

Barrier cream surrounding skin

Refer for rapid GP/NP review
- ☐ **Extensive or full-thickness injury**
- ☐ **Uncontrolled bleeding or large haematoma**

↓

Select dressing
- ☐ Non-adherent dressing, cover with absorbent layer, bandage secure
- ☐ Mark direction of flap on dressing
- ☐ Do not disturb flap when redressing

↓

Re-assess in 24–48 hours
- ☐ Check for signs of infection
- ☐ Check for pain
- ☐ Check for flap necrosis
- ☐ Check whether flap is pale or dusky

Consider need for GP/NP review based on skin tear re-assessment

↓

Review in approximately 72 hours
- **Any non-viable skin (necrotic or pale/dusky skin without blood supply) will need removing**

↓

Complete full wound assessment and wound care plan, including wound care goal

GP = general practitioner NP = nurse practitioner

Suggested dressings for skin tears (ISTAP 2018)

Product	Indication	Skin tear types	Considerations
Non-adherent mesh dressings (eg, impregnated gauze, silicone)	Dry or exudative wound	1, 2, 3	Maintains moisture balance for multiple levels of wound exudate, atraumatic removal, may need secondary cover dressing
Foam dressing	Moderate exudate, up to 7-day wear time	2, 3	Use non-adhesive border foams to avoid periwound trauma
Hydrogel	Donates moisture for dry wounds	2, 3	Maintains moisture balance for multiple levels of wound exudate, atraumatic removal, may need secondary cover dressing
Calcium alginates	Moderate to heavy exudate, haemostatic	1, 2, 3	May dry out wound bed if inadequate exudate, secondary cover dressing required
Gelling fibres	Moderate to heavy exudate	2, 3	No haemostatic properties, may dry out wound bed if inadequate exudate, secondary cover dressing required

Note: This product list is not exhaustive; other products may also be appropriate for treating skin tears.

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Pain
Mamae

The information in this guide is accurate to the best of our knowledge as of June 2023.

Definitions

As the International Association for the Study of Pain defines it, pain is 'An unpleasant sensory and emotional experience associated with, or resembling that associated with, actual or potential tissue damage' (Raja et al 2020). Further:

- pain is a personal experience influenced by biological, psychological and social factors (such as culture and coping strategies) (Sheikh et al 2021)
- a person's report of pain experience should be respected. In other words, 'Pain is what the person says it is' (Raja et al 2020).

Chronic pain is pain that persists for 3 months or more. It is more common in older people (Robertson 2002; Sheikh et al 2021).

Key points

- Chronic pain is most common in people living in residential care and those aged 75 years or older (Schofield et al 2022). An Aotearoa New Zealand study reports that approximately 28 percent of people aged 75 years or older experience chronic pain (Dominick et al 2011).
- People can express pain through several different behaviours, not limited to describing it in words. If a person is unable to communicate, that does not rule out the possibility that they are experiencing pain (Raja et al 2020).
- People with cognitive impairment are at greatest risk of undertreatment of pain.
- No one has yet found a definitive approach to pain management (Sheikh et al 2021).

Why this is important

Pain decreases a person's functional, social and psychological wellbeing (Raja et al 2020) and impacts health-related quality of life. Severe pain is associated with reduced function, poorer physical and mental health and increased risk of mortality (Dominick et al 2011). Uncontrolled pain is a major cause of delirium (Sampson et al 2020). Moderate to severe pain can impair sleep, increase the risk of falls, put people off eating and hasten frailty progression (Sheikh et al 2021).

Implications for kaumātua*

Culture can impact on the experience and perception of pain as well as the response to pain (Magnusson and Fennell 2011). Understanding this influence is critical when assessing and managing pain.

A Māori view of health is holistic. That means the physical experience of pain impacts on **oranga hinengaro** (mental health), oranga **wairua** (spiritual health) and oranga **whānau**/family (or social health), as well as **hauora** (wellbeing).

It is important to be able to differentiate between acute and chronic pain, as well as between physical pain and emotional or spiritual pain. When pain is present (chronic) or exacerbated (acute), it is important to involve whānau/family in care and support. Whānau/family can offer valuable suggestions for culturally informed interventions and help to motivate kaumātua as they are invested in the outcome for their loved one.

Cultural clues may indicate pain has a non-physical source. This is likely to vary from person to person. Again, trusting whānau/family and their input as well as using available cultural advisors will be beneficial in identifying non-physical causes of pain.

It is important to note that some people keep the experience of pain to themselves or minimise the impacts when reporting pain. They may do so because they are very private, do not want to be a burden to others or they experience a sense of **whakamā** (shame, embarrassment) about discussing such experiences with an outsider (see the *Guide for health professionals caring for kaumātua | Kupu arataki mō te manaaki kaumātua* for more information).

Assessment

Health professionals are more likely to identify pain when they are in a 'pain-vigilant culture'. In this kind of culture, it is common practice to consider the need for pain treatment when a person has a disease known to cause pain, or predispose to pain, as well as when a person experiences and is recovering from trauma (eg, falls, skin tears, pressure injuries) (National Ageing Research Institute Limited 2021).

People may under-report pain for a range of different reasons. These include but are not limited to: a) believing pain is a 'natural' part of ageing, b) fear of becoming addicted to pain medication, c) fear of the underlying cause of pain and d) cultural norms that reduce expressions of pain (National Ageing Research Institute Limited 2021).

- People with cognitive impairment may be unable to accurately report pain in words. In these cases, look for non-verbal indicators of pain. It can be helpful to use a standard assessment tool, such as the PAINAD (Warden et al 2003) or Abbey Pain Scale (National Ageing Research Institute Limited 2021), in addition to asking the person about their pain.

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- When people can report pain, exploring their experience using a tool such as OLDCARTS-ICE is the essential first step in managing the pain.
- You can use a tool such as the Brief Pain Inventory to guide people in self-reporting the intensity and impact of pain.
- Listen to the person's concerns about pain (what pain means to them).
- Engage whānau/family in identifying and managing pain. (They may see subtle signs that health professionals do not notice.)
- New pain is a significant event. The general practitioner (GP) or nurse practitioner (NP) should evaluate it fully.

Treatment

Pain is more often undertreated than overtreated in older people. After a thorough pain assessment, a multimodal approach to pain management is recommended (Sheikh et al 2021). While non-pharmacological treatments are the first step, health professionals should not withhold effective pharmacological treatments (Schofield et al 2002). However, even with the best treatment, for some people it may only be possible to achieve a 30 percent reduction in symptoms (Sheikh et al 2021).

Non-pharmacological treatment

- Offer music and spiritual support.
- Keep the person moving (which may involve anything from repositioning in bed to walking).
- Support the person to eat well. Maintaining strength and eating favourite foods improves mood.
- Support sleep.
- Provide complementary therapies, such as massage, aromatherapy, soaking in a warm bath and/or pet therapy.
- Safely apply heat (refer to your facility's policy).
- Safely apply cold (refer to your facility's policy).
- Use culturally informed interventions (eg, **mirimiri**, reiki, karakia).

Pharmacology

The nurse has an important role in pain medication management through:

- administering and monitoring analgesics for effectiveness
- slowly increasing analgesics after they are started at a low dose (to effect)
- taking care to properly space the timing of analgesia for maximum effect
- reviewing the use of as needed (PRN) medications and discussing with the GP/NP if prescriptions need changing
- proactively using available PRN medications in response to pain.

Medications

- **Paracetamol** is indicated for musculoskeletal pain, osteoarthritis of the hip and knee and lower back pain. For low-weight (< 50 kg) older people with frailty, one study recommends a maximum 24-hour dose of 3 g (Sheikh et al 2021). However, other authors report that no good-quality evidence is available to either support or refute this lower standard maximum dose (Caparrotta et al 2018).
- **Non-steroidal anti-inflammatory drugs (NSAIDs)** are generally not recommended for older people. If used, this should be for short courses only as they can cause harm (particularly gastrointestinal injury and increased renal impairment) and result in hospitalisation (Sheikh et al 2021). The prescriber considers the harm–benefit balance, and the nursing team needs to assess for evidence of harm (eg, abdominal pain, fluid retention or bleeding). These medications are generally not advised in heart failure, gastrointestinal disease and renal disease.

  Note: Studies indicate that topical NSAIDs are safer than oral ones (Schofield et al 2022).
- Opioids are indicated for moderate to severe pain. They are generally not indicated for chronic pain. A GP or NP may issue these medications based on individual assessment. However, they are best used for acute pain, short-course therapy or end-of-life care.

  Monitoring includes evaluation of renal and liver function and adverse effects:
  - Strong opioids (morphine, oxycodone): Assess for sedation, respiratory depression, muscle twitching and constipation.
  - Weak opioids (codeine): Assess for constipation.
  - Atypical opioids (tramadol): Assess for delirium.
  - Transdermal opioids (fentanyl): These take 24 hours to reach maximum effect and 24 hours to clear the system if stopped. Assess for sedation and significant respiratory depression when starting, increasing or stopping patches. A monitoring period of at least 24 hours is required (Schofield et al 2022). Patches are not recommended for people who have never had opioids before.
- Adjuvant analgesics are indicated for neuropathic pain (Schofield et al 2022; Sheikh et al 2021). They include:
  - tricyclic antidepressants, but assess for cardiac side effects
  - anticonvulsants (gabapentin and pregabalin)
  - cannabidiol, although the current recommendation is to avoid it due to central nervous system side effects (Sheikh et al 2021).

Care planning

A patient-centred approach to care planning is recommended. This involves setting goals for pain management and using the multidisciplinary team to address all aspects of care that potentially may impact on pain.

Consider all possible impacts, including physical, psychological, whānau/family and spiritual impacts. Include any culturally informed triggers or interventions that whānau/family or cultural advisors have identified in the care plan.

Pain assessment tools

Pain history collection: OLDCARTS-ICE

While primarily designed as a way to interview patients, OLDCARTS-ICE is also a useful tool for exploring the symptoms and expectations from the perspective of whānau/family or designated decision-makers.

OLDCARTS-ICE

Explore	Questions/actions
Onset	When did it start? *(Be as accurate about date and time as possible.)* Did it start suddenly or gradually? What (if anything) stimulated it? *(What was happening? What was the person doing?)* Has something similar happened in the past? If so, what worked and what happened? **Particularly for people with chronic pain** – is anything different about the experience this time? Consider emotional triggers that may be impacting pain, for example, whānau/family issues, special anniversaries.
Location	Where is the pain? Does it spread anywhere (radiate)?
Duration	How long does it last? Is it continuous or intermittent? How often does it occur? Is there a pattern?
Characteristics	What does it feel like? *(Get a description, eg, ache, stabbing, burning.)*
Associated symptoms	Is anything else happening at the same time *(eg, nausea, sweating, fear/anxiety, palpations, dizziness)*? Be aware that associated symptoms may not be just physical symptoms. **Wairua** (spiritual) unrest with spiritual or emotional pain may manifest as **tīpuna** (ancestors) or other deceased loved ones 'visiting' during dreams or at other times.
Relieving and aggravating	What makes it better? What makes it worse?
Treatment	Have you tried any treatments *(including home remedies, medication, position)*?
Severity	How bad is it? *(Use a scale – see later tools.)* Be aware. Reluctance to report pain or under-reporting pain may be due to whakamā (shame, embarrassment) or not wanting to be a burden.
Always consider the following for chronic pain; they may also be helpful with acute pain.	
Impact	**For kaumātua**, ask how has this affected your **mauri** (life force, vital essence/vitality)? Your **wairua** (spirit)? Your **hinengaro** (mind/psychological state)? Think beyond the physical impacts.
Coping	How are you managing?
Expectation	What can we (staff in aged care) do to support/help? *(Expectations and priorities differ.)*

Descriptions that help identify pain

Pain types	Clinical example	Location/radiation	Characteristics
Visceral pain: from organs and surrounding or supporting tissue	Bowel spasm, distended bladder (acute retention) or deep tumour	Often difficult to localise; it radiates sometimes	Cramping, stabbing, deep and throbbing, squeezing, pressure, heaviness, sharp intense pain; may fluctuate
Somatic pain: from joint, muscle and bone	Arthritis, muscle sprain/ strain, wounds, metastatic bone disease	Person can often point to the pain; it radiates sometimes	Constant, aching, stabbing sharp, sore, cramping, throbbing, dull, gnawing
Neuropathic pain: from peripheral and central nerves	Post-herpetic neuralgia, peripheral neuropathy, spinal cord issues	It radiates along the nerve; a dermatome map will help identify the nerve	Pins and needles, burning, crawling, gnawing, stabbing, shooting, intense pain
Emotional pain	This pain may not have a physical trigger Whānau/family may be able to provide information about a trigger	May be vague and difficult to isolate in physical exam (be alert for reports of abdominal pain)	Can be a whole range of descriptors

Brief pain inventory

A tool for people to self-report their pain. Examples are freely searchable: **www.apsoc.org.au/PDF/Publications/APS_Pain-in-RACF-2_M-RVBPI.pdf** (PDF, 112 KB).

