Annual Report 2016/17

Contents

Foreword

Message from Catherine Cooney, Chair of the interRAI New Zealand Governance Board

It is with pleasure that I present the 2016/17 Annual Report for interRAI New Zealand and for interRAI Services as a business unit within TAS.

2016/17 was only the second year of interRAI New Zealand as an entity, emerging from the project phase. It has been the year where we consolidated our leadership role establishing processes and policies and expanding the range of what we do, including continuing to build many positive relationships within the sector.

We are looking to the future with optimism. Acceptance from stakeholders is growing, and several projects are underway with the goal of introducing new ways of using interRAI data. Examples include establishing quality indicators and introducing new interRAI instruments, for example the interRAI Palliative Care assessment.

Our new data visualisation has made our data available and tangible for everyone. It is a fascinating experience, and I urge you all to visit our website and give it a go. Play with it and use it. The beauty of interRAI is in its data. We hope our data visualisation will be useful for many of our stakeholders.

This is the first report of its kind, combining the previous Governance Board Annual Report and the National interRAI Data Analysis Annual Reports. In this publication we focus on documenting our progress, and highlighting developments. I warmly recommend our two special features on people with dementia living at home on page 11, and a Registered Nurse's perspective on interRAI on page 26.

Catherine Cooney

Chair, interRAI New Zealand Governance Board

Where data comes alive

interRAI data visualisation opens up new ways of seeing interRAI data. The tool allows you to access interRAI data at national, regional, DHB, as well as population subgroup level. The interactive nature of this tool means you are in control of the information at the level of detail you desire.

www.interRAI.co.nz/data

Access interRAI Data Visualisation at www.interRAI.co.nz/data

The term interRAI™[1] refers to both the international organisation responsible for developing comprehensive clinical assessment systems and the suite of clinical assessment tools available.

interRAI stands for 'international Resident Assessment Instrument'.

interRAI International is a not-for-profit organisation consisting of a collaborative network of clinicians and researchers in over 35 countries, including Canada, USA, Australia, Belgium, Spain, Jordan, Finland, France, Switzerland, Sweden, Poland, Germany, Netherlands, Italy, Hong Kong, India, Estonia, Japan, Iceland, Korea, China, Taiwan, Lithuania, Czech Republic, Denmark, Norway, Singapore, South Africa, Brazil, Lebanon, the United Kingdom, Israel, South Korea, Qatar and New Zealand.

The interRAI comprehensive clinical assessment suite

interRAI is a suite of comprehensive clinical assessment tools. The suite of instruments is built on a core set of assessment items that are considered important in all care settings.

Each tool in the comprehensive clinical assessment interRAI suite has been developed for a specific population. The tools are standardised assessments designed to work together to form an integrated health information system, the primary purpose being to improve care planning for each individual.

Data from each assessment may be aggregated to provide information at facility, regional and national level.

interRAI in New Zealand

In New Zealand, interRAI is governed by the interRAI New Zealand Governance Board, chaired by Catherine Cooney. New Zealand has a royalty free licence with interRAI International through the Director-General of Health.

All District Health Boards (DHBs) have been using interRAI for assessing older people's needs for home and community support services since 2012, and in July 2015 interRAI became the primary assessment tool in aged residential care.

Five different interRAI assessments are used in New Zealand:

- Long Term Care Facilities (LTCF) assessment in aged residential care facilities
- Home Care (HC)
- Contact
- Community Health (CHA) and
- Palliative Care assessments, in the home care sector.

interRAI Services, as a business unit within TAS, provides:

- education and support
- reporting and analytics
- governance support and
- software services.

New Zealand is the first country in the world to use the interRAI suite of assessment tools nationwide within a single national software platform. This means assessments can follow people when they move from home to hospital or to an aged residential care facility, improving information sharing and communication.

- Learn more about interRAI on our website at www.interrai.co.nz/about

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[1] For ease of reading, we have removed the '™' symbol when referring to interRAI in the remainder of this report, however it is noted that interRAI™ is a registered trademark and appropriate use of the term applies.

interRAI assessments in New Zealand – numbers and demographics

Between July 2016 and June 2017, over 120,000 interRAI assessments have been completed in New Zealand. The total number of completed interRAI assessments, since interRAI was introduced, is close to 430,000. Over half of these assessments were completed in aged residential care facilities.

Figure 1. In New Zealand, between July 2016 to June 2017, the number of completed interRAI assessments

16,200
Contact assessments

35,400
Home Care assessments

66,500
Long Term Care Facilities assessments

The number of completed Contact and Home Care (HC) assessments has reduced slightly in the last two years. On the other hand, the number of completed Long Term Care Facilities (LTCF) assessments continues to increase, from 27,200 in 2014/15 to 66,500 in 2016/17. The large volume of LTCF assessments and the steady increase was expected as the interRAI LTCF assessment instrument has become the primary assessment in aged residential care since July 2015.

Figure 2. Number of completed assessments by type over time

LTCF became primary assessment in aged residential care sector in July 2015

Contact assessment (CA)   Home Care (HC)   Long Term Care Facilities (LTCF)
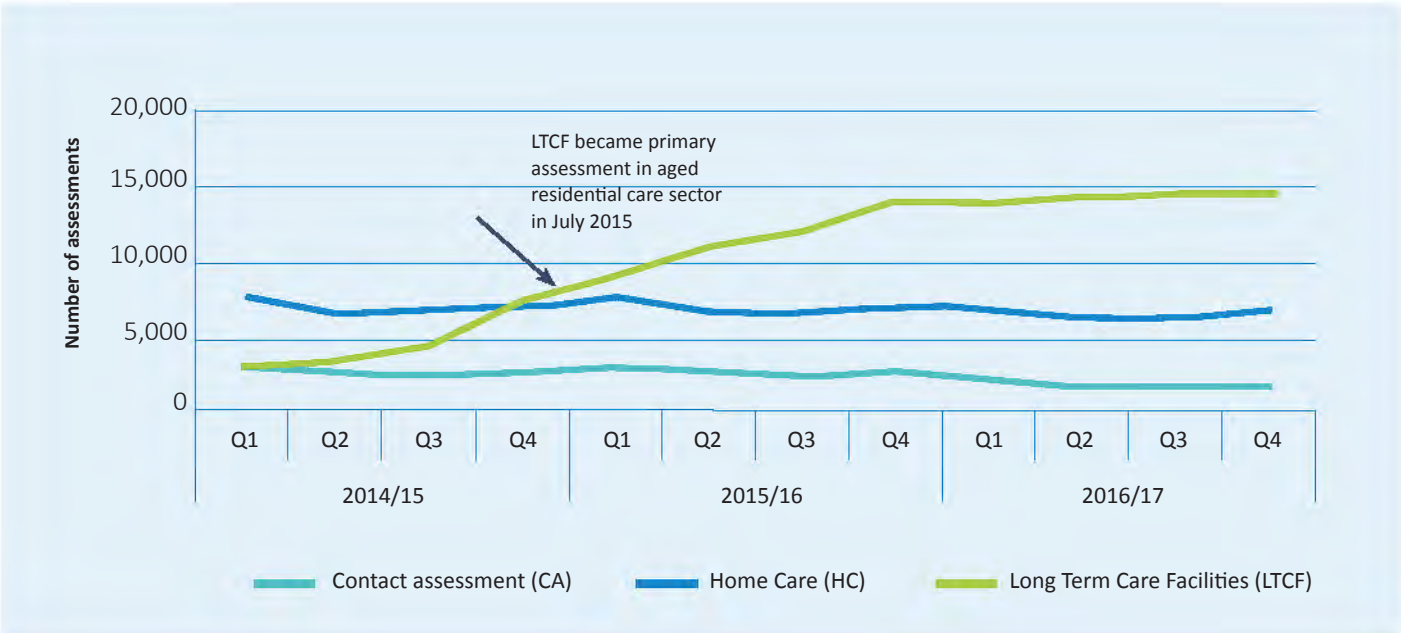
Frequency of assessments

Re-assessment, sometimes referred to as routine assessment, is a follow up assessment to monitor the changes in the health of an older person over time to ensure that their care plan is appropriate and current.

In aged residential care, re-assessment for the same resident occurs within six months as part of the Aged Related Residential Care Services Agreement. For interRAI assessments completed in home and community, there is no national agreement. The median period between the initial assessment and re-assessment was 12 months for Home Care, and 13 months for Contact re-assessments.