Validated pain assessment tools

Use when people have cognitive impairment or communication difficulties.

Pain Assessment in Advanced Dementia Scale: PAINAD (Warden et al 2003)

Behaviour	0	1	2	Score
Breathing independent of vocalisation	Normal	Occasional laboured breathing, short period of hyperventilation	Noisy laboured breathing, long period of hyperventilation, Cheyne–Stokes respiration	
Negative vocalisation	None	Occasional moan or groan, low-level speech with a negative or disapproving quality	Repeated, troubled calling out, loud moaning or groaning, crying	
Facial expression	Smiling or inexpressive	Sad, frightened, frowning	Facial grimacing	
Body language	Relaxed	Tense, distressed pacing, sighing	Rigid, fists clenched, knees pulled up, pulling or pushing away, striking out	
Consolable	No need to console	Distracted or reassured by voice	Unable to console, distract or reassure	
Possible interpretation: 1–3 Mild pain 4–6 Moderate pain 7–10 Severe pain			**Total**	

Abbey Pain Scale (National Ageing Research Institute Limited 2021)

Behaviour	Score	None	Mild 0	Moderate 2	Severe 3
Vocalisation Whimpering, groaning, crying					
Facial expression Looking tense, frowning, grimacing, looking frightened					
Body language change Fidgeting, rocking, guarding part of body, withdrawn					
Behaviour change Increased confusion, refusing to eat, alteration in usual patterns					
Physiological change Temperature/pulse/blood pressure outside normal limits, perspiring, flushing or pallor					
Physical change Skin tears, pressure areas, arthritis, contractures, previous injuries					
Interpretation: 0–2 No pain; 3–7 Mild pain; 8–13 Moderate pain; 14+ Severe pain				**Total**	

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Electronic (app-based) tools such as 'PainChek' artificial intelligence facial analysis may also be useful. Some providers are integrating it into their care management systems (see **www.painchek.com/use-cases/residential-aged-care**).

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Polypharmacy and deprescribing
Ngā rongoā maha me te whakakore tūtohu

The information in this guide is accurate to the best of our knowledge as of June 2023.

Definition

Polypharmacy is the use of multiple medications. Older people often take many medications to treat conditions, maintain health and prevent future problems. What is important is the effect of the medication rather than the number of medications they use. The aim is always to use medications that benefit the person and eliminate those that may be harmful (Thompson et al 2019).

Deprescribing is the deliberate and systematic act of removing medication and assessing the impact of that change.

Key points

- In aged residential care, regular medication review and associated deprescribing can significantly reduce the number of people with potentially inappropriate medication. It can also reduce the incidents of falling, hospitalisations and overall mortality (Kua et al 2019, 2021).
- As part of the multidisciplinary team, registered nurses make a significant contribution to managing polypharmacy and deprescribing. In particular, they:
  - evaluate and report on resident (and **whānau**/family) understanding of the medication regime, medication preferences, challenges with routes of medication administration, potential adverse drug effects and medication monitoring
  - manage the use of 'as needed' medications
  - lead the monitoring of residents following deprescribing.

Why this is important

As frailty progresses, physiology, life expectancy and goals of care change. By regularly reviewing medication and then deprescribing where appropriate, health professionals can provide ongoing treatment that best meets the resident's need.

Implications for kaumātua*

It is important to take a whānau/family-centred approach when changing medication for a kaumātua. This involves actions such as:

- including whānau/family in conversations
- providing opportunities for whānau/family to share their observations and insights and valuing their input
- allowing adequate time to discuss the matters with all parties involved
- thoroughly discussing and explaining the rationale for medication changes.

When conversations go well, whānau/family may use this opportunity to share important, culturally informed interventions. Supporting these wherever possible is vital to providing holistic care.

Assessment

Guidelines to reduce potentially harmful medications generally provide lists of medications to review. Managing these lists is often easier with computer support (Monteiro et al 2019; Thompson et al 2019). The following are some guidelines available for potentially inappropriate medication.

- New Zealand criteria have been developed to identify potentially inappropriate polypharmacy in older adults. New Zealand experts recommend a list of 61 medication indicators that should prompt formal medication review (Liu and Harrison 2023).
- From the United Kingdom, the Screening Tool of Older Persons Prescriptions in Frail adults with limited life expectancy (STOPPFrail version 2) is aimed at older people who have **all** of the following (Curtin et al 2021):
  - limitation with activities of daily living and/or severe chronic disease and/or terminal illness
  - severe frailty
  - the responsible nurse practitioner or general practitioner would not be surprised if the person died within 1 year.
- Beers Criteria (American Geriatrics Society 2019) have an extensive list of medications and associated risks. Many of the medications listed are not available in New Zealand.
- An Australian tool is the Medication Appropriateness Tool for Co-morbid Health Conditions in Dementia (MATCH-D) (Page et al 2016).

* Kaumātua are individuals, and their connection with culture varies. This guide provides a starting point for a conversation about some key cultural concepts with kaumātua and their whānau/family. It is not an exhaustive list; nor does it apply to every person who identifies as Māori. It remains important to avoid assuming all concepts apply to everyone and to allow care to be person and whānau/family led.

Treatment

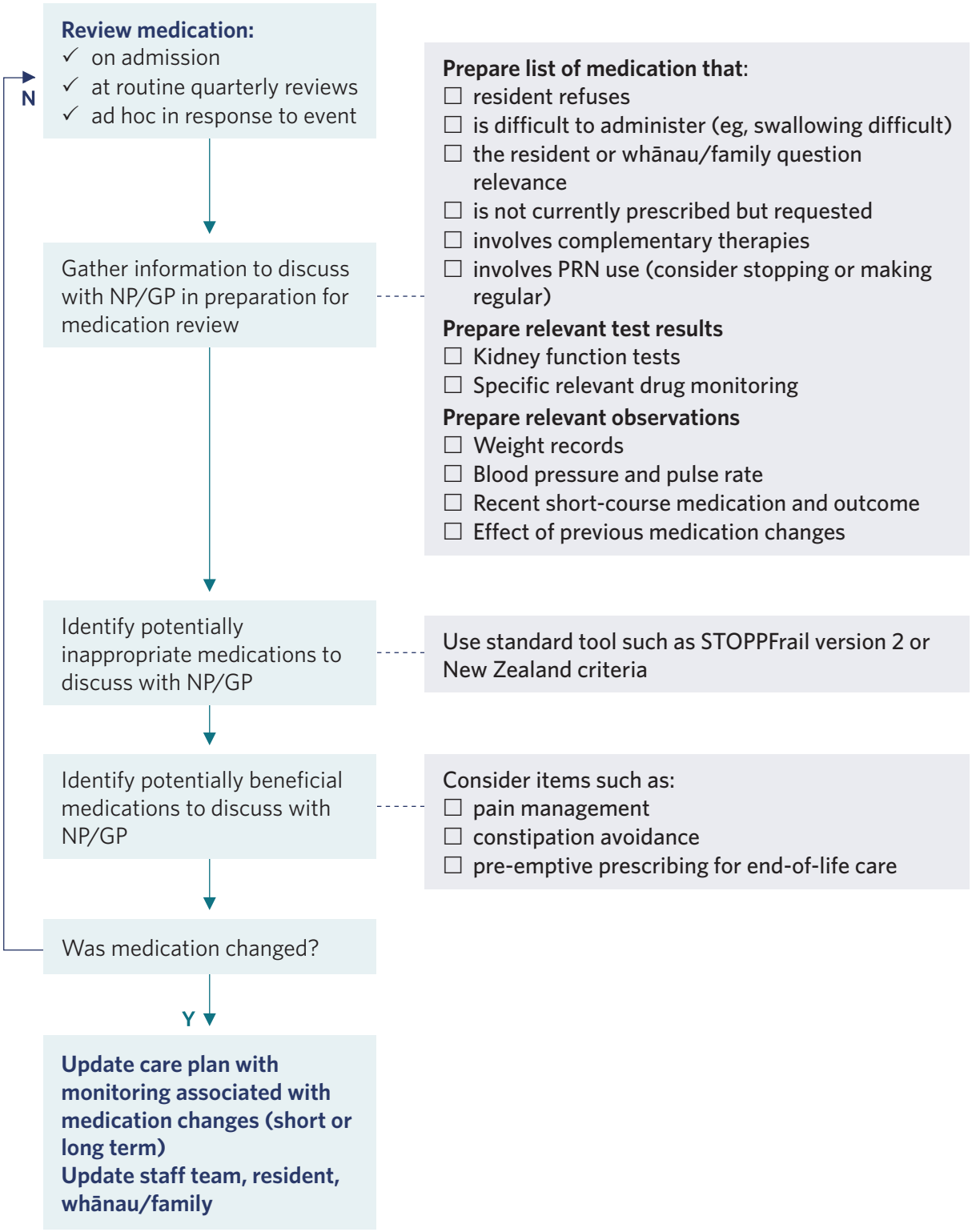
Use a standard tool and nursing observation to identify potentially inappropriate medications and to support deprescribing practice.

Medications to consider (adapted from STOPPFrail version 2; Frailty Care Guide 2019)

Medication	Reason to deprescribe	Reason to continue
Cardiovascular system		
Lipid lowering: statins, eg, atorvastatin	• Need long duration to be of benefit • Muscle weakness and falls	• Life expectancy > 5 years • Stroke in last 2 years • Peripheral vascular disease where symptoms improve on statin
Antihypertensive	• Falls or dizziness • Postural hypotension • If systolic blood pressure is consistently less than 130 mmHg	• History of stroke • Treatment of cardiac disease other than hypertension, eg, treating arrhythmia, myocardial infarction or heart failure
Coagulation system		
Antiplatelets	• Using for primary prevention only • Using aspirin for stroke prevention in atrial fibrillation	
Central nervous system		
Antipsychotic in dementia, eg, haloperidol, risperidone	• After using for 12 weeks and behavioural and psychological symptoms of dementia (BPSD) are controlled • After using for 12 weeks and BPSD unchanged • **Monitor reducing dose regime**	• Long-term mental health disorder • Treatment for acute delirium • BPSD when withdrawal fails or symptoms relapse
Sedatives or hypnotics, eg, lorazepam, zopiclone	• Increase memory problems in cognitively impaired, cause daytime sedation • **Monitor reducing dose regime**	
Gastrointestinal system		
Proton pump inhibitors, eg, omeprazole	• Had full therapeutic dose for > 8 weeks • Mild reflux that can be managed with antacids • **Monitor for 4–12 weeks after stopping** (for non-verbal residents, monitor behaviour)	• Severe oesophagitis or history of gastric bleed • Recurrence of symptoms

Medication	Reason to deprescribe	Reason to continue
Musculoskeletal system		
Osteoporosis treatment	• No short-term benefits • Had full therapeutic treatment • Unable to manage administration	• Fragility fractures and evidence of benefit
Calcium supplement	• No short-term benefits • Adds cardiovascular risk	
Non-steroidal anti-inflammatory drugs (NSAIDs)	• Increased risk of major side effects (peptic ulcer disease, bleeding, worsening heart failure) when taken regularly for > 2 months • Renal impairment	• The only effective medication for arthritic pain, and risks evaluated and understood
Oral steroids	• Increased risk of adverse effects when taken long term (consider reduction if unable to deprescribe)	• Worsening underlying disease with withdrawal
Urogenital system		
Drugs for overactive bladder, eg, solifenacin	• If incontinence persistent despite treatment	• Clear history of painful detrusor hyperactivity
Drugs for benign prostatic hyperplasia, eg, doxazosin	• In males with long-term catheters	
Endocrine system		
Antidiabetic oral agents	• Aim for monotherapy • Less stringent control (HbA1c up to 70 mmol/mol)	
Miscellaneous		
Multivitamins and supplements	• Stop if only used for prophylaxis	• Support cachexia, or wound healing
Antispasmodics	• Not for regular use	• Frequent relapse of colic symptoms
Prophylactic antibiotics	• No firm evidence of ability to prevent recurrent cellulitis or urinary tract infection	
Others	• Any medication without clear clinical indication or symptom now resolved	

Decision support



GP = general practitioner NP = nurse practitioner PRN = 'as needed' (pro re nata)

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Pressure injury
Whara pēhanga

The information in this guide is accurate to the best of our knowledge as of June 2023.

Definition

A **pressure injury** is localised damage to skin and underlying tissue that occurs as a result of pressure, friction or shearing forces. It can develop when pressure temporarily cuts off circulation and tissue dies. Most pressure injuries develop over bony prominences, especially the sacrum, hips and heels, but they can occur in other areas (EPUAP/NPIAP/PPPIA 2019).

Why this is important

Pressure injuries are considered avoidable and have a significant impact on quality of life.

Implications for kaumātua*

It is important to give kaumātua and their **whānau**/family all the information they need to participate in pressure injury prevention and treatment. If they have a strong sense of pride or do not want to be a bother, kaumātua are less likely to ask for or accept help with pressure injury prevention. Whānau/family can suggest valuable, culturally informed interventions and help motivate kaumātua because they are invested in the outcome for their loved one.

Be aware of the concepts of **tapu** (sacred, prohibited, restricted) and **noa** (neutral, ordinary, unrestricted) if using pillows for positioning or pressure avoidance. People and their bodily fluids are considered tapu, and items that touch the body, particularly the head, carry tapu from the individual. Do not swap pillows and pillowcases that have been supporting the head with pillows that have been supporting other parts of the body. Doing so would be a breach of tapu and can have a significant negative impact on kaumātua and whānau/family spiritually and emotionally. See the *Guide for health professionals caring for kaumātua | Kupu arataki mō te manaaki kaumātua* for more information).

* Kaumātua are individuals, and their connection with culture varies. This guide provides a starting point for a conversation about some key cultural concepts with kaumātua and their whānau/family. It is not an exhaustive list; nor does it apply to every person who identifies as Māori. It remains important to avoid assuming all concepts apply to everyone and to allow care to be person and whānau/family led.

Assessment

- Assess all residents for risk of developing pressure injuries, using a standard risk assessment tool (see the policy of your own facility for the tool of choice). Tools differ in their diagnostic accuracy (Chou et al 2013).
- Implement a pressure injury prevention plan for every resident who is considered at risk of pressure injury.
- If a pressure injury develops, base wound care on wound assessment and the wound care goal (see the guides to *Wound assessment | Te aromatawai taotū* and *Wound care | Te maimoatanga ō ngā taotū).* Reducing pressure, friction or shearing forces is the key to healing.

Treatment

- Report pressure injuries in line with your facility's policy.
- To stage pressure injury, follow an agreed standard (European Pressure Ulcer Advisory Panel et al 2019) recommended by the Pan Pacific Pressure Injury Classification system (pictures on following pages) and use further resources **pppia.org/pppia-resources**.
- Pressure injuries in darker skin tones may be more difficult to identify, and this may lead to identification at a later stage (Oozageer Gunowa et al 2018). Specifically, stage 1 pressure injuries are unlikely to be reddened; however, damaged skin is likely to be different from surrounding skin in that it may be a different colour, firmer, softer, warmer or cooler than surrounding tissue. The area is also likely to be painful (Baker 2016).
- Use pressure-relieving equipment and techniques in line with your facility's policy.
- Chart and evaluate progress of the wound every 2 weeks.
- Treat the wound based on the wound care goal.
- Provide adequate pain management, nutrition and hydration. Manage continence and provide associated skin care (see the SSKIN poster available at: **www.nzwcs.org.nz/images/ppig/STOP_PI_2020_RESOURCES/3054_ACC_Pressure_Injuries_-_A3_Poster_FA_ONLINE_PRINT_SSKIN.pdf** .
- Refer high-risk wounds (stage 3 and above) to a specialist wound service and the responsible general practitioner or nurse practitioner.

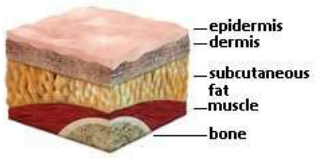
Care planning

The care plan includes specific pressure areas of care and holistic frailty management with the aim of maximising wellness and minimising the risk of developing further pressure injuries.

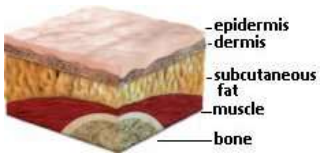
PAN PACIFIC PRESSURE INJURY CLASSIFICATION SYSTEM FOR OLDER ADULTS

PAN PACIFIC Pressure Injury Alliance

Normal adult skin



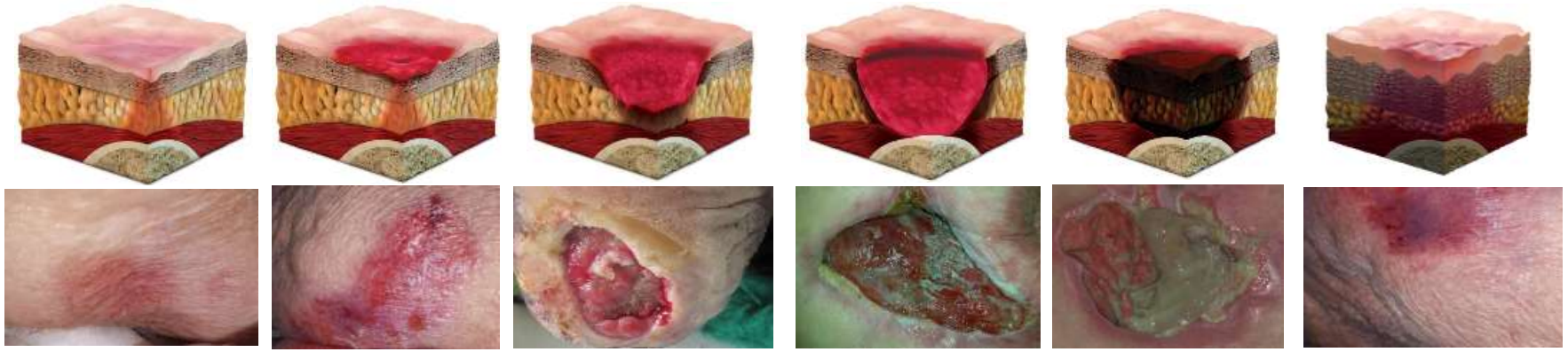
Normal older skin



Compared to the skin of younger adults, older skin has a thinner, more wrinkled epidermis and may appear paler or with pigmented (age) spots. Epidermis, dermis and subcutaneous fat layers are thinner. Skin moisture concentration is reduced and skin pH is raised in older adults.

Text adapted from: *International NPUAP/EPUAP Pressure Ulcer Classification System (2009,2014)* published in: National Pressure Ulcer Advisory Panel (NPUAP), European Pressure Ulcer Advisory Panel (EPUAP), Pan Pacific Pressure Injury Alliance (PPPIA), Prevention and Treatment of Pressure Ulcers: Clinical Practice Guideline. 2014: Emily Haesler (Ed.) Cambridge Media: Osborne Park, WA. **3D graphics:** Owned by PPPIA, supported by Silver Chain. **Photos**: Photos courtesy of K. Carville, used with permission. **Also available in this series:** PPPIA Classification System: Multicultural, PPPIA Classification System for Adults with Light Skin Tones, PPPIA Classification System for Dark Skin Tones, PPPIA Classification System for Asian Skin Tones, PPPIA Classification System for Neonates and Children. **More information and permission:** www.pppia.org

Stage 1	Stage 2	Stage 3	Stage 4	Unstageable	Suspected Deep Tissue Injury
Intact skin with non-blanchable redness of a localised area usually over bony prominences. Darkly pigmented skin may not have visible blanching; its colour may differ from the surrounding area. The area may be painful, firm, soft, warmer or cooler as compared to adjacent tissue. Stage I pressure injuries may be difficult to detect in older adults with darkly pigmented skin tone. May indicate 'at risk' older adults (a heralding sign of risk).	Partial thickness loss of dermis presenting as a shallow open ulcer with a red/pink wound bed, without slough. May also present as an intact or open/ruptured serum-filled blister. Presents as a shiny or dry shallow ulcer without slough or bruising (bruising indicates suspected deep tissue injury). Stage 2 pressure injuries should not be used to describe skin tears, tape burns, perineal dermatitis, maceration or excoriation.	Full thickness tissue loss. Subcutaneous fat may be visible, but bone, tendon or muscle are not exposed. Slough may be present but does not obscure depth of tissue loss. May include undermining and tunnelling. The depth of Stage 3 pressure injuries varies by anatomical location. The bridge of nose, ear, occiput and malleolus do not have subcutaneous tissue and Stage 3 ulcers can be shallow. In contrast, areas of significant adiposity can develop extremely deep Stage 3 pressure injuries. Bone/tendon is not visible or directly palpable.	Full thickness tissue loss with exposed bone, tendon or muscle. Slough or eschar may be present on some parts of the wound bed. Often include undermining and tunnelling. The depth of a Stage 4 pressure injury varies by anatomical location. The bridge of nose, ear, occiput and malleolus do not have subcutaneous tissue and these ulcers can be shallow. Stage 4 pressure injuries can extend into muscle and/or supporting structures (e.g. fascia, tendon or joint capsule) making osteomyelitis possible. Exposed bone/tendon is visible or directly palpable.	Full thickness tissue loss in which the ulcer base is covered by slough (yellow, tan, gray, green or brown) and/or eschar (tan, brown or black) in the wound bed. Until enough slough and/or eschar is removed to expose the base of the wound, the true depth, (and therefore Stage) cannot be determined. Stable (dry, adherent, intact, no erythema or fluctuance) eschar on the heels serves as 'the body's natural (biological) cover' and should not be removed.	Purple or maroon localised area of discoloured intact skin or blood-filled blister due to damage of underlying soft tissue from pressure and/or shear. The area may be preceded by tissue that is painful, firm, mushy, boggy, warmer or cooler as compared to adjacent tissue. Deep tissue injury may be difficult to detect in older adults with dark skin tones. Evolution may include a thin blister over a dark wound bed. The wound may further evolve and be covered by thin eschar. Evolution may be rapid, exposing additional layers of tissue even with optimal treatment.