Figure 3. Months to re-assessment by assessment in New Zealand
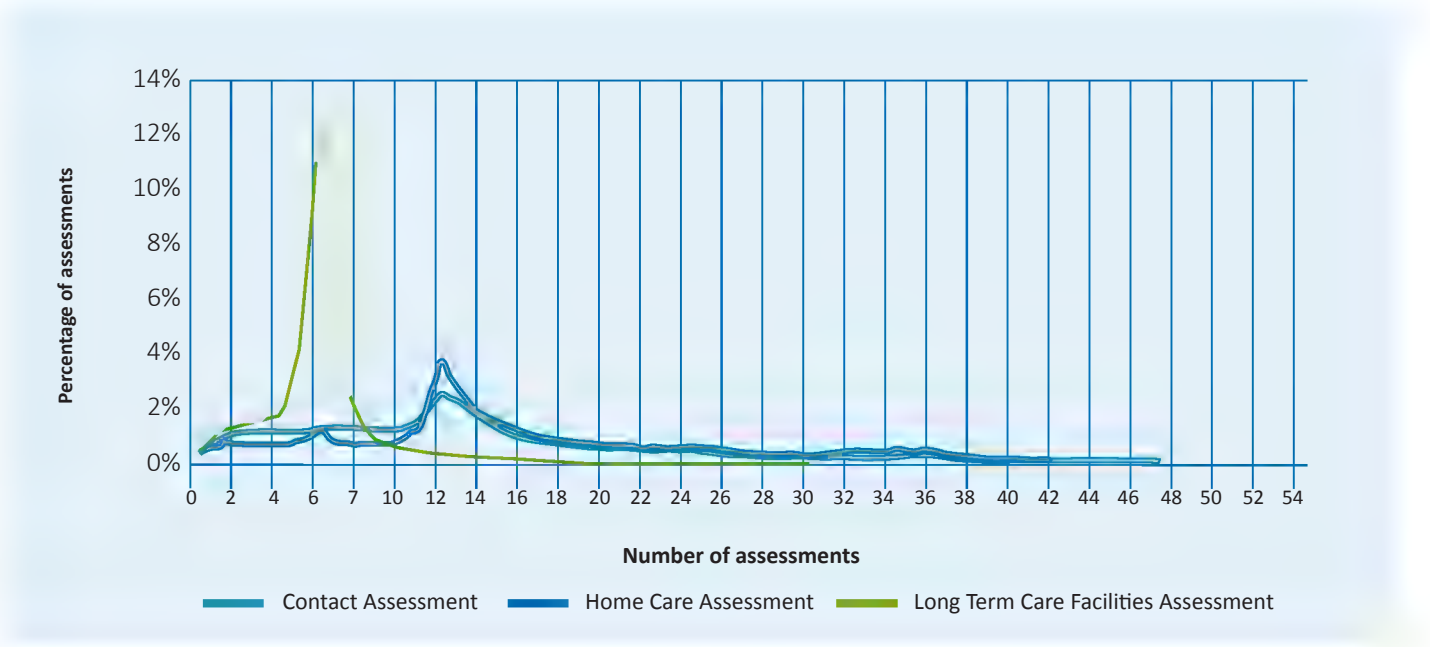
Re-assessment, sometimes referred to as routine assessment, is a follow up assessment to monitor the changes in the health of an older person over time to ensure that their care plan is appropriate and current.

interRAI assessed population demographics

Age profile

A total of 73,200 clients aged 65 and above completed an interRAI assessment in 2016/17. This represents 10% of the New Zealand population aged 65 and above. This percentage has remained constant over the last three years. Two out of five (41%) of the assessments in 2016/17 were for people aged 85 and older which indicates this age group has the greatest needs for support and service delivery.

73,200
people aged 65 and above completed at least one interRAI assessment

Figure 4. interRAI assessed clients/residents aged 65 and over, 2014/15-2016/17
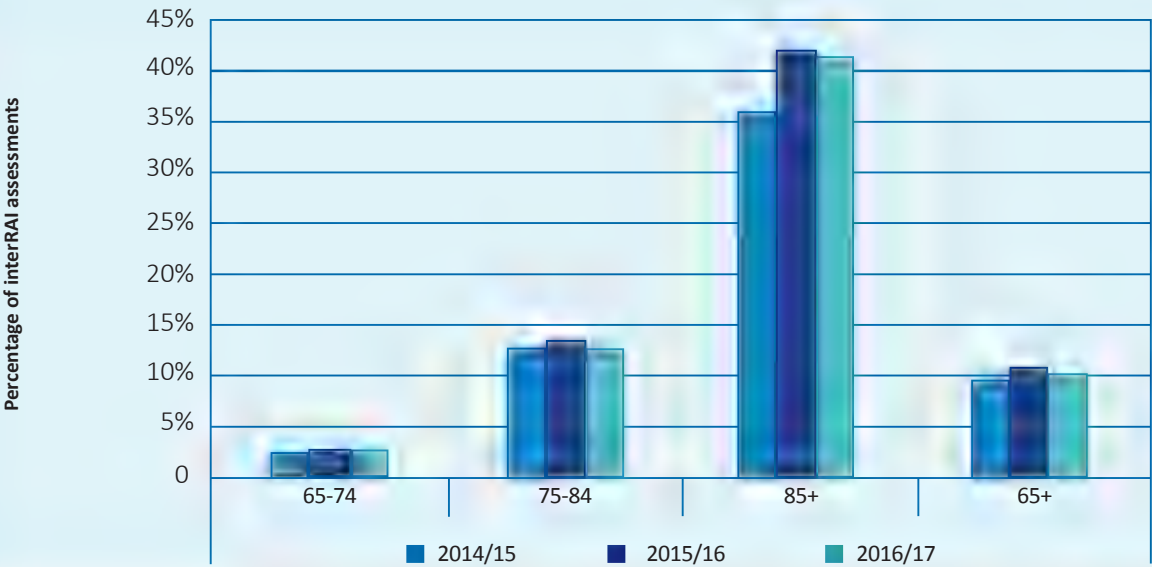
Age and gender make up

Females aged 75 and above were more likely to have an interRAI assessment than males. This is consistent with the higher proportion of females in the general population aged 75 and above.

Figure 5. interRAI assessed clients/residents aged 65 and over, by assessment type 2016/17
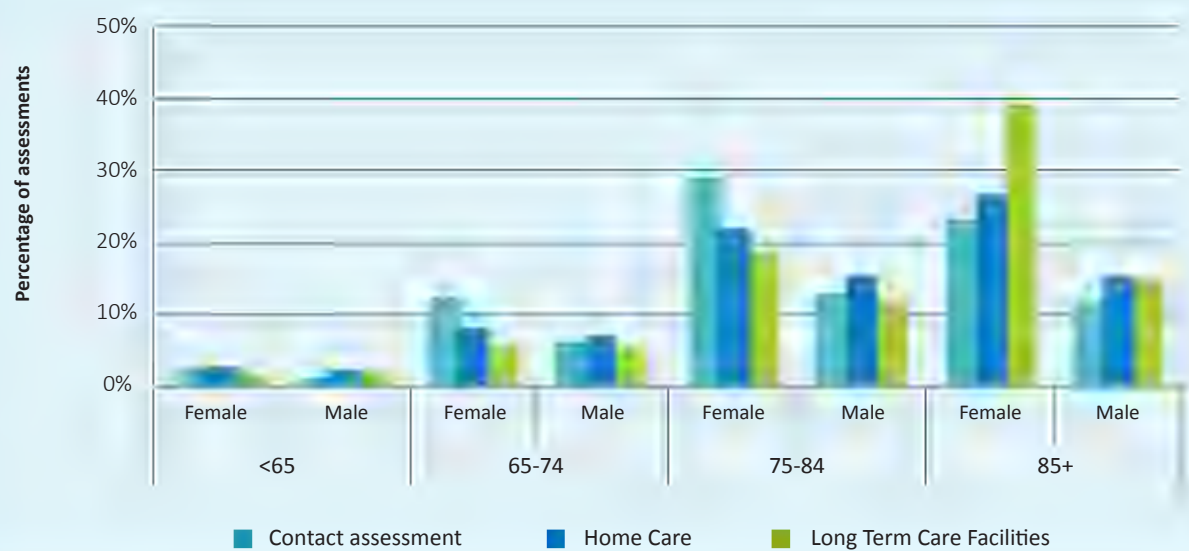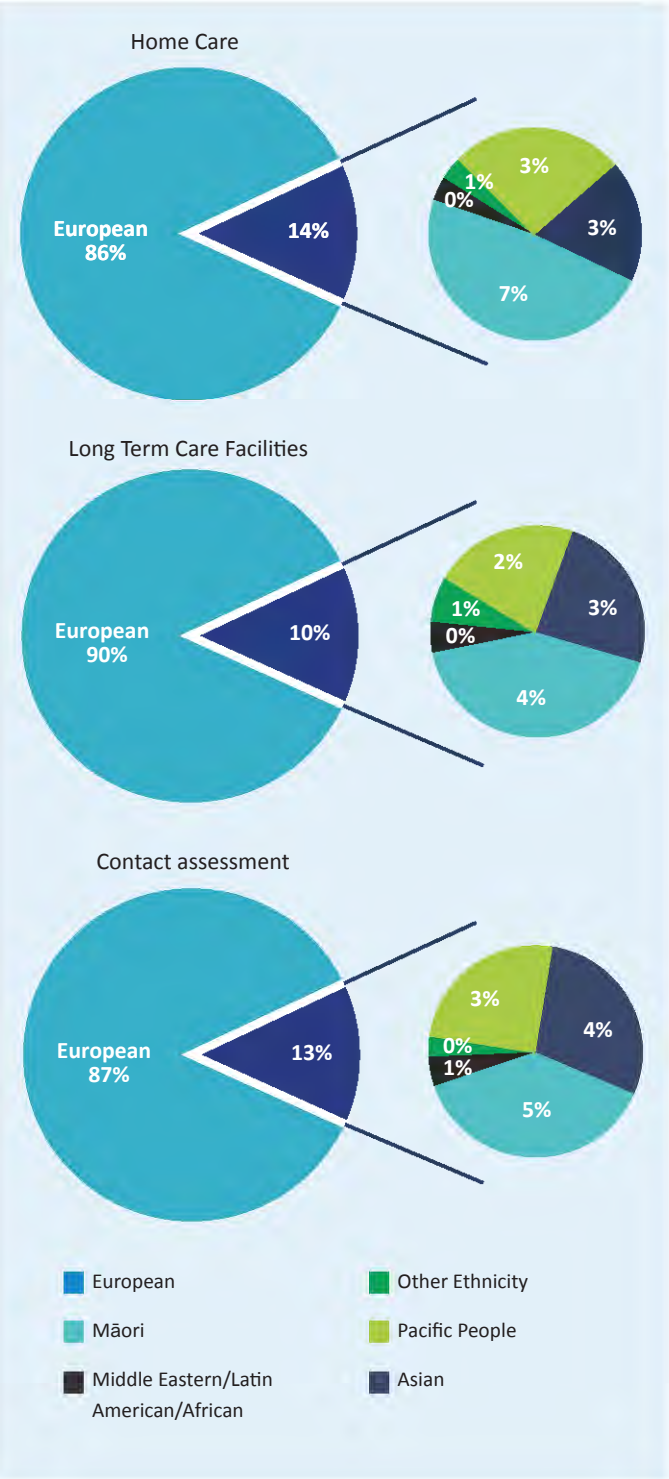
Home Care

European 86%
14%
3%
1%
0%
3%
7%

Long Term Care Facilities

European 90%
10%
2%
1%
0%
3%
4%

Contact assessment

European 87%
13%
3%
0%
1%
4%
5%

- European
- Māori
- Middle Eastern/Latin American/African
- Other Ethnicity
- Pacific People
- Asian

Ethnicity

In 2016/17, the majority of assessments were for clients who identified as European. Close to 7% of Home Care clients were Māori. About another 4% were Pacific Peoples. Among aged residential care residents, 4% were Māori. These results were similar to 2015/16.