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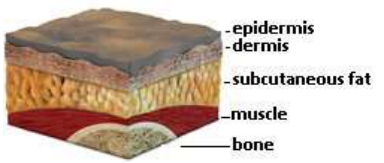
PAN PACIFIC PRESSURE INJURY CLASSIFICATION SYSTEM FOR DARK SKIN TONES

PAN PACIFIC
Pressure Injury Alliance

Normal skin



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More information and permission for use: www.pppia.org

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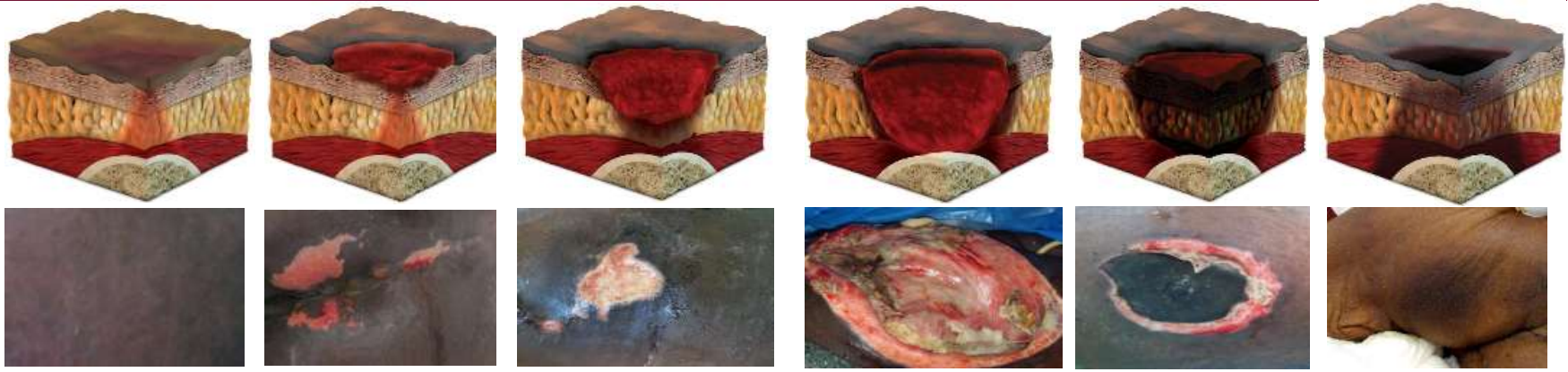

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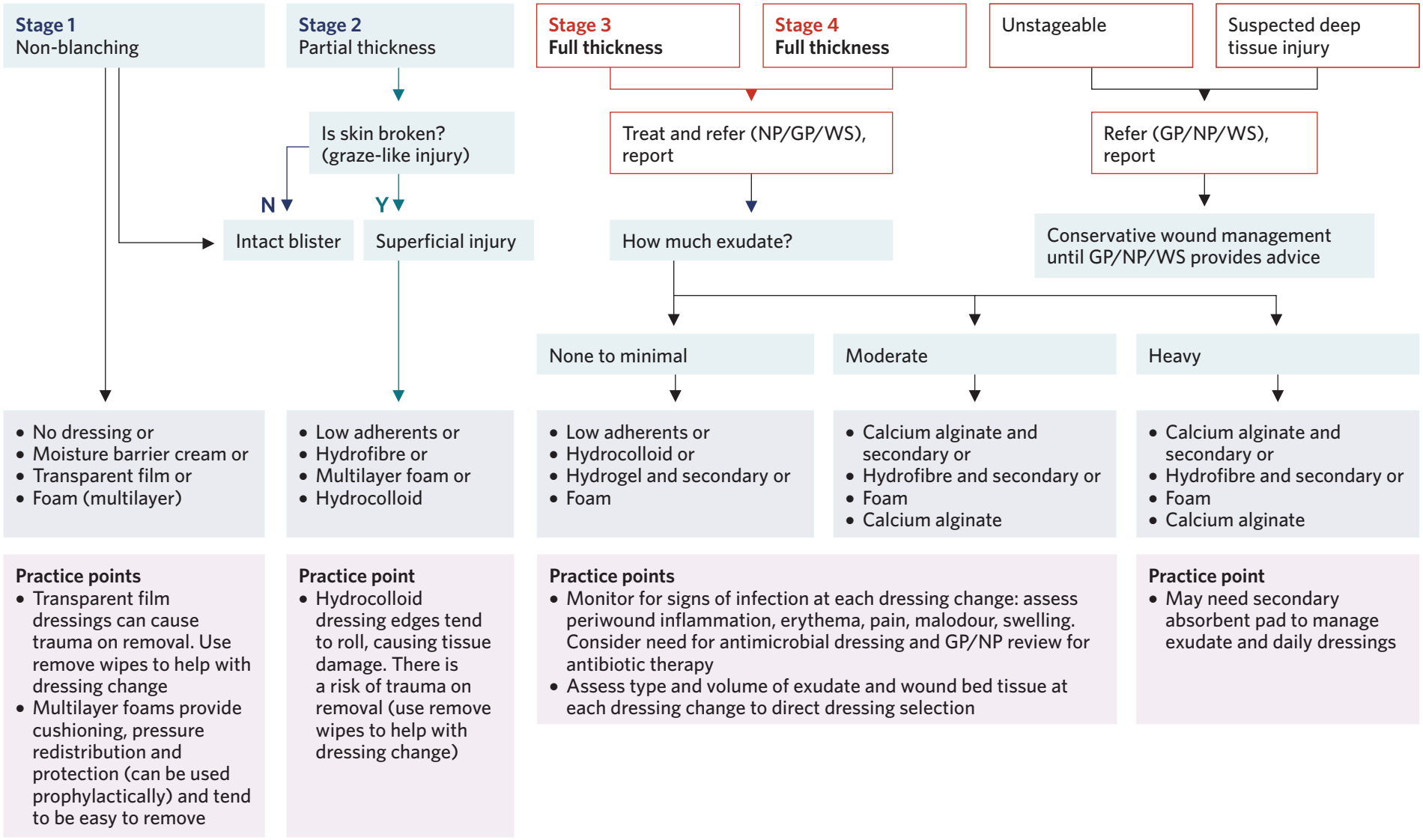
Decision support



GP = general practitioner NP = nurse practitioner WS = wound specialist

'Report' means follow facility incident reporting guidelines.

Further resources

Pan Pacific Pressure Injury Alliance (PPPIA) resources: **pppia.org/pppia-resources**

Reproduction of the PPPIA classification system tools and flowcharts is permitted for all educational purposes **in the original formats (including acknowledgements and logos) available on the above website.**

Advisory Document for Wound Bed Preparation in New Zealand: **nzwcs.org.nz/images/publications/Wound_Bed_Preparation_June2020/NZWCSWoundBedPrepAdvisoryDoc2020.pdf**

SSKIN (Surface, Skin, Keep moving, Incontinence, Nutrition) poster: **www.nzwcs.org.nz/images/ppig/STOP_PI_2020_RESOURCES/3054_ACC_Pressure_Injuries_-_A3_Poster_FA_ONLINE_PRINT_SSKIN.pdf**.

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Responsive and reactive behaviour
Ngā momo whanonga kātoitoi, tauhohe hoki

The information in this guide is accurate to the best of our knowledge as of June 2023.

Definition

Responsive and reactive behaviours are actions, words or gestures of a person living with dementia (PLWD) in response to something negative, frustrating or confusing in their social and physical environment (Alzheimer Society 2013; Scales et al 2018). These behaviours occur because dementia limits a person's ability to understand their environment, communicate and provide for their own needs. They are best understood as responses to challenges in the physical and social environments rather than symptoms of the disease itself (Cohen-Mansfield et al 2015; Fazio et al 2020).

Responses are wide ranging. At various times they may include agitation, aggression, apathy, withdrawal, anxiety and depression, delusions and/or hallucinations, paranoia, searching (wandering) or restlessness, making unexpected noises, sexual or social disinhibition, loss of emotional control and sleep disturbance (Alzheimer Society 2013; bpac^{nz} 2020; Fazio et al 2020).

Key points

- Thinking of behaviours as communication of unmet need helps carers understand the situation and find solutions (Cohen-Mansfield et al 2015).
- Getting to know the PLWD is the key to working effectively with them and their **whānau**/family.
- Recommended responses are to have a person-centred culture, identify triggers (antecedents) of behaviour and take a flexible approach to responding to behaviour (Fazio et al 2020).
- Consider medication use carefully. Psychotropic medications can have harmful as well as beneficial effects, and medications for health issues such as pain or depression should be given even when the person cannot communicate about them verbally (bpac^{nz} 2020; Fazio et al 2020; Scales et al 2018).

Why this is important

PLWD can experience severe distress but may have difficulty expressing the reason for distress. Understanding the behavioural expression of distress (seeing the issue from the perspective of the PLWD) is vital to maximising quality of life.

Implications for kaumātua* (Dudley et al 2019)

A **Māori** world view interprets the behaviour changes in those with **mate wareware** (dementia) differently from western medicine. The way that kaumātua manifest such behaviour may also differ. For these reasons, you should carefully consider cultural perspectives when assessing and treating kaumātua. For example, anxiety and depression can present with **wairua** (spiritual) unease, unrest or disturbance, all of which require careful interpretation (bpac^{nz} 2010).

Key aspects of care include:

- providing for the holistic wellbeing of the whole whānau/family, with special consideration for **oranga wairua** (spiritual wellbeing)
- honouring kaumātua identity
- developing **mana** -enhancing relationships based on cultural concepts of **aroha** (compassion, kindness, empathy), **manaakitanga** (reciprocity, kindness, hospitality), **whanaungatanga** (relationships, connections) and **whakapapa** (genealogy).

When planning care, consider treatments that are culturally relevant and appealing such as:

- integrating the use of **te reo Māori** (which may have been the first language of the kaumātua but they were suppressed from using it as a child)
- participation in cultural activities and events such as **waiata** (singing), **kapa haka** (Māori performing arts) and opportunities to **manaaki** (care for, look after) others.

See the *Guide for health professionals caring for kaumātua | Kupu arataki mō te manaaki kaumātua* for more information.

Assessment

It is helpful to use a framework to identify distress and its impact on the person, their whānau/family and others. Many frameworks are available, as follows.

Model of unmet need (Cohen-Mansfield et al 2015)

Distress behaviours are a result of interacting issues. To assess their cause, consider all of these elements:

1. lifelong habits and personality
2. current physical and mental condition
3. environmental issues – physical and psychosocial
4. behaviour as a means of fulfilling needs
5. behaviour as a means of communicating needs
6. behaviour as an outcome of frustration or issue interacting with disinhibition.

* Kaumātua are individuals, and their connection with culture varies. This guide provides a starting point for a conversation about some key cultural concepts with kaumātua and their whānau/family. It is not an exhaustive list; nor does it apply to every person who identifies as Māori. It remains important to avoid assuming all concepts apply to everyone and to allow care to be person and whānau/family led.

Typically, unmet needs are:

1. loneliness or need for social interaction
2. boredom or sensory deprivation
3. need for meaningful activity
4. discomfort
5. anxiety or need for relaxation
6. need for control
7. pain.

Impacts on behaviour (James and Jackman 2017)

1. What is happening in the **environment** that impacts on behaviour?
2. What is happening for the **PLWD** that impacts on behaviour?
3. What is happening for the **care team** that impacts on behaviour?

A communication alternative (Fazio et al 2020)

1. What is the person expressing?
2. What is causing this reaction?
3. How can we respond to reduce their distress?

The ABC process (Psychology Tools nd)

1. Antecedents: What happened before the event?
2. Behaviour: Describe what happened.
3. Consequences: What happened next? How did the whānau/family, care team and others respond?

Treatment

It is 'business as usual' to minimise distress for everyone in our care. Evidence shows that the following non-pharmacological approaches reduce distress and reactive behaviours in PLWD.

All approaches need to be carefully individualised and evaluated to meet the needs of and take account of the preferences, abilities, habits and roles of the PLWD (including discussing with whānau/family or delegated decision-maker). In health care environments, interventions need to follow provider training and safety protocols.

The following evidence is available on non-pharmacological practices (Scales et al 2018).

Sensory intervention (Scales et al 2018)

- Aromatherapy practices may help to reduce agitation (Scales et al 2018), although research findings are mixed (Livingston et al 2014).

- Massage can reduce non-verbal communication of distress such as agitation, aggression, anxiety, depression and disruptive vocalisations.
- Multisensory stimulation (light, calming sounds, smells and tactile stimuli) can reduce short-term anxiety, agitation, apathy and depression.

Psychosocial (Scales et al 2018)

- Validation therapy focuses empathically on the emotional content of the person's words or expressions, with the aim of reducing negative and enhancing positive feelings. Validating how the person feels helps to reduce agitation, apathy, irritability and disturbed sleep.
- Reminiscence therapy improves mood without negative effects while focusing on happy memories. Used together with the person's life story, it can help reduce feelings of loneliness and isolation. (Also be aware of the risk of stimulating unhappy memories.)
- Music therapy can help to reduce anxiety, agitation and apathy in some people (Scales et al 2018). It can be an individualised therapy or used as part of a group leisure activity (while again being aware of the possibility of overstimulation) (Livingston et al 2014).
- Pet therapy can help increase social and verbal interactions, decrease passivity and bring comfort and calm to those who like animals. (Also be aware of allergies or fear of animals.)
- Meaningful activities can help enhance quality of life through engagement, social interaction and opportunities for self-expression and self-determination.

Treating pain in PLWD

Providing adequate pain relief reduces distress in PLWD. However, research shows they are often given less analgesia than people who do not have dementia but have similar chronic conditions (Husebo et al 2011; Nakashima et al 2019).

Communication difficulties can make assessing and managing pain in PLWD difficult so it is important to use a standard pain assessment tool to guide care (Griffioen et al 2019; Paulson et al 2014).

Care planning

Person-centred care (Fazio et al 2018)

Person-centred care (a term first used by Thomas Kitwood) is the approach to care for PLWD that has been most researched and gained the greatest support. The following are key themes of this approach.

1. The person living with dementia is more than a diagnosis. Get to know them and support them to uphold their values, beliefs, interests, abilities and personal preferences.
2. See the world from the perspective of the PLWD. Recognise and accept that behaviour is communication. Validating their feelings can help the person connect with their reality.

3. Every experience or interaction is an opportunity for meaningful engagement. This should support interests and preferences of PLWD, and allow for their choice (eg, of foods, music, clothes, activities). Remember all PLWD can experience joy, comfort and meaning in life.
4. Build and nurture authentic, caring relationships that demonstrate respect and dignity. Focus on the interaction when completing tasks. Supportive relationships are about 'doing with' rather than 'doing for'.
5. Create a supportive community that allows for comfort and celebrates success and occasions.

Suggested responses to specific changes in PLWD (bpac^{nz} 2020)

- Agitation: Consider reversible conditions (pain, constipation, infection, acute illness) and environmental factors (boredom or loss of meaningful activity).
- Apathy: Consider engaging in activities such as music, exercise, sensory stimulation.
- Depression: Consider exercise, increased social engagement or cultural connections and medication (see the *Depression | Mate pāpōuri* guide).
- Anxiety: Identify and manage the cause. Consider environmental factors. Offer emotional support and consider wairua.
- Psychotic symptoms such as delusions and hallucinations: Check for: a) reversible causes; b) truth in delusion/hallucination; c) environmental factors. If no modifiable factors are evident, consider referral to specialist services.
- Some culturally specific manifestations could be misinterpreted as delusions or hallucinations, such as where a kaumātua sees or is visited by **tīpuna** (ancestors). Anyone interpreting such cultural manifestations should only do so from a Māori world view so that the interpretation is accurate and avoids misdiagnosis (bpac^{nz} 2010).
- Wandering: Consider: is this a lifetime habit? Is this searching? Enable safe walking.
- Poor sleep: Assess for and treat underlying conditions or reasons. Minimise night-time noise and light. Establish an evening routine.
- Disinhibition: This can occur due to impaired judgement, poor understanding or misinterpretation of a situation. Support the person rather than scolding them for their actions. Provide the person with privacy and support their dignity at all times.

Other helpful activities

- Give the PLWD access to exercise and physical activity (eg, walking, dancing, exercise classes).
- Help them maintain their own routine. This helps them navigate their day.
- Use the person's preferred name/term and accept this may change at times.
- If the situation is distressing the PLWD, stop it and give them a break. Consider: is this activity necessary? Are you the right person to help?

Decision support

Formally review knowledge of people receiving care:
- ✓ on admission
- ✓ at routine reviews
- ✓ after acute events

Dementia is a progressive illness, meaning symptoms will generally get worse over time. How quickly that happens will vary. What the PLWD can do, remember and understand may change from day to day
- ☐ Review knowledge of person including their core values, interests, life stories and perception of timeline

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Describe what is happening and how this impacts on PLWD and others (severity)

Consider the degree of distress for the PLWD and those around them (care team, whānau/family, fellow residents)

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What do you believe may be the reason for the changes in the PLWD?

Consider using tools such as ABC, life story, talking to whānau/family and care team to search for clues as to reasons (eg, emotional distress, physical symptom, spiritual distress)

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Systematically consider possible cause of change in PLWD

Environment – for example
- ☐ Over/understimulation
- ☐ Wayfinding difficult
- ☐ Temperature, light
- ☐ Clutter
- ☐ Noise

Person (holistic approach) – for example
- ☐ Acute illness or physiological condition (pain, constipation)
- ☐ Basic needs (hunger, elimination, warmth, companionship)
- ☐ Wairua (stress, coping, life story trigger)
- ☐ Whānau/family (something in family life upsetting)

Care team – for example
- ☐ Communication style
- ☐ Ethnicity of care provider (ie, in relation to PLWD world view)
- ☐ New caregiver unfamiliar to PLWD

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Consider: How can distress be reduced?

- ☐ Involve care team, whānau/family in trialling intervention to reduce distress (try strategies that have worked before but remember dementia is progressive and you may need to try multiple approaches)
- ☐ Base strategies on observation and knowledge of person
- ☐ Refer to GP/NP if unresolved

↓

Did intervention work?

N ◄ (back to Consider: How can distress be reduced?)

↓ Y

Review routinely

ABC = antecedents, behaviour, consequences

GP = general practitioner

NP = nurse practitioner

PLWD = person living with dementia

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Urinary incontinence
Te tururuturu o te mimi

The information in this guide is accurate to the best of our knowledge as of June 2023.

Definition

Urinary incontinence is the loss of bladder control and the involuntary leakage of urine. Age-related changes to the urinary tract may increase the risk of urinary incontinence. For example, older people may produce more urine at night and have higher residual volumes of urine. Women may experience reduced urethral closure pressure and men increased prostatic obstruction that affects urinary continence.

Key point

- Limited research evidence supports the assessment and treatment of urinary incontinence that older people living with frailty experience (Gibson et al 2021).

Why this is important

Urinary incontinence has the potential to impact on all areas of life. However, the degree of distress associated with this condition varies from person to person.

Implications for kaumātua*

Because some kaumātua may experience a sense of **whakamā** (shame, embarrassment) over their urinary incontinence, they may either not disclose it or under-report it. They may be a private person who finds discussing incontinence difficult or they may not want to be a bother. See the *Guide for health professionals caring for kaumātua | Kupu arataki mō te manaaki kaumātua* for more information.

It is essential to work with kaumātua and whānau/family to help them engage in prevention, treatment and management options. For example, you need to explain what is known about incontinence and the importance of nutrition and hydration in maintaining usual function. It is also important to support cultural preferences such as traditional Māori herbal remedies. Using familiar, culturally acceptable words when discussing incontinence and continence products (see table below) may also be helpful. Continence New Zealand has additional Māori language resources: **www.continence.org.nz/pages/Continence-Resources-in-Te-Reo-Māori/260**

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Kupu (words) to discuss incontinence

Māori term and pronunciation	English translation
Mimi	Urine
Turuturu	Leak
Māturuturu	Trickle
Kope	Pad
Wharepaku	Toilet

Assessment

A comprehensive assessment is recommended because chronic conditions, mobility, cognitive ability, environment and medications all impact on continence, as the Sixth International Consultation on Incontinence explains (Gibson et al 2021).

History of urinary incontinence

- When did incontinence begin?
- What previous treatments has the person received for urinary incontinence and what were the outcomes?
- Detail the characteristics of voiding: frequency, timing, volume, urgency, hesitancy, awareness.
  - Consider neurological deficit when a person is not aware that their bladder is leaking or their bladder empties without warning.
  - Consider obstruction, eg, prostate enlargement, when the person has trouble starting to pass urine, is straining to pass urine or has poor urine flow.
  - Consider residual urine if dribbling occurs after passing urine.
  - Consider sphincter strength if person cannot stop the flow of urine.
- What are relieving or aggravating factors, eg, diuretics, tea or coffee?
- What adaptive behaviours does the person use? For example, do they like to stay close to the toilet? Do they limit drinking? Do they go to the toilet 'just in case'?
- What urinary continence products do they use?
- How does incontinence impact on the person?

Collect detail of toileting situation (collect information over 3–5 days)

- Urinary toileting habits: Use tools such as a bladder diary and fluid intake record.
- To understand if constipation is influencing urinary incontinence, collect bowel history (using the **Bristol stool chart**).

Medical and surgical history

- Hyperglycaemia increases urine production and can risk neuropathic bladder.
- Heart failure increases production of urine at night.
- Stroke can increase urinary retention.
- Dementia or cognitive impairment can make managing continence more difficult.
- Obstetric history influences urinary tract trauma during delivery.
- Chronic constipation worsens urinary incontinence.
- Previous surgery may impact on continence.

Medication

- Consider all medications, recent changes, any 'as required' medication, diuretic therapy, sedatives, anticholinergics and psychotropics.

Functional history

- Manual dexterity and mobility influence the time it takes to get to and use the toilet.
- Ability to process the complex task influences toileting response time.

Eating and drinking habits

- Coffee and tea can increase frequency of urination.
- Lack of fluids can result in concentrated urine, which can irritate the bladder.
- Urinary continence is improved by avoiding constipation.

Environmental issues

- Where the person is placed relative to the toilet location influences their toileting response time.
- Access issues include toilet seat height and space in toilet room.
- Consider the colour of the toilet suite for visually or cognitively impaired residents.

Staffing issues

- Consider availability of staff at toileting times and location of older person relative to the location of the staff hub.

Types of urinary incontinence

Type	Description	Potential treatments
Stress	Occurs with increased intra-abdominal pressure, eg, coughing, sneezing May occur from weakened pelvic floor muscles or malfunction of urethral sphincter Often occurs with urgency in women	• Scheduled toileting • Oestrogen cream • Pelvic floor muscle exercise
Urge	Sudden need to pass urine due to bladder contractions, not dependent on volume of urine in bladder Multiple causes, including neurological conditions, urinary tract infection, bladder pathology	• Bladder retraining; scheduled toileting • Pelvic floor muscle exercise • Anticholinergic medication
Overactive bladder	No cause found for repeated, uncontrolled bladder contraction Causes urgency, frequency and nocturia	• Bladder retraining and/or anticholinergic medication
Overflow	Lack of sensation to urinate, bladder does not empty and small amount of urine leaks continuously; can present with inability to void Most strongly associated with enlarged prostate; residual volume measured with bladder scanner or in/out catheter	• Intermittent self (or nurse) catheterisation or indwelling catheter • Alpha blockers for benign prostatic hypertrophy • Scheduled voiding and double voiding • General practitioner or nurse practitioner monitoring kidney function
Functional	Associated with limitations in thinking, moving and communicating about need to reach toilet due to issues such as confusion, cognitive impairment, neurological conditions and vision/hearing difficulties	• Scheduled toileting in line with individual's observed pattern • Bedside toileting (commode, urinal or co-located bathroom)

Urinary incontinence assessment questions: QUID: Questionnaire for female urinary incontinence diagnosis. Questions 1–3 relate to stress incontinence and questions 4–6 to urge incontinence (Bradley et al 2010).

Do you leak urine (even small drops), wet yourself or wet your pads or undergarments ...

1. When you cough or sneeze?

☐ None of the time ☐ Rarely ☐ Once in a while ☐ Often ☐ Most of the time ☐ All the time

2. When you bend down or lift something up?

☐ None of the time ☐ Rarely ☐ Once in a while ☐ Often ☐ Most of the time ☐ All the time

3. When you walk quickly, jog or exercise?

☐ None of the time ☐ Rarely ☐ Once in a while ☐ Often ☐ Most of the time ☐ All the time

4. While you are undressing to use the toilet?

☐ None of the time ☐ Rarely ☐ Once in a while ☐ Often ☐ Most of the time ☐ All the time

5. Do you get such a strong and uncomfortable need to urinate that you leak urine (even small drops) or wet yourself before reaching the toilet?