Disease diagnosis

interRAI collects information on disease diagnosis, which feeds into the algorithms that inform various outcomes and CAPs for care planning.

For LTCF assessments, dementia (other than Alzheimer's disease) is the most prevalent condition. Over a third (37%) of the assessments reported having this condition. Coronary heart disease (26%) and depression (24%) are also common among people in residential care.

In 2016/17, the top three most common diseases for home care assessments were:

- Coronary heart disease (32%),
- Diabetes mellitus (21%) and
- Stroke (18%).

...close to 7%
of Home Care clients were Māori

Focus:
People with dementia living at home

Dementia is an umbrella term used to describe a group of conditions that affect how well our brains work. The most common form of dementia is Alzheimer's disease, which around two-thirds of people with dementia have.

Historically, people with advanced dementia have been cared for in aged care facilities. But now, more and more people with dementia prefer to stay in their own homes and remain independent for as long as possible.

The Ministry of Health, non-government organisations (NGOs) and local communities are working to support people with dementia to remain at home safely and appropriately, with services for them and their families/whānau.

About interRAI Home Care assessment

A Home Care assessment is a comprehensive clinical assessment designed for people with complex needs who are able to live at home. This tool can also help identify when a person needs to be referred to aged residential care.

For our analysis we used data from Home Care assessments completed between July 2016 and June 2017. This represents a total of 35,469 of assessments and 32,673 home care clients. A proportion of home care clients (8%) had multiple assessments in the year, results reported in this section refer to assessments rather individuals, unless specified otherwise.

Demographic characteristics of interRAI Home Care assessed clients with dementia

• **One in four interRAI Home Care assessed clients were formally diagnosed with dementia**

In 2016/17, one in four (25%) interRAI Home Care assessments reported having a dementia diagnosis. This percentage has had little or no change since 2014/15.

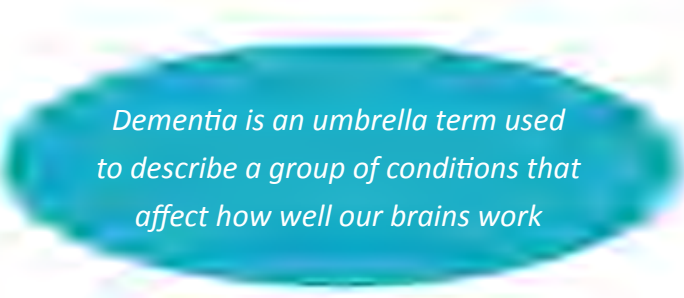• **Almost half of the diagnosed clients are between 75 to 84 years of age**

The proportion of older people diagnosed with dementia increased steeply with age, with 43% of dementia diagnoses reported by people aged between 75 and 84.

• **Men are more likely to be diagnosed with dementia**

The proportion of diagnosed dementia was higher for men than women (27% and 23%, respectively) after adjusting for age differences in the assessment population. This means, for men and women at the same age, men were 1.2 times more likely than women to have been diagnosed with dementia.

• **Māori and Pacific people are more likely to be diagnosed with dementia**

The proportion of interRAI home care assessed Māori (31%) and Pacific (33%) clients diagnosed with dementia is higher than Asian (24%) and other ethnicity clients (24%, predominantly European), after adjusting for age differences.

Dementia is an umbrella term used to describe a group of conditions that affect how well our brains work

Living at home with dementia

1 in 4 interRAI Home Care assessed clients in 2016/17 had a formal diagnosis of dementia.

35% of home care clients with dementia and cognitive performance issues require extensive assistance or are completely dependent.

17% of home care clients with dementia and cognitive performance issues live independently without support.

Throughout

New Zealand, assessors in District Health Boards use the standardised interRAI Home Care assessment instruments to help determine which level of support is required for clients who live at home.

The data is then aggregated to provide information at provider, regional or national level. This analysis is based on data from 35,500 Home Care assessments in 2016/17.

18% of homecare clients with dementia and cognitive performance issues receive full time care from family or friends, more than 40 hours per week, compared to only 4% of clients without dementia.

1 in 3 assessed home care clients living with dementia and cognitive performance issues have daily episodes of troubling behaviours, for example, wandering, being verbally or physically abusive, or resisting care.

44% of primary carers report feeling distressed or angry because of the demands of caring for their loved one.

55% of family or friends who care for a person living with dementia report feeling overwhelmed by the person's support needs.

interRAI Home Care assessed clients with dementia and cognitive performance issues

It is normal for memory to deteriorate as people get older. Having difficulty remembering things or making decisions does not necessarily mean developing dementia. However, depending on the level of memory and cognitive impairment, it can interfere with activities of daily living.

The Cognitive Performance Score (CPS) combines information on memory impairment, level of consciousness and executive functioning. A CPS score of three and above indicates having moderate to severe cognitive impairment, or 'cognitive performance issues' as used in this report.

In the following section, we will focus on the group of interRAI home care assessed clients who have a diagnosis of Alzheimer's disease and/or other types of dementia, as well as having a CPS greater and equal to three.

Other long term conditions

People with cognitive performance issues living at home are in fair health. Coronary heart disease and diabetes were less prevalent for this group compared to others without cognitive performance issues. There was little difference in common mental health conditions such as anxiety and depression between the two groups.

Coronary heart disease and diabetes were less prevalent for this group

Figure 7. Comparing coronary heart disease, diabetes, anxiety and depression diagnoses between people with cognitive performance issues and without
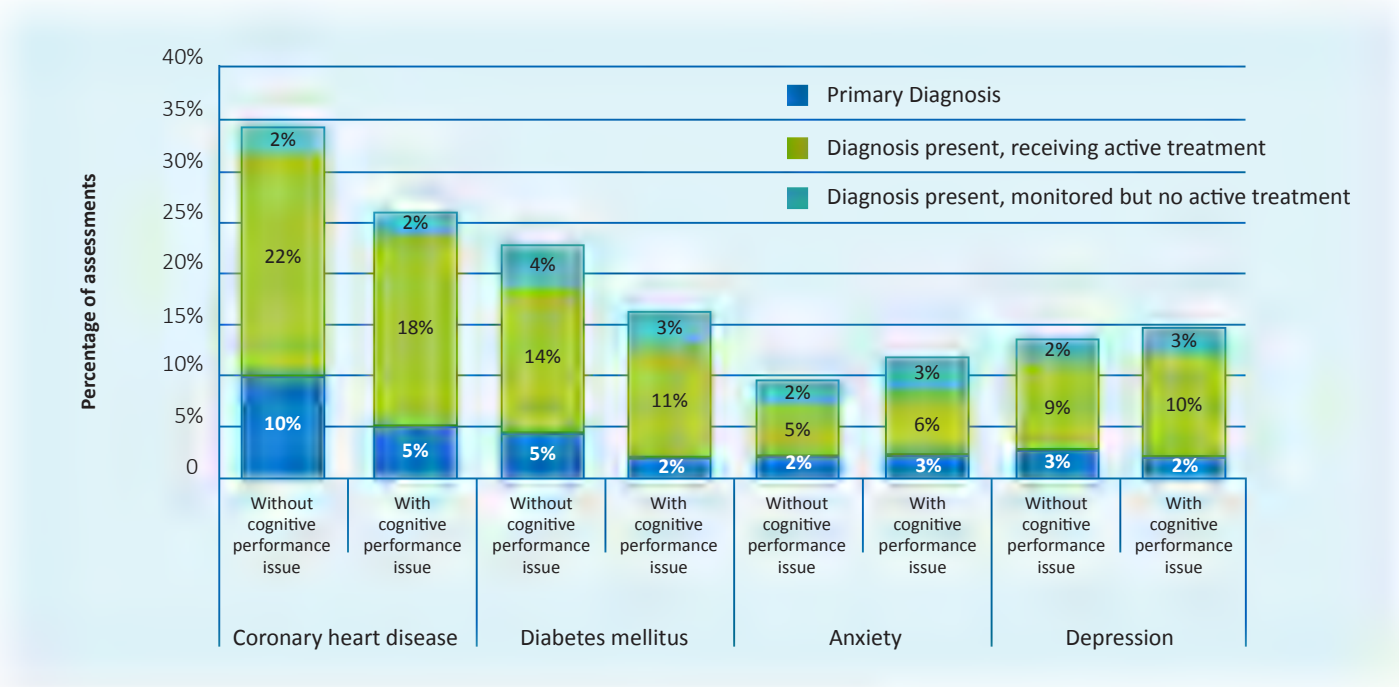
Cognitive and mental health

Declining or worsening cognitive abilities increase the risk of personal dependence and subsequently the likelihood of going into aged residential care.

Clinical Assessment Protocols (CAPs) focus on a person's function and quality of life, assessing need, strengths and preferences. Selected items in the assessment can trigger a CAP, indicating the person may benefit from care and support in that area.

Most cognitive and mental health CAPs trigger at 1-2 levels, where level 1 indicates an increased likelihood of improvement when addressed, and level 2 an increased likelihood of declining. The Delirium CAP only triggers at level 1.

Some of the cognitive and mental health CAPs explained

- **Behaviour** – to prevent, manage behavioural problems, for example wandering, verbally abusing others, physically abusing others, socially inappropriate, disruptive behaviour, resisting care.

- **Communication** – to improve communication ability and to prevent avoidable communication decline.

- **Mood** – to identify, treat, monitor mood issues, for example negative statements, persistent anger, expressions of unrealistic fears, repetitive health complaints, repetitive anxious complaints, sad, crying, tearfulness. Depression rating score indicates a medium to high risk.

- **Delirium** – to identify people with active symptoms of delirium such as acute change in mental status, and behaviour appears different from usual functioning.

Figure 8. Comparing triggered cognitive and mental health CAPs between people with cognitive performance issue and without
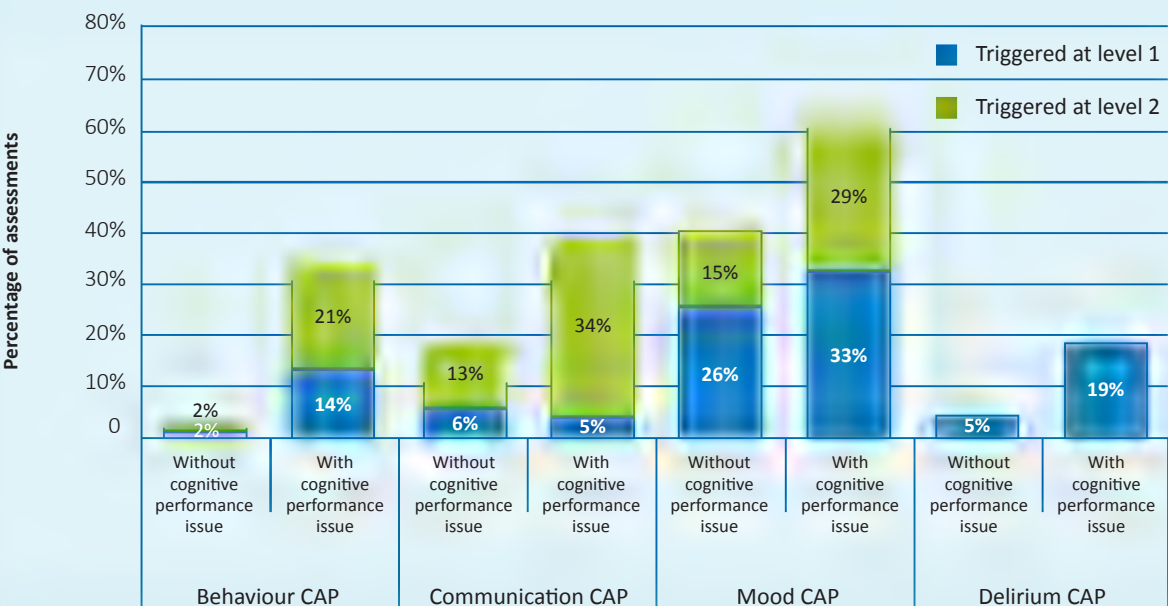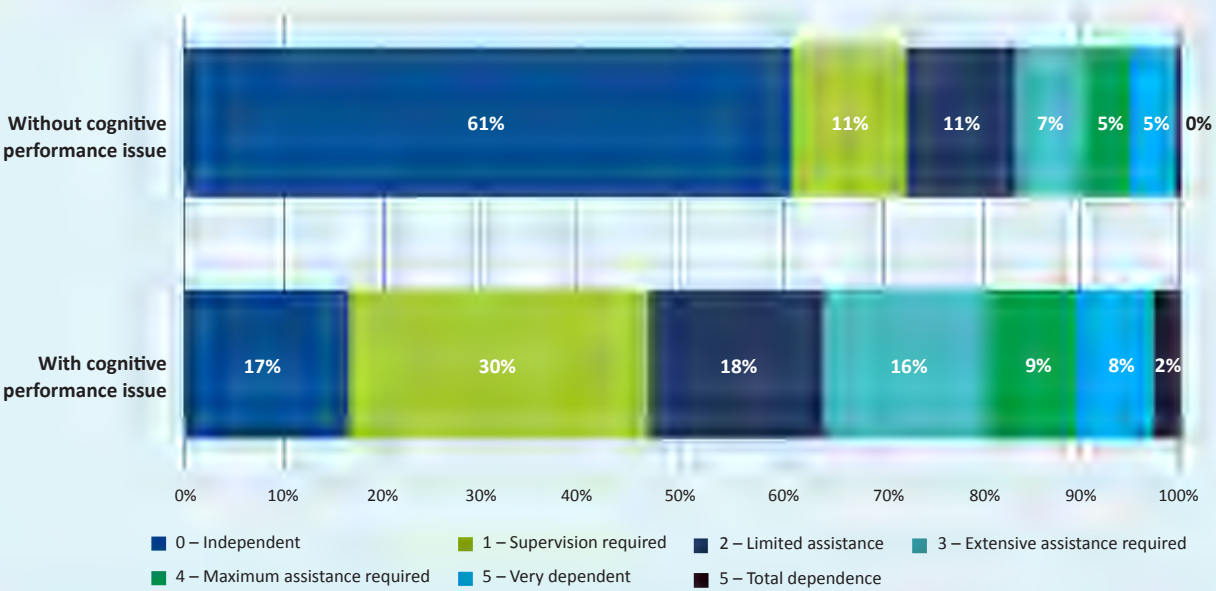
Level of dependency

The level of dependency is measured through the Activities of Daily Living (ADL) Self-Performance Hierarchy Scale, based on level of difficulty in personal hygiene, locomotion, toilet use and eating. The higher the score, the more support is required.

Over 60% of people without cognitive issues were independent, this proportion reduced markedly to 17% for people with cognitive performance issues.

Figure 9. Comparing ADL Self-performance Hierarchy Scale between people with cognitive performance issues and without

Legend:
- ■ 0 – Independent
- ■ 1 – Supervision required
- ■ 2 – Limited assistance
- ■ 3 – Extensive assistance required
- ■ 4 – Maximum assistance required
- ■ 5 – Very dependent
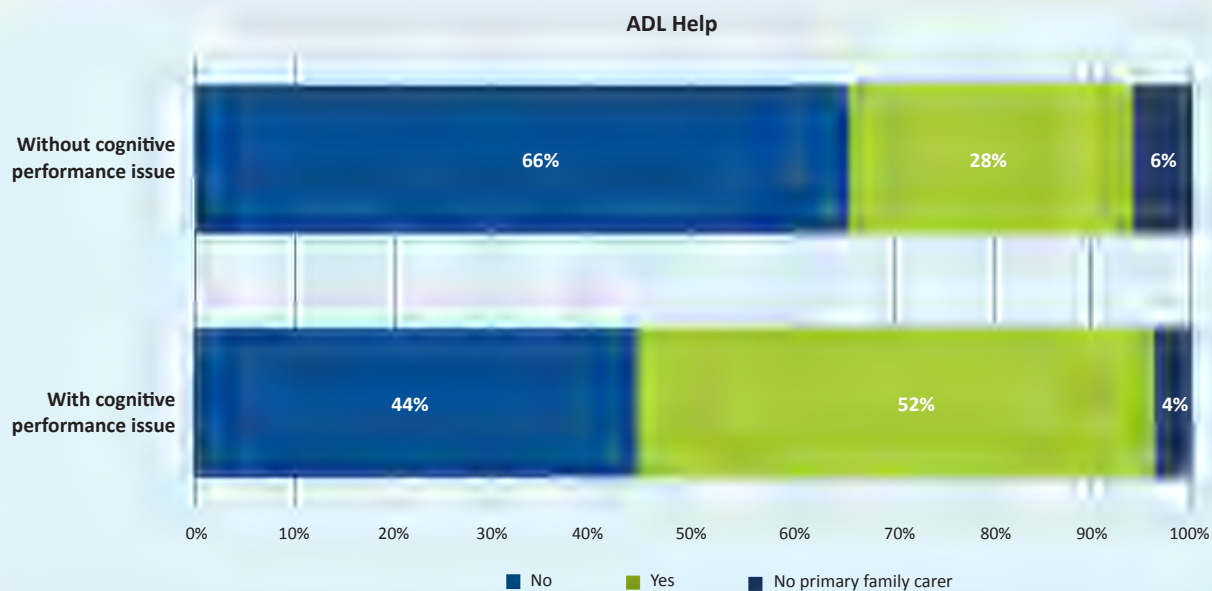- ■ 5 – Total dependence

Over 60% of people without cognitive issues were independent

Most need help with daily activities

People with cognitive performance issues are more likely to need help with daily activities. This includes help with activities such as bed mobility, transferring, walking, dressing, eating, toilet use, personal hygiene and bathing.

Figure 10. Comparing level of support for activities of daily living (ADL) by primary family carer

ADL Help

Category	No	Yes	No primary family carer
Without cognitive performance issue	66%	28%	6%
With cognitive performance issue	44%	52%	4%

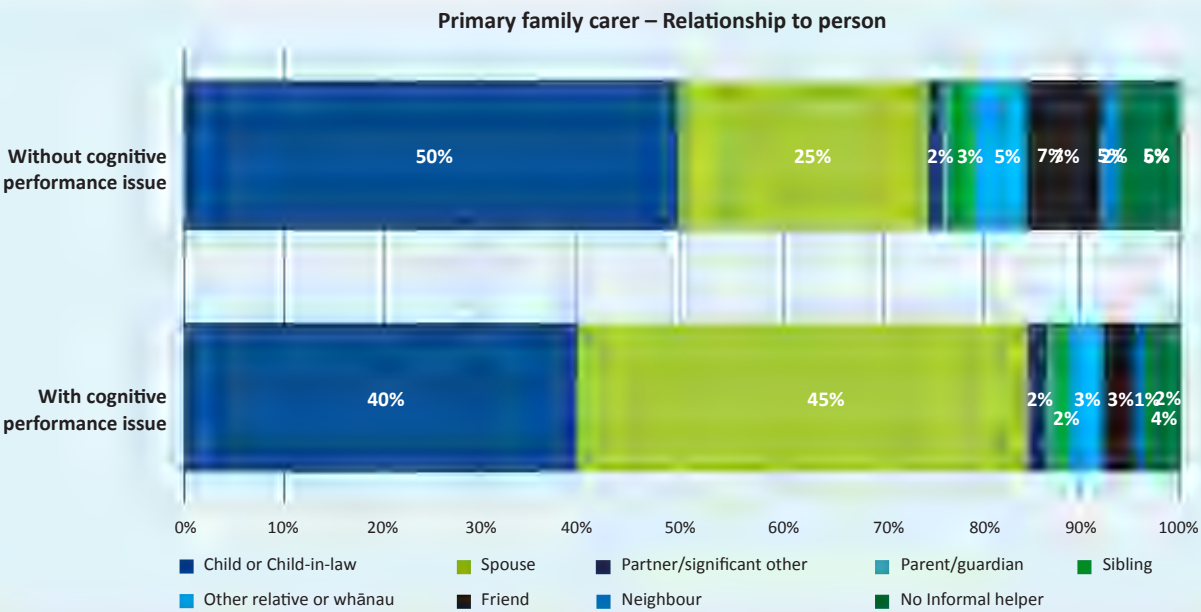Legend: ■ No ■ Yes ■ No primary family carer

Social support for people with dementia

Family and whānau make up the majority of primary carers. For people with cognitive performance issues living at home, the largest proportion of those caregivers were spouses (45%), followed by children and children-in-law (40%).

Family and whānau make up the majority of primary caregivers

Primary family carer – Relationship to person

|	Child or Child-in-law	Spouse	Partner/significant other	Parent/guardian	Sibling
	Other relative or whānau	Friend	Neighbour	No Informal helper	

Caring as a fulltime occupation

The interRAI Home Care assessment captures the number of hours carers spend assisting personal activity, including active monitoring of the person's activity over the last three days (72 hours).

About 18% of the assessed people with cognitive performance issues reported that their carers provided care for more than eight hours a day, the equivalent of fulltime work. This percentage is less for people without cognitive performance issue (4%).

Figure 12. Number of hours primary family carers spent assisting with personal activities for the previous three days, comparing between people with and without cognitive performance issue

With cognitive performance issue ■   **Without cognitive performance issue** ■
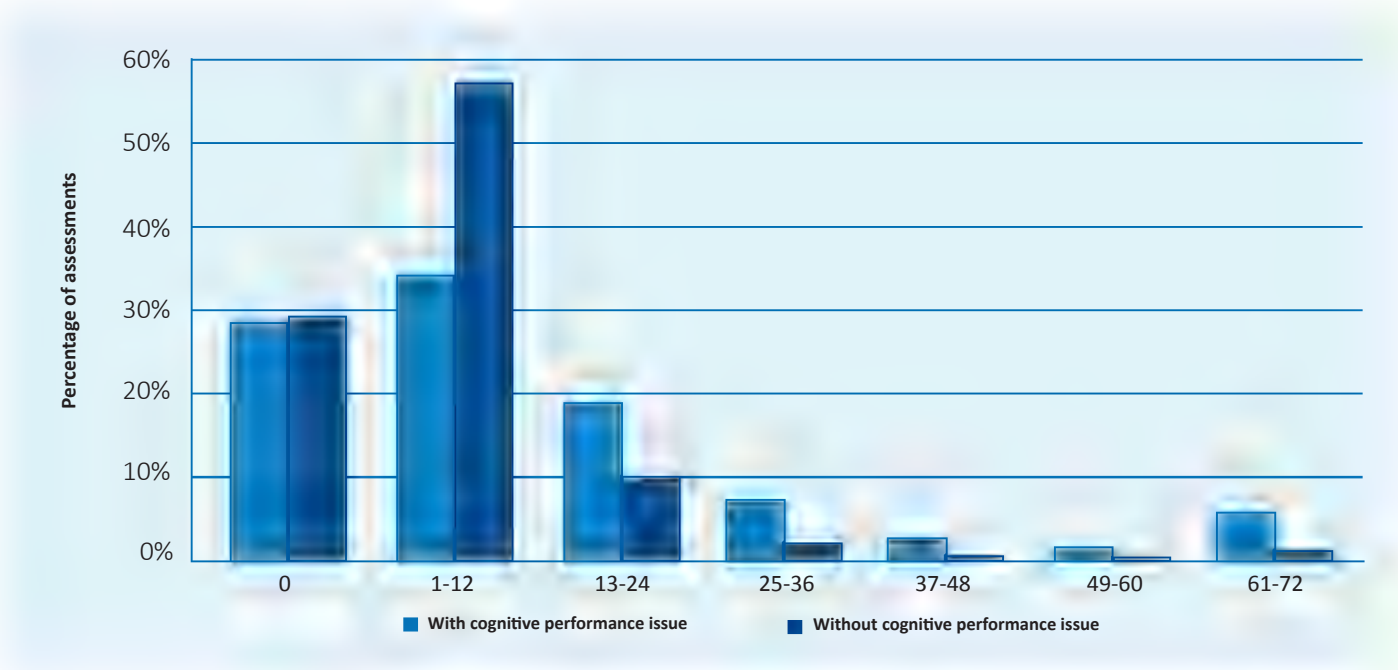
Over half of caregivers report feeling overwhelmed

Primary family carers caring for a person with cognitive performance issues are more than two times as likely to report feeling overwhelmed by person's support needs.

Figure 13. Percentage of home care assessments where primary family carers reported feeling overwhelmed by person's support needs, comparison between people with and without cognitive performance issue

Family carers feeling overwhelmed by person's support needs

Without cognitive performance issue — 25%

With cognitive performance issue — 55%
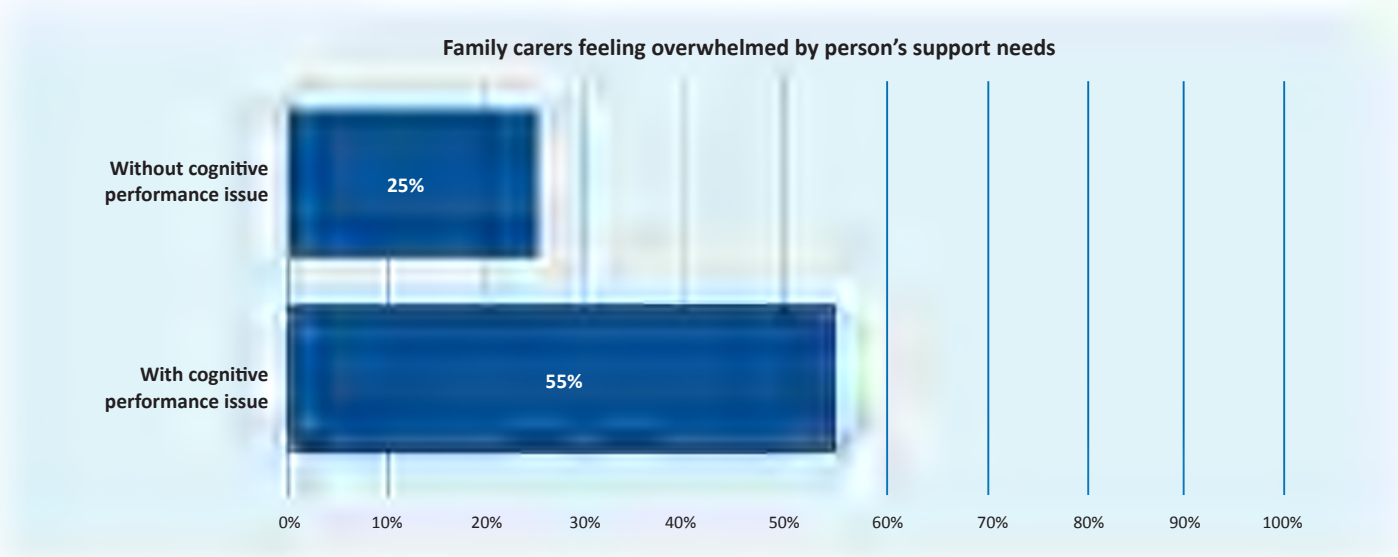
37% of primary family carers report they are unable to continue caring

The assessments have found that primary family carers who look after a person with cognitive performance issues are twice as likely to report they are unable to continue in caring activities (37% vs. 17%). This may be for many reasons, for example, lack of desire to do so, the carer's personal health issue or other competing commitments, such as child care or work.

The assessments have found that primary family carers looking after a person with cognitive performance issues are two and half times more likely to report feelings of distress, anger or depression because of caring for the person (44% vs. 17%), as shown in figure 15.

Figure 14. Percentage of home care assessments where carers reported not being able to continue with caring activities, comparison between people with and without cognitive performance issues

Primary family carers unable to continue in caring activities

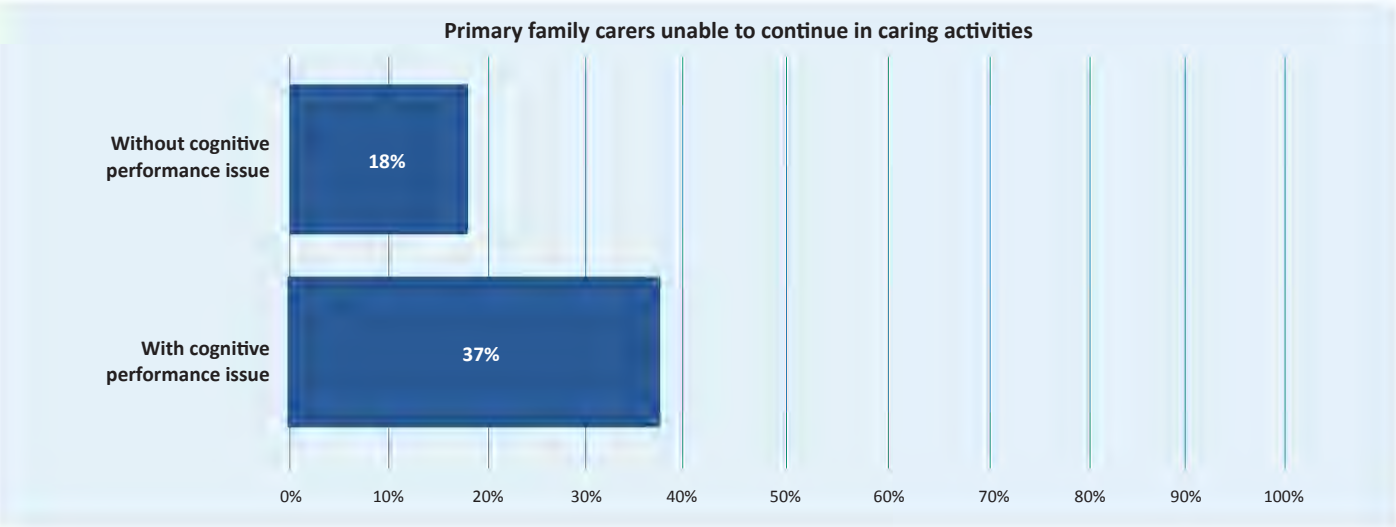|	
Without cognitive performance issue	18%
With cognitive performance issue	37%

Figure 15. Percentage of home care assessments where carer stress was reported, comparison between people with and without cognitive performance issues

Primary family carers expresses feelings of distress, anger or depression

Without cognitive performance issue	17%
With cognitive performance issue	44%
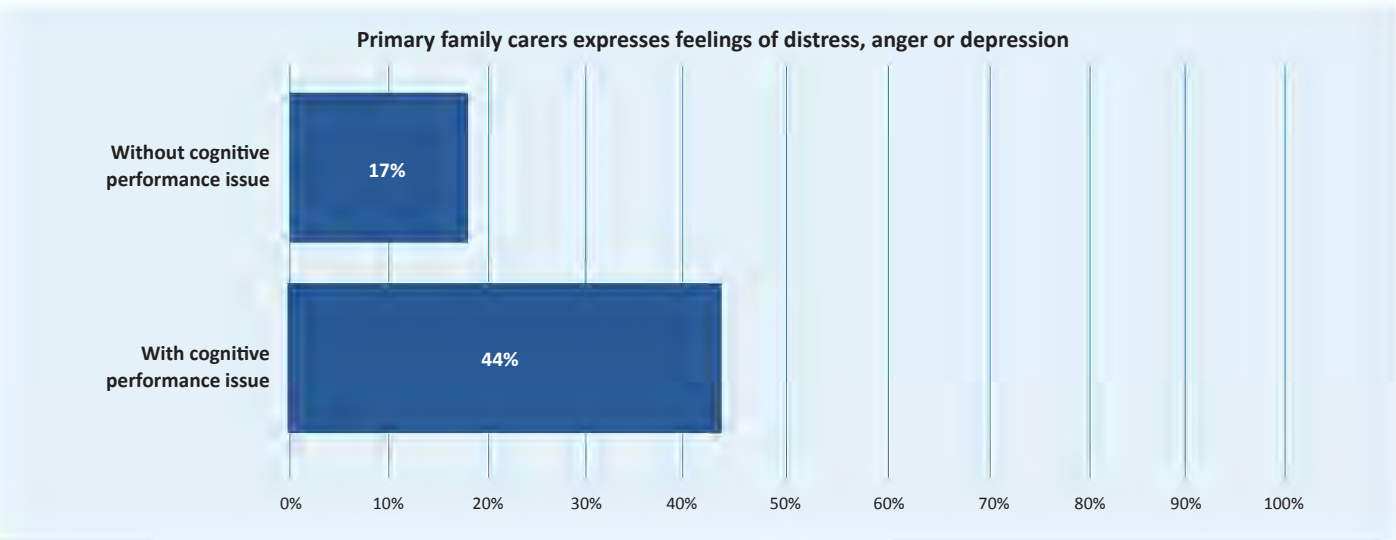
2016/17
The year in review

2nd

2016/17 was the **2nd** *year of interRAI Services as a business unit, and of the interRAI New Zealand Governance Board.*

Strategic direction

The interRAI New Zealand Governance Board first agreed *interRAI New Zealand – Future Direction,* a 3-year rolling strategic plan, in 2016. It is updated each year.

The *Future Direction* is based on the strategic themes of the refreshed New Zealand Health Strategy, and how interRAI supports implementation of the strategy.

More about our strategic direction:

- Download interRAI New Zealand – *Future Direction* from the interRAI website at www.interrai.co.nz/about/board/board-key-documents

- Download the New Zealand Health Strategy from the Ministry of Health's website at www.health.govt.nz/publication/new-zealand-health-strategy-2016

- Download the Healthy Ageing Strategy from the Ministry of Health's website at www.health.govt.nz/publication/healthy-ageing-strategy

interRAI Vision	Continuous improvement of health outcomes for New Zealanders as they age and improvement in the effectiveness and efficiency of our health system
interRAI Mission	Better assessment, better care, better outcomes
Achieved through	Guiding and leading the use of interRAI instruments and the dissemination and use of interRAI information in conjunction with other information sources
Success looks like	A national interRAI programme that delivers on clear objectives, is a centre of excellence for interRAI Education and Support Services, and provides resources for the strategic development, planning and delivery of health care and home support in the community

$8.25m

Funding

TAS is the national service provider for interRAI in New Zealand, commissioned by the Ministry of Health. The overall funding for interRAI for 2016/17 was $8.25 million.

2016/17–The year in review

Independent review report

In March 2017, we received and published the independent review of the Implementation of Comprehensive Clinical Assessment (interRAI) in Aged Residential Care 2011-2015. The review was thorough and independent and provided ten recommendations, all of which the Governance Board are committed to addressing. It also showed us what a long way interRAI has come since the early days of the project.

• Download the review report from the interRAI New Zealand website at

www.interrai.co.nz/about/publications

New venues

We moved into three new training venues in Auckland, Christchurch and Wellington. The venues are modern, comfortable and fit-for-purpose.

Overview of achievements

2016/17

was a busy year for the interRAI Services team, with many achievements on top of business-as-usual activities and meeting the agreed delivery targets.

Pilot: Accredited training model

interRAI Services has trialled an accredited training model, where aged residential care providers train interRAI assessors themselves.

For the trial, interRAI Services worked with Bupa and CHT, who already employed qualified interRAI educators, who trained their staff to be interRAI assessors, to the same competency and quality standard as the interRAI Services national programme.

Bupa and CHT educators have been working very closely with interRAI Services, including attending regular phone conferences and taking part in a moderation process, to ensure the same learning experience and results for their trainees. This close alliance, and the willingness and commitment from all parties, was crucial to the success of the pilot and for the shared processes to work.

Pilot:
Integrating
interRAI in your facility

We joined forces with the New Zealand Aged Care Association to pilot a new workshop format for aged residential care facility managers and senior nurses about how to make interRAI work in their facilities.

Pilot: Palliative Care assessment

The interRAI Palliative Care instrument will soon be used nationwide in New Zealand, offering another option for home care assessors when assessing clients living in the community with a terminal condition or prognosis. With the introduction of the new instrument, home care assessors in New Zealand can now choose from four interRAI assessments, depending on the complexity of the individual case. The other assessments are the Contact, Community Health and Home Care assessments.

Our successful pilot proved that the Palliative Care instrument is fit for purpose and tailored to the needs of clients as well as being user friendly for assessors. A survey of assessors who took part in the pilot found that, compared to using the standard Home Care assessment with palliative clients, the Palliative Care assessment is more focused and less tiring, concentrating on items relevant for this particular client group. Once the home care assessor workforce is trained to use the new instrument, we expect to complete about 2,500 Palliative Care assessments per year.

The pilot took place between December 2015 and December 2016, and involved **13 assessors across 3 District Health Boards**, Hawkes Bay, MidCentral and Canterbury, and 162 participants.

- See the end of pilot report at www.interrai.co.nz/about/board/board-key-documents

interRAI™
New Zealand

2016/17–The year in review

Pilot: Integrating interRAI in your facility

We joined forces with the New Zealand Aged Care Association to pilot a new workshop format for aged residential care facility managers and senior nurses about how to make interRAI work in their facilities. An initial pilot workshop took place in March 2017 in Masterton with 20 participants. It was very well received, and the workshops are being rolled out across New Zealand in 2017/18.

Completed integration

In 2016/17, interRAI staff who were employed with District Health Boards joined TAS. This completed the first phase of work to build a nationally integrated interRAI Education and Support Services team.

Suite of quarterly reports for aged residential care facilities

The interRAI National Data Analysis and Reporting team started producing individualised quarterly reports for all aged residential care facilities across New Zealand. The reports provide information to enable improved decision making and planning in facilities and they also ensure their contractual obligations to District Health Boards are met.

Aged residential care facilities can access their very own data at a summary level, and are able to benchmark themselves against their District Health Board, other similar sized facilities and nationally.

In 2016/17, interRAI staff who were employed with District Health Boards joined TAS. This completed the first phase of work to build a nationally integrated interRAI Education and Support Services team

Reformed Software User Group

The New Zealand interRAI Software User Group has been set up to provide an operational forum for the use of the interRAI software. The group meets ten times a year via teleconference and includes members nominated by District Health Boards, the Home and Community Health Association (HCHA), the New Zealand Aged Care Association (NZACA), the Care Association New Zealand (CANZ), and interRAI Services. The purpose of the group is to support consistent use of the national platform, provide an operational link between the software users and the software host service, be the communications channel between the wider users and the Governance Board and to develop and recommend prioritised enhancements to the software.

- More about the Software User Group at www.interrai.co.nz/about/software-user-group

New communications channels

We developed a new website and a newsletter specifically for interRAI assessors, both of which are quickly becoming key resources for interRAI users.

The website accepts training requests, holds additional information for assessors, directly links to the interRAI software and the training system, and it is kept up-to-date with what is happening at interRAI.

Case study:
Making the most of interRAI

A case study with a registered nurse working at an aged residential care facility

Angela Wheeler, a registered nurse working at CHT Onewa, an aged residential care facility, shared with us her experience as an interRAI assessor.

Since she became a competent interRAI assessor in April 2014, Angela feels she is getting more and more proficient at completing assessments.

In the past, Angela and her colleagues were sometimes frustrated that interRAI assessments were taking them away from their core caring responsibilities. By the end of this case study, Angela was delighted to know there are resources readily available for her and her colleagues to help them get the most of interRAI.

Each quarter, every aged residential care facility in New Zealand receives an interRAI report via Connex, the health sector's information sharing platform. Contact us at interRAI.Data@tas.health.nz if you need help accessing your reports.

About the facility

CHT Onewa Home and Hospital is situated in Birkenhead, northwest Auckland. It is a medium sized aged residential care facility offering 10 dedicated rest home beds and 59 dual service beds, which can be used for both rest home and hospital level care depending on demand. The facility has 66 residents.

There are eight registered nurses at this facility. They each take on eight residents in their caseload at a time and a specific area of expertise. For Angela, her area of expertise is infection control.

Residents' demographic

A good understanding of the residents' demographics can help a facility plan and deliver appropriate care.

The residents' age ranges from 67 to 101, with an average of 88 years.

The ratio of female to male residents is 3 to 1, the gender differentiation is more exaggerated in the 75+ age group.

Figure 16. Age and gender profile of residents at CHT Onewa. Data source: Momentum Analytics
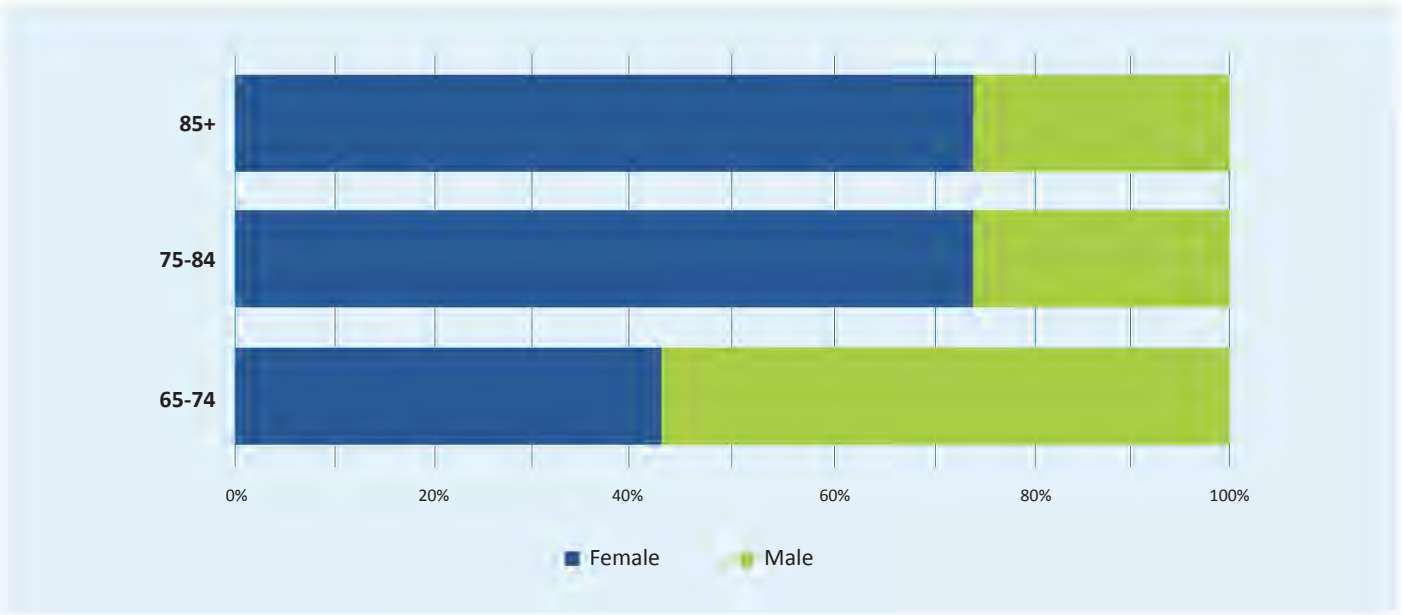
Data source: Aged Residential Care facility bed survey 2016/17, fourth quarter (1 April-31 June). Report run as at 15 August 2017.

Seeing the need and relevance of interRAI

Angela fully supports the use of interRAI assessments: 'I see the relevance and need for interRAI, because of how comprehensive it is, absolutely!' The assessment is comprehensive and consistent. It provides detailed information about residents that is used as a basis for discussion with care workers and residents themselves. The assessments help the carers identify key areas of focus for care and monitoring. It is beneficial for the continuous improvement of care.

Fewer cardiovascular conditions

Residents at CHT Onewa report fewer cardiovascular conditions such as stroke and coronary heart disease than in other facilities. Other age related chronic conditions, such as diabetes, chronic obstructive pulmonary disease (COPD) and dementia are less prevalent compared to the national level result. One in three residents at CHT Onewa are diagnosed with dementia, the national average was 55% in 2016/17.

However, residents at this facility have a higher than average level of mental health issues, for example, the proportion of residents diagnosed with anxiety, depression and bipolar disorder is higher than the national average. There is also a higher proportion of residents with cancer at this facility compared to the national level.

Figure 17. Residents' disease diagnoses. Extract from standard suite of interRAI reports for CHT Onewa, 4th quarter (1 April-31 June) 2016/17
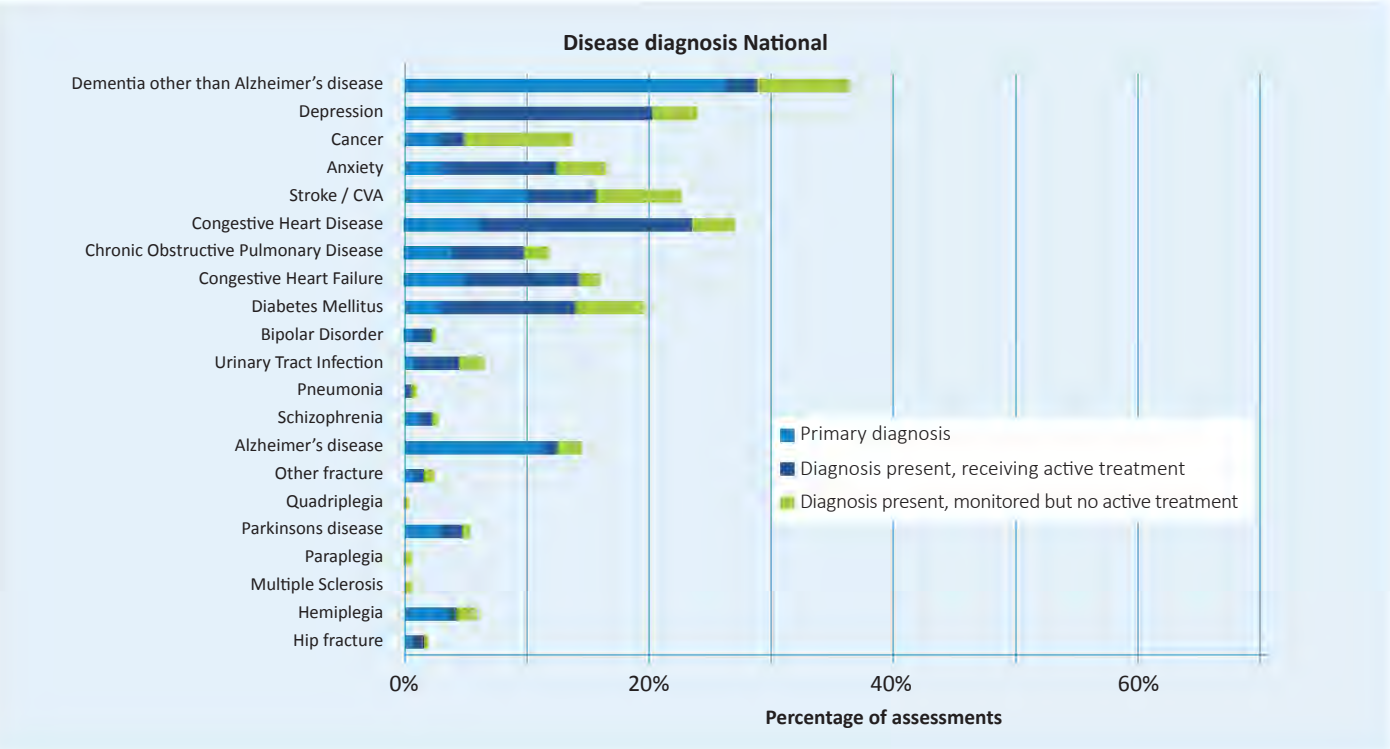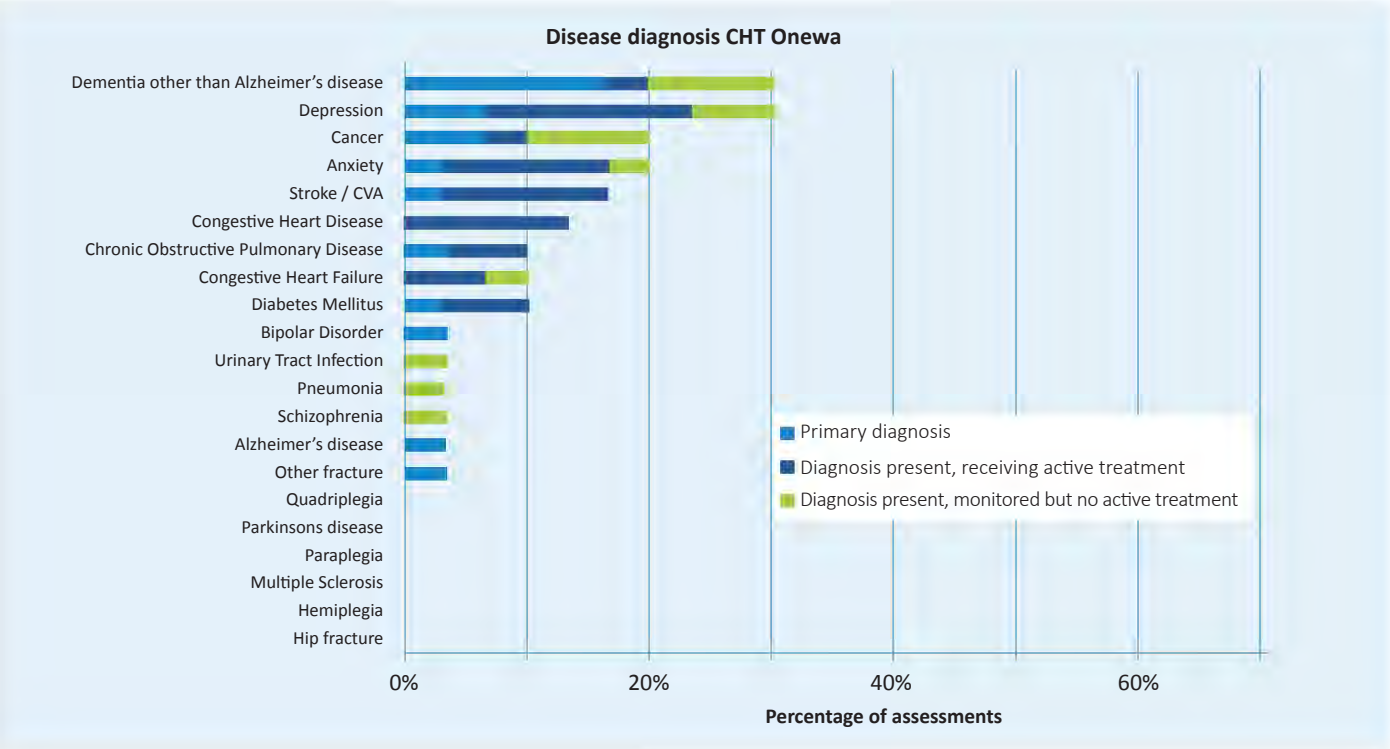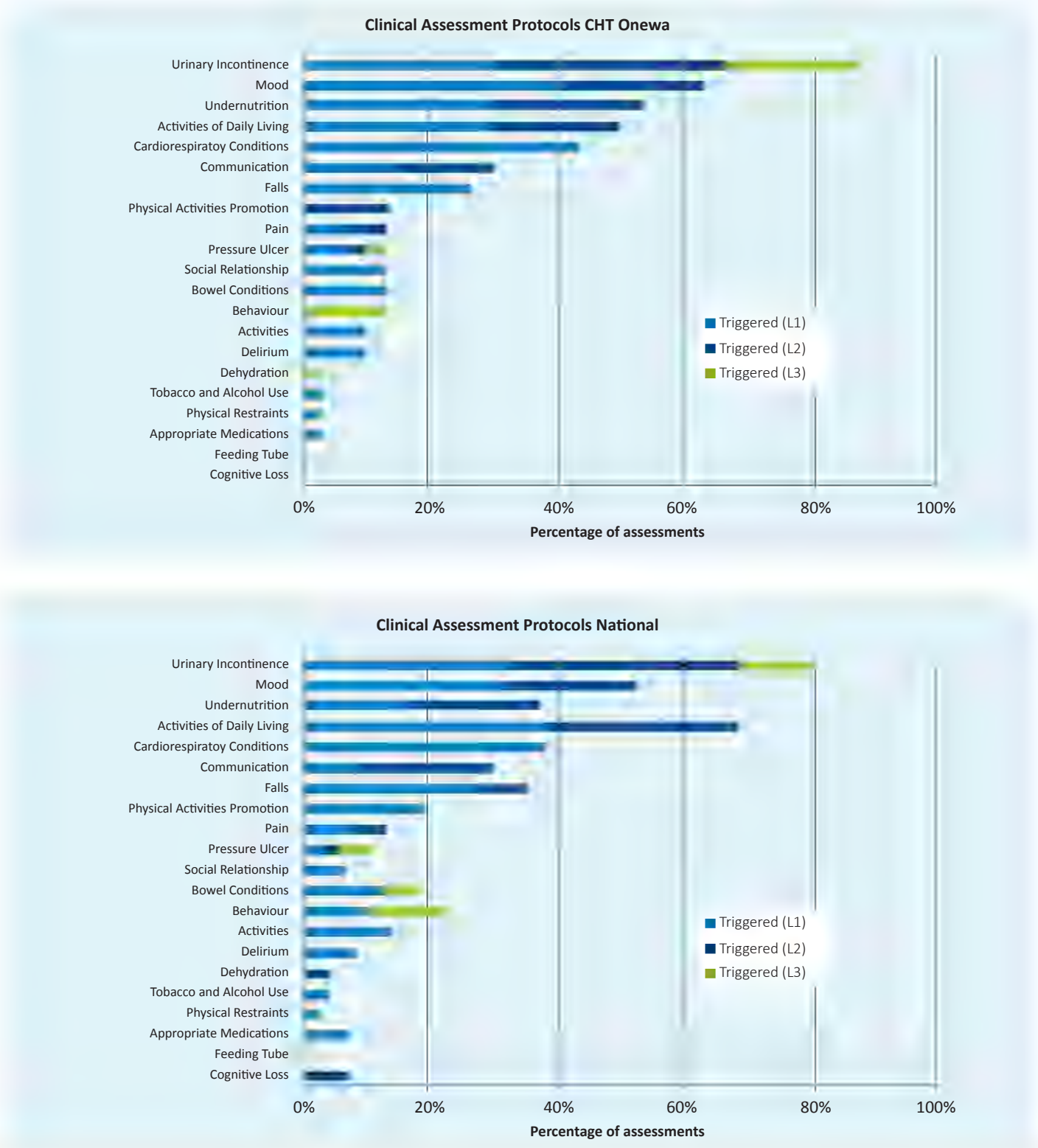

Disease diagnosis CHT Onewa

Legend:
- Primary diagnosis
- Diagnosis present, receiving active treatment
- Diagnosis present, monitored but no active treatment

X-axis: Percentage of assessments (0%, 20%, 40%, 60%)

Categories (top to bottom):
Dementia other than Alzheimer's disease, Depression, Cancer, Anxiety, Stroke / CVA, Congestive Heart Disease, Chronic Obstructive Pulmonary Disease, Congestive Heart Failure, Diabetes Mellitus, Bipolar Disorder, Urinary Tract Infection, Pneumonia, Schizophrenia, Alzheimer's disease, Other fracture, Quadriplegia, Parkinsons disease, Paraplegia, Multiple Sclerosis, Hemiplegia, Hip fracture

Disease diagnosis National

Legend:
- Primary diagnosis
- Diagnosis present, receiving active treatment
- Diagnosis present, monitored but no active treatment

X-axis: Percentage of assessments (0%, 20%, 40%, 60%)

Categories (top to bottom):
Dementia other than Alzheimer's disease, Depression, Cancer, Anxiety, Stroke / CVA, Congestive Heart Disease, Chronic Obstructive Pulmonary Disease, Congestive Heart Failure, Diabetes Mellitus, Bipolar Disorder, Urinary Tract Infection, Pneumonia, Schizophrenia, Alzheimer's disease, Other fracture, Quadriplegia, Parkinsons disease, Paraplegia, Multiple Sclerosis, Hemiplegia, Hip fracture

Figure 18. Clinical Assessment Protocols. Extract from standard suite of interRAI reports for CHT Onewa, 