☐ None of the time ☐ Rarely ☐ Once in a while ☐ Often ☐ Most of the time ☐ All the time

6. Do you have to rush to the bathroom because you get a sudden, strong need to urinate?

☐ None of the time ☐ Rarely ☐ Once in a while ☐ Often ☐ Most of the time ☐ All the time

Further assessment resources

People living in aged residential care are entitled to a continence assessment from a continence nurse specialist. The Continence NZ website hosts a range of tools for residential aged care: **www.continence.org.nz/pages/Continence-Information-Adults/18/** (scroll to the bottom of the webpage).

Treatment

Containment

- Urinary continence products are recommended over urinary catheterisation because they have a lower risk of infection. Choose the product based on its match with urine volume.

Physical therapy

- Pelvic floor exercises can be helpful.
- Support general mobility to help the person get to and use the toilet.

Pharmacology

- Antimuscarinic medications (oxybutynin and solifenacin) reduce symptoms of urge incontinence and increase bladder capacity. They may be helpful. However, they also have many adverse effects, including increasing the risk of falls, constipation and urinary retention (New Zealand Formulary nd).
- Local oestrogen therapy (applied to vagina) can help with incontinence related to vaginal atrophy.
- Laxatives can help avoid constipation, a condition that worsens urinary incontinence.

Treat potentially reversible conditions

- Avoid hyper- and hypoglycaemia in diabetes.
- Treat urinary tract infection and inflammation.
- Manage functional limitations.
- Optimise fluid management.

Care planning

Individual assessment is required to understand the impact of incontinence on the person and the capacity to implement interventions.

Decision support

History of urinary incontinence
- ☐ Onset and previous treatments
- ☐ Characteristics of voiding
- ☐ Aggravating and relieving factors
- ☐ Behaviours and products to manage continence
- ☐ Impact on person

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Usual toileting habits and continence details
- ☐ 3-day bladder diary to establish routines
- ☐ 7-day Bristol stool chart to establish routines
- ☐ Collect symptom detail

Determine:
- severity of issue
- bowel management plan
- incontinence type

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Medical and surgical history
- ☐ Surgery (prostate, bowel, gynae, back)
- ☐ Obstetric (births and associated trauma)
- ☐ Whānau/family history
- ☐ Medical chronic conditions
- ☐ Constipation and bowel management history
- ☐ Gynaecological (vaginal atrophy, thrush)

- Note risk associated with surgery
- Note risk from childbirth
- Note whānau/family history and screen/refer
- Optimise management (refer GP/NP)
- Manage constipation
- Manage atrophy or thrush (refer GP/NP)

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Review available tests
- ☐ Ultrasound (residual urine)
- ☐ Blood tests (renal)
- ☐ Urinalysis results

- Consider intermittent catheterisation (CNS continence)
- Consider impact of this
- Treat current UTI but not asymptomatic bacteriuria

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Medication
- ☐ Prescribed medications
- ☐ Recent changes in medication
- ☐ OTC, herbal or self-administered
- ☐ Drugs and alcohol
- ☐ Laxative use (include PRN doses)

- Check NZF: do medications worsen incontinence?
- Is change in continence coincidental?
- Review for impact or interactions
- Alcohol increases urine production
- Consider effectiveness and regularity

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Cognitive function
- ☐ Does person recognise need to toilet?
- ☐ Can they locate toilet?
- ☐ Do they recognise toilet?
- ☐ Can they manage toileting processes?

- Regular toileting may be necessary
- Use signage, colours, staff direction
- Consider lifestyle: did they use out-house in past?
- Provide support, easy-access clothing

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Physical function
- ☐ Manual dexterity (manage clothing, zips, buttons)
- ☐ Mobility: get to and on/off toilet, reach call bells
- ☐ Visual acuity

- Easy-access clothing
- Mobility aid and physio referral
- Colours, lighting, glasses in place

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Usual eating and drinking habits
- ☐ 3-day fluid diary to establish routines (volumes and type)
- ☐ 5-day food diary (compare with stool chart)

- Determine effect on continence
- Determine how food affects bowel

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Review environment
- ☐ Impediments to reaching and using toilet (distance from toilet, distance from staff, mobility aids, call bells, shared facilities)

- Consider environmental adaptations

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Review staffing
- ☐ Is staffing sufficient at peak toileting times? Is toileting prioritised? Are isolation precautions impacting staff availability?

- Consider staffing adaptations

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Impact of continence or incontinence

How does this impact on the person's:
- ☐ mana and self-esteem
- ☐ day-to-day activity and quality of life
- ☐ goals and expectations

- Use to plan person-centred approach to intensity of treatment/investigation

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Physical exam
- ☐ General health and vital signs
- ☐ Abdominal and genital exam (refer as needed to NP/GP)
- ☐ Bowel exam (refer as needed to NP/GP)

- Use to aid diagnosis and plan treatment or referral in collaboration with GP/NP

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Use collected information to develop holistic continence plan, including referral to MDT

Review every 3 months

CNS = clinical nurse specialist
GP = general practitioner
MDT = multidisciplinary team
NP = nurse practitioner
NZF = New Zealand Formulary
PRN = 'as needed' (pro re nata)
OTC = over the counter
UTI = urinary tract infection

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Urinary tract infections
Te pokenga pūaha mimi

The information in this guide is accurate to the best of our knowledge as of June 2023.

Definition

A urinary tract infection (UTI) is an infection in any part of the urinary system, from the urethra and bladder (cystitis) to the kidneys (pyelonephritis). People with a simple (non-complicated) UTI (cystitis) may experience pelvic pain, increased urge to urinate, and pain or burning with urination (dysuria). They can be treated in aged residential care with oral antibiotic therapy (Health Quality & Safety Commission 2022).

Key points

- In aged residential care, up to half of the population have asymptomatic bacteriuria (where bacteria are in the urine but do no harm). It is more common in older women than older men (Givler and Givler 2022).
- A simple UTI can progress to pyelonephritis and sepsis so always consult a nurse practitioner (NP) or general practitioner (GP) as soon as you note symptoms of these more serious conditions. Pyelonephritis symptoms include back pain, nausea, vomiting and fever, confusion, hypothermia and hypotension.

Where possible, treat a UTI with antibiotics when the person has clinical signs and symptoms (following the decision-support flowchart) and lab results are within the specified range.

Why this is important

UTIs cause distress and can lead to more serious conditions. However, unnecessary exposure to antibiotic therapy can lead to antibiotic resistance and adverse medication effects. Standardising an approach to UTI diagnosis and treatment provides the balance between potential benefits and harms. Te Tāhū Hauora Health Quality & Safety Commission has produced a 'how to' guide to support this process (Health Quality & Safety Commission 2022).

Implications for kaumātua*

Kaumātua may experience a sense of **whakamā** (shame, embarrassment) about their urinary symptoms and so either not disclose or under-report them. They may be a private person who finds discussing symptoms difficult or they may not want to be a bother to others.

* Kaumātua are individuals, and their connection with culture varies. This guide provides a starting point for a conversation about some key cultural concepts with kaumātua and their whānau/family. It is not an exhaustive list; nor does it apply to every person who identifies as Māori. It remains important to avoid assuming all concepts apply to everyone and to allow care to be person and whānau/family led.

It is essential to provide kaumātua and **whānau**/family with all the information they need to help them understand the approach to managing UTIs in aged residential care. Working with kaumātua and whānau/family may include supporting their use of traditional Māori herbal remedies.

Should kaumātua experience delirium, whānau/family may see this as a disturbance in the resident's **wairua** (spirituality) or a breach of their personal **tapu** (sacredness). It is important to acknowledge this cultural perspective and welcome cultural interventions such as **karakia** (prayer), **pure** (cleansing rituals) and **whakanoa** (ritual that lifts or removes tapu).

See the *Guide for health professionals caring for kaumātua | Kupu arataki mō te manaaki kaumātua* for more information.

Assessment

Diagnosis – people who can report symptoms

Diagnosis relies on the presence of clinical symptoms and urine laboratory testing (urine microscopy culture and sensitivity testing, MC&S).

1. **Clinical symptoms** – people without a urinary catheter experiencing situation a, b or c:
    a. acute dysuria or
    b. fever AND one of the following: acute flank pain or tenderness; suprapubic pain; visible blood in urine; new or increased incontinence, urgency or frequency or
    c. two or more of the following: suprapubic pain; visible blood in urine; new or increased incontinence, urgency or frequency.

AND

2. **Laboratory testing MC&S** – situation a or b:
    a. bacterial count > 10^8 CFU/L with signs and symptoms or
    b. bacterial count > 10^5 CFU/L if specimen collected by intermittent catheterisation.

Diagnosis – people who cannot report symptoms

In situations where residents cannot report their symptoms (eg, those with dementia or communication issues), the nurse will need to observe for changes in cognition, behaviour, function and vital signs to identify deterioration (D'Agata et al 2013). In these circumstances a dipstick urinalysis may be helpful to **rule out the diagnosis of UTI** (Devillé et al 2004). Unfortunately, a dipstick showing leukocytes and nitrites does not confirm UTI because half of the population ordinarily have bacteria in their urine.

Treatment process

(See decision-support flowchart on the next page for detail.)

1. Identify symptoms.
2. Contact GP/NP for treatment plan.
3. Collect a urine sample for MC&S **before** administering antibiotic.
    a. Clean catch urine or collect through intermittent catheterisation and keep the specimen refrigerated until processed by the laboratory (avoid false results).
    b. Do not withhold antibiotic if it is not possible to collect a urine specimen (Gharbi et al 2019).
4. Administer prescribed antibiotic treatment.
5. Review MC&S result.
    a. Check antibiotic matches sensitivity reported.
    b. Check bacterial count is within the range as described in decision-support flowchart.
6. Contact GP/NP if bacteria are not sensitive to antibiotic, count is not within the range or person deteriorates.

Care plan

Clearly record identified symptoms and treatment plan in resident's notes. This includes the lab results. Document information related to a resident with suspected UTI and communicate it during handover.

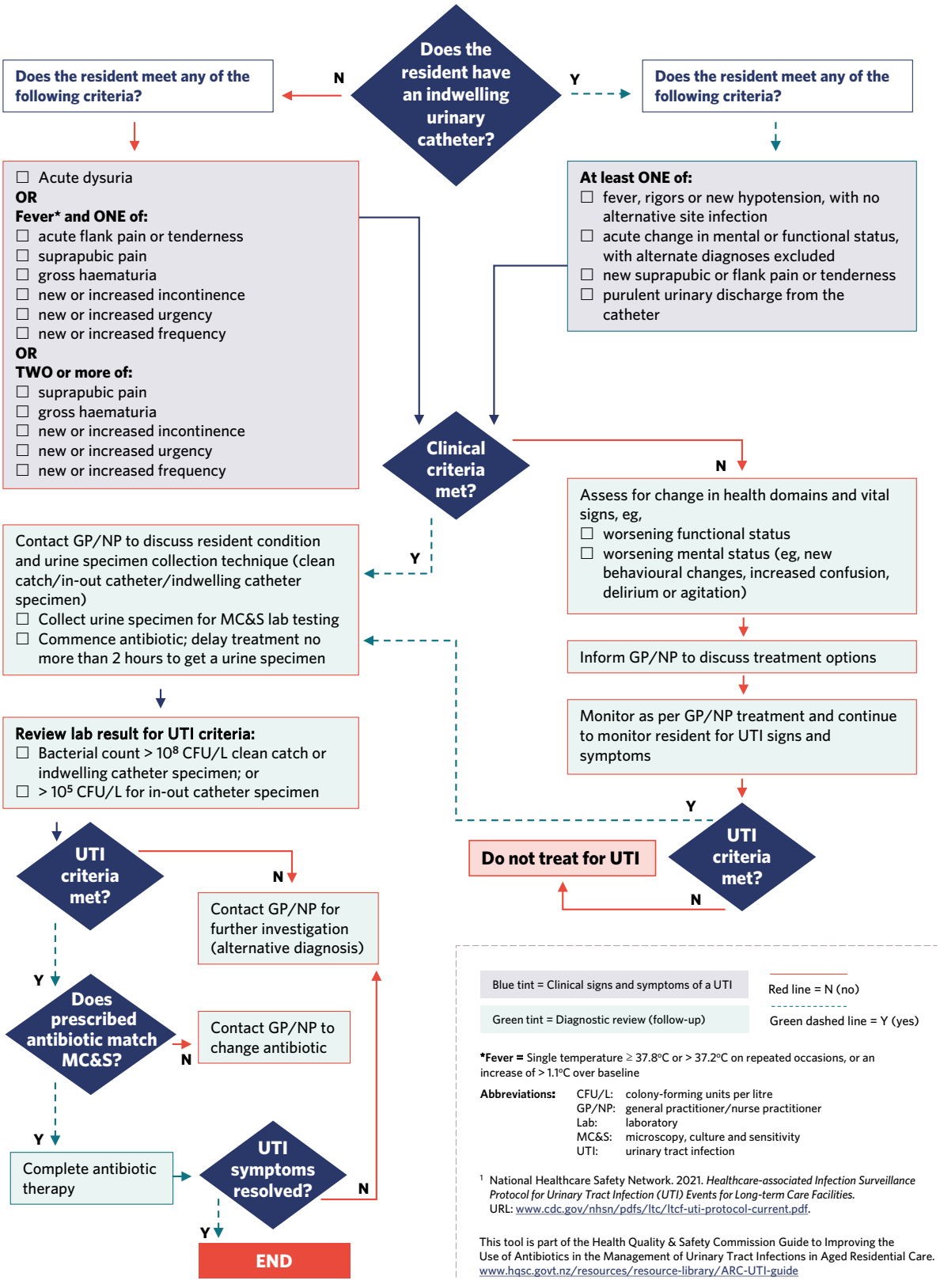
Implement strategies to minimise the risk of UTI for all women living in aged residential care. These include:

- fluid intake of at least 1.5 litres per day (less fluid restricted) (Booth and Agnew 2019); see the *Nutrition and hydration | Te taiora me te mitiwai* guide
- considering removal of indwelling urinary catheters
- continence assessment and, if necessary, well-fitted products
- hand hygiene (both resident and care provider)
- avoiding constipation.

Decision support

Urinary tract infection (UTI) decision-support tool for the treatment of medically stable residents in aged residential care

Resident unwell; UTI suspected (I think my resident may have a UTI)



***Fever =** Single temperature ≥ 37.8°C or > 37.2°C on repeated occasions, or an increase of > 1.1°C over baseline

Abbreviations:

CFU/L:	colony-forming units per litre
GP/NP:	general practitioner/nurse practitioner
Lab:	laboratory
MC&S:	microscopy, culture and sensitivity
UTI:	urinary tract infection

[1] National Healthcare Safety Network. 2021. *Healthcare-associated Infection Surveillance Protocol for Urinary Tract Infection (UTI) Events for Long-term Care Facilities.* URL: www.cdc.gov/nhsn/pdfs/ltc/ltcf-uti-protocol-current.pdf.

This tool is part of the Health Quality & Safety Commission Guide to Improving the Use of Antibiotics in the Management of Urinary Tract Infections in Aged Residential Care. www.hqsc.govt.nz/resources/resource-library/ARC-UTI-guide

Source: Health Quality & Safety Commission (2022)

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Wound assessment
Te aromatawai taotū

The information in this guide is accurate to the best of our knowledge as of June 2023.

Definition

Wound assessment is the initial and follow-up collection of information about a person's wound, their health history (physical, cognitive, behavioural, spiritual, mental and functional) and environmental factors to understand the likely cause of the wound, plan management approaches and assess the healing process. It is necessary to physically examine the person (for their general health and wellbeing) and the wound to complete a comprehensive wound assessment (Dowsett et al 2015; Phillips et al 2020; Swanson 2014).

Key point

- Efficient wound healing requires optimum management of the person's general health as well as specific wound management (Dowsett et al 2015; Phillips et al 2020).

Why this is important

Wound assessment provides the foundation for wound care treatment planning, measuring wound healing progress and prompt referral for non-healing or deteriorating wounds (Dowsett et al 2015; Phillips et al 2020). Wound assessment must occur before wound care goals ultimately leading to wound healing can be determined.

In some circumstances (where the person is terminally ill or has untreatable vessel disease), wound healing may not be realistic. In these cases, wound assessment aims to identify wound aetiology, and wound care goals include patient comfort and infection prevention.

Implications for kaumātua*

When completing a wound assessment with kaumātua, it is important to observe the interconnected principles of **mana** (dignity, prestige, status), **tapu** (sacred, prohibited, restricted) and **noa** (neutral, ordinary, unrestricted). See the *Guide for health professionals caring for kaumātua | Kupu arataki mō te manaaki kaumātua* for more information.

Traditionally, mana increases with age (so kaumātua are highly regarded), and as mana increases so does tapu (Mead 2016). All people (and their body fluids) are tapu; the head and sex organs are the most tapu of all. Items that touch the body, especially the head, carry the individual's tapu.

* Kaumātua are individuals, and their connection with culture varies. This guide provides a starting point for a conversation about some key cultural concepts with kaumātua and their whānau/family. It is not an exhaustive list; nor does it apply to every person who identifies as Māori. It remains important to avoid assuming all concepts apply to everyone and to allow care to be person and whānau/family led.

It is vital to keep tapu and noa separated and balanced to avoid a breach of tapu. Traditionally, breaching tapu incurs the wrath of the **atua** (gods), which can have a significant spiritual and emotional impact on kaumātua and **whānau**/family.

In practice, observing these principles means that you:

- avoid damage to tapu and mana by asking for permission to enter personal space (tapu) and to touch the person – touching the head in particular is seen as an intimate act
- keep tapu and noa separate by keeping wound assessment supplies off food or drink surfaces, away from toileting equipment and away from the head and the pillows that the head rests on.

Bear in mind that kaumātua may feel **whakamā** (shame, embarrassment) about showing an outsider their wound. As a result, they may be reluctant to participate in wound assessment or may under-report their symptoms.

Assessment

A wound assessment considers: (World Union of Wound Healing Societies 2020)

- health and environmental factors impacting wound healing, eg, medical conditions, medication, nutrition, hydration and exercise, mental wellbeing, smoking
- wound-specific factors: unrelieved pressure, infection
- wound duration factors:*
  - acute wounds are new with sudden onset and tend to heal in 6 weeks or less; examples include skin tears, surgical incisions
  - hard-to-heal wounds (previously called chronic wounds) do not heal in a timely manner; they take longer than 6 weeks to heal or reduce by half; examples include pressure injuries, leg ulcers.

* Wound healing times vary: as a pragmatic guide, this document suggests acute wounds heal or reduce by at least 50 percent in 6 weeks and hard-to-heal wounds take longer than 6 weeks to reduce by half or heal.

Tissue type: assess wound bed tissue and percentage of each tissue type

Necrotic tissue or eschar

Black or brownish, dehydrated, dead tissue, looks 'leathery' and is usually dry.

Wounds with eschar on lower leg or foot: Keep dry and complete urgent referral to specialist services (vascular).

Slough

Cream or yellow dead fibrous tissue, can be dry or moist.

Needs debriding with dressings. If dry, donate moisture; if wet, absorb exudate.

Beware tissue such as fat, tendons, bones and ligaments also appear yellow. Any suspicion that underlying structures can be seen in a wound requires urgent referral to GP/NP specialist services.

Granulating tissue

Bright-red, bumpy texture, initially pink then beefy red – **this is normal healing tissue.**

Protect and promote tissue growth with moist healing environment.

Hypergranulation tissue: is an overgrowth of granulating tissue that sits above the usual level of the skin. It is important to get this tissue checked by GP/NP as it can be malignant. Referral to specialist wound service may be necessary to get treatment advice.

Epithelising tissue

Protect from trauma and keep moist.

Infection: assess for infection (IWII 2022) Take a swab if you note symptoms.

Local infection (subtle): delayed healing	
• Hypergranulation • Bleeding, friable granulation tissue • Epithelial bridging and pocketing	• Increased exudate • Delayed wound healing
Local infection (overt): wound breakdown	
• Redness, warm and swollen tissue • Purulent discharge • Wound breakdown or increase size	• New or increased pain • Malodour
Spreading infection: wound breakdown	
• Extending redness, warm and swollen tissue • Inflammation > 2 cm from wound edge	• Wound breakdown or increased size • Possible lymph node swelling
Systemic infection: rapid wound breakdown and acutely unwell older person	
All signs of infection plus: • Cellulitis, abscess or pus • New or increased confusion/delirium • Lethargy/sleeping more • Mood or behaviour change	• Pyrexia, fever, chills or hypothermia • Hypotension, tachycardia • Swollen lymph nodes (lymphangitis) • Sepsis

Moisture or exudate

Moist (not wet or dry) wound environments promote wound healing. Assess wound environment and volume of exudate to determine the need to either add or absorb moisture.

Edge of wound: assess wound edge and periwound (up to 4 cm around wound)

Maceration	**Dehydration**
White, soggy surrounding tissue • Protect surrounding skin with barrier film or cream • Review frequency of dressing changes and absorbency of products	Hard, dry surrounding skin • Rehydrate or moisturise
Undermining	**Rolled edges**
Loss of tissue under wound edges • Establish depth and stimulate granulation	Raised, rolled edges around wound • These can present in older non-healing wounds; consider excluding malignancy
Hyperkeratosis or callus	**Eczema (wet or dry)**
Hard, dead skin plaques • Remove and rehydrate • Seek specialist advice	• If non-responsive to basic moisturisers, review need for steroid therapy with nurse practitioner or general practitioner. May need dermatology review

Decision support

Identify wound type

- ☐ Pressure injury
- ☐ Skin tear
- ☐ Surgical
- ☐ Palliative

Assess local factors affecting wound healing

- ☐ Impaired blood supply
- ☐ Dehydration
- ☐ Age of wound
- ☐ Mechanical stress
- ☐ Local infection
- ☐ Wound location

Assess systemic factors affecting wound healing

- ☐ Nutritional status: protein, fat, carbohydrates, vitamins and minerals in diet
- ☐ Presence of dehydration due to excess wound exudate
- ☐ Weight: cachexia delays healing, obesity can put stress on wound
- ☐ Stress hormones
- ☐ Medication: immunosuppressants, anti-inflammatories, anticoagulants
- ☐ Lack of rest/sleep
- ☐ Circulation (poor arterial and venous blood flow)
- ☐ Mental wellbeing helps person adhere to treatment

Measure wound size (and photograph)

- ☐ Length in head-to-toe direction, lateral width
- ☐ Depth: probe deepest area and measure
- ☐ Consider undermining
- ☐ Photograph: tape measure next to wound in head-to-toe direction

Assess tissue loss and estimate healing time by:

- tissue loss or
- pressure injury stage

- ☐ **Superficial**: loss epidermis (painful) 10–14 days
- ☐ **Partial**: loss dermis (may be painful) 14–21 days

REFER to wound specialist service

- ☐ **Deep**: more dermis destroyed (less painful, nerve damage) > 21 days
- ☐ **Full thickness**: epidermis, dermis and subcutaneous layers destroyed, may include muscle, tendon, bone, ligament or hidden due to eschar/slough (not painful, nerves destroyed), may need surgery

Describe wound bed

- ☐ **Slough**: cream/yellow, dry or moist
- ☐ **Granulation**: red, bumpy
- ☐ **Hypergranulation**: proud tissue
- ☐ **Epithelising**: pink, migrating skin cells

REFER to wound specialist service

- ☐ **Necrotic**: dehydrated dead tissue: **HIGH RISK** keep dry until seen by specialist

Assess wound edge

- ☐ **Healthy**
- ☐ **Fragile**
- ☐ **Red**

- ☐ **Macerated**: may need specialist advice to manage exudate
- ☐ **Oedematus: REFER NP/GP**
- ☐ **Rolled: malignant or chronic REFER GP/NP**

Describe:

- exudate type/volume

Usually ↓exudate as wound heals

- ☐ **Serous**: clear or light-coloured watery liquid (normal)
- ☐ **Haemoserous**: blood-stained serous (normal)
- ☐ **Sanguinous**: frank blood or heavily blood stained
- ☐ **Purulent (pus)**: thick, opaque yellow, green, white or tan colour
- ☐ **Haemopurulent**: bloody pus
- ☐ **Malodorous**: usually infection (check after dressing removal and wound cleaning)

Volume (dressing saturation): ☐ Dry ☐ Moist ☐ Wet ☐ Saturated ☐ Leaking

Assess for presence of infection – swab if indicated

- ☐ **Local (subtle or overt)**: risks delays in healing. No progress in 2 weeks, fragile tissue **consider wound specialist advice**

- ☐ **Spreading**: redness, swelling, wound breakdown **REFER GP/NP**
- ☐ **Systemic**: unwell patient **REFER GP/NP**

Assess periwound (up to 4 cm around wound)

- ☐ **Consider**: is maceration related to dressing choice or wound oedema?

REFER to wound specialist service

- ☐ Hyperkeratosis, callus

REFER NP/GP

- ☐ Eczema

Complete wound documentation

- Wounds that do not heal or reduce by 50% in 6 weeks are considered hard to heal
- Lower-leg wounds that do not heal or reduce by 50% in 6 weeks are leg ulcers
- People with diabetes and foot or leg ulcers need specialist review – do not delay

GP = general practitioner NP = nurse practitioner

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Wound care
Te maimoatanga ō ngā taotū

The information in this guide is accurate to the best of our knowledge as of June 2023.

Definition

Wound care is the practice of providing the optimum environment for a wound to progress towards healing. Wound healing is a staged process, and wound care goals should match the medical needs of the patient, the stage of wound healing and the patient's individual goals. Wound care goals help with selecting the appropriate wound dressing.

Key point

- You must conduct a wound assessment before setting wound care goals.

Why this is important

Wounds have significant implications in terms of quality of life and financial burden.

Implications for kaumātua*

Māori have a holistic view of health and wellbeing. It is important to treat the 'whole person' and not just 'the hole in the person'. Taking a holistic approach is one way of protecting the **mana** (inherent dignity, prestige, status) of kaumātua.

Traditionally, mana increases with age (so kaumātua are highly regarded), and as mana increases so does **tapu** (sacredness) (Mead 2016). All people (and their body fluids) are tapu (sacred, prohibited, restricted); the head and sex organs are the most tapu of all. Items that touch the body and especially the head carry the individual's tapu.

It is vital to keep tapu and **noa** (neutral, ordinary, unrestricted) separated from each other and balanced to avoid a breach of tapu. Traditionally, breaching tapu brings on the wrath of the **atua** (gods), which can have significant spiritual and emotional impact on kaumātua and **whānau**/family.

Practically this means:

- avoiding damage to tapu and mana by asking for permission to enter personal space (tapu) and to touch the person; touching the head in particular is seen as an intimate act
- separating tapu and noa by keeping wound care items off food or drink surfaces, away from toileting equipment and away from the head and the pillows that the head rests on.

* Kaumātua are individuals, and their connection with culture varies. This guide provides a starting point for a conversation about some key cultural concepts with kaumātua and their whānau/family. It is not an exhaustive list; nor does it apply to every person who identifies as Māori. It remains important to avoid assuming all concepts apply to everyone and to allow care to be person and whānau/family led.

A wound, particularly one that is large, easily visible or malodourous, may be a source of **whakamā** (shame, embarrassment) for kaumātua. Kaumātua may find it difficult to show the wound to an outsider or may not want to burden others. As a result, they may be reluctant to have wound care or may inaccurately report their wound issues.

Kaumātua and whānau/family may have culturally informed interventions that support wound treatment from a holistic perspective, including the use of **rongoā Māori** (traditional Māori medicines) and in some cases **pure** (cleansing rituals). Explore these options on a case-by-case basis.

See the *Guide for health professionals caring for kaumātua | Kupu arataki mō te manaaki kaumātua* for more information.

Assessment

The ideal dressing should: (Turner 1979, WUWHS 2019)

- maintain an optimal moist environment
- remove excess exudate
- allow gaseous exchange
- thermally insulate
- be impermeable to micro-organisms
- be free from contaminants
- be able to be removed without causing trauma.

Take account of factors specific to the patient, including:

- allergies or skin sensitivities
- comfort and conformability
- ease of use
- mana and whakamā
- cost effectiveness
- wound care goals.

Infection control with dressing products

- Store dressing in original containers in a store cupboard (not on treatment trolley).
- Check expiry dates of dressings before using.
- Clean dressing/procedure trolley before and after use.
- Use dressing of the correct size where possible so you do not need to cut sterile dressings.
- If you need to cut dressings, use sterile scissors and throw away any unused product.

Treatment

Wound cleaning

Cleaning wounds with tap water does not increase or decrease risk of infection. Cleaning should focus on removing products that delay wound healing (Fernandez and Griffiths 2012, IWII 2022). The following are suggested cleaning processes.

- Acute wounds (eg, new skin tear): Clean with warm, sterile normal saline.
- Established or chronic wounds: Clean with warm tap water (previously boiled or town supply) or chronic wound cleansers.
- Showering with chronic wounds: Remove dressings in shower to clean chronic wounds.
- Granulation tissue: Clean only if there is a build-up of exudate.
- Sloughy/necrotic tissue: Remove loose slough (gentle irrigation or swabbing), tough stuck necrotic tissue or slough. Consider debridement.

Wound debridement

Autolytic debridement (where the body naturally breaks down dead tissue) is the main method for non-specialists to undertake debridement. The most common approach is to use moisture-retentive (hydrofibre or foam) or moisture-donating (hydrogel or hydrocolloid) dressings.

If sharp debridement is necessary, a health professional with appropriate skills must undertake it. Generally, you will need to make a referral to a wound specialist, general practitioner (GP) or nurse practitioner (NP) (Phillips et al 2020).

Avoid moist wound healing on necrotic tissue or ischaemic wounds until a GP or NP has reviewed the wound. Consider a specialist review.

Choosing a wound dressing

Use a systematic process to evaluate each aspect of the wound – see the decision-support flowchart on the next page.

Match your choice of dressing products to the person's wound care goals. This guide does not recommend a specific manufacturer. Please refer to the manufacturer information for details on the specific dressing you choose.

Further resources

Carville K. 2012. *Wound Care Manual* (6th ed, revised and expanded). Perth: Silver Chain Foundation.

Decision support (Leaper 2012, IWII 2022)

Step 1 – Determine majority of tissue type in wound bed

- ☐ Granulation or epithelisation → **Protect** → **Consider**: consider foam protection, sticky dressings may cause trauma to fragile skin
- ☐ Slough → **Debride** → **Consider**: hydrocolloid, hydrogel
- ☐ Necrotic → **Refer specialist wound service, GP or NP and use conservative (eg, non-adherent) dressing until review**

Step 2 – Is infection present?

- ☐ Colonised: microorganism present, no significant host reaction, healing not delayed → Directed by tissue type and exudate
- ☐ Local wound infection: (subtle) pocketing, epithelial bridging, hypergranulation → Reduce bacterial burden → **Consider**: daily antimicrobial. If no improvement in 2 weeks or it deteriorates, **refer wound specialist**
- ☐ Overt wound infection: redness, swelling, purulent discharge → **Manage infection** and exudate → **Refer wound specialist and/or GP/NP**
- ☐ Systemic infection: lethargy, fever or hypothermia, confusion/ delirium, loss of appetite, hypotension, tachycardia → **Manage patient** and their wound pain and exudate → **Do not use occlusive dressing**

Step 3 – Is moisture present? Healing occurs best in moist (not wet or dry) wound environments

- ☐ No – wound dry → **Donate moisture** → **Consider**: hydrogel
- ☐ Moist (ideal) → **Maintain**
- ☐ Moderate- or high-volume exudate → **Absorb** → **Consider**: foam, absorbent pad

Step 4 – Review wound edge

- ☐ Healthy skin → Directed by tissue type and exudate
- ☐ Dry, raised thick edges → **Debride** → **And refer GP/NP, may be malignant**
- ☐ Macerated → **Absorb** → **Consider**: hydrofibre or alginate primary dressing
  - **Refer wound specialist and/or GP/NP**
- ☐ Undermining → **Regrowth from wound bed** → **Consider**: alginate or hydrofibre with foam dressing (depending on exudate)
  - **Refer wound specialist and GP/NP**

GP = general practitioner NP = nurse practitioner

Dressing product types

Hydrogel: an aqueous gel with high water content and polymers that absorb some fluid

Indicated for: Dry wounds or hydration of necrotic or sloughy tissue or preservation of bone or tendon

Advantages	Care required
• Donates moisture to wound for debridement • Absorbs some exudate (minimal) • Easily irrigated from the wound	• Need to manage surrounding skin to prevent maceration

Practice tips

- Secondary dressing: Use semi-permeable film for dry wounds and a film-coated dressing for low-exuding wounds

Hydrofibre

Indicated for: Wounds with moderate to heavy exudate, or superficial or cavity wounds, or sloughy or granulating wounds

Advantages	Care required
• Does not need to be cut to size of wound • Highly absorbent • Forms a cohesive gel • Helps with autolytic debridement	• Requires a secondary dressing such as an absorbent pad or foam dressing • Needs sufficient exudate to form a gel • Dressing expands with absorption of exudate

Practice tips

- Do not moisten before applying to wound
- Has a wear time of up to 7 days
- **Seek advice before inserting dressings into cavities where you cannot see the base of the wound**
- Cavity wounds: Use rope and fill to three-quarters of wound space – do not overpack
- Deep cavity wounds: Leave a long wick protruding from wound

Alginate: Non-woven fibres of sodium and calcium salts of alginic acid, derived from seaweed

Indicated for: Managing bleeding wounds or wounds with moderate to heavy exudate

Advantages	Care required
• Highly absorbent • Helps with haemostasis • Helps with autolytic debridement	• Requires a secondary dressing • Needs sufficient exudate to form a gel • Needs to be cut to size of wound

Practice tips

- Do not moisten before applying to wound
- Has a wear time of up to 7 days
- **Seek advice before inserting dressings into cavities where you cannot see the base of the wound**

Foam: An absorbent multi-layer dressing that maintains an optimal moist environment

Indicated for: Wounds with moderate to heavy exudate or hypergranulating wounds, or cavity or superficial wounds, or sloughy or granulating wounds

Advantages	Care required
• Highly absorbent • Thermally insulating • Permeable to gas and water vapour • Impermeable to micro-organisms • Retains absorbency under compression • Highly conformable • Silicone options available for fragile skin	• Not suitable for dry wounds

Practice tips

- Extend dressing 2 cm beyond wound margins
- Use only non-adhesive foam tape edges (to maintain vapour transmission)
- Has a wear time of up to 7 days
- Check manufacturer instructions for which side to place against wound

Silicone wound contact layer dressing (Meuleneire and Rücknagel 2013): Soft, tacky dressings that do not stick like a traditional adhesive so are less likely to harm fragile skin when you remove them

Indicated for: Skin tears or skin abrasions/lacerations, or surgical wounds, or leg and pressure ulcers

Advantages	Care required
• Does not adhere to wound bed • Minimises pain and trauma during dressing changes • Comfortable • Leaves no residue • Allows passage of exudate	• Needs secondary dressing to manage exudate • Do not use if patient has silicone allergy

Practice tips

- Use with secondary dressing
- Can remain in place for up to 2 weeks (depending on wound)

Antimicrobial dressing (Shultz et al 2015; Swanson et al 2022): Reduces bacterial burden and aids healing in critically colonised wounds; its most common additives are iodine silver and honey

Indicated for: Critically colonised wounds

Advantages	Care required
• Reduces bacterial burden	• Not indicated when there is no evidence of critical colonisation • Patients can be sensitive or allergic to the additive

Practice tips

- Refer to manufacturer's instruction

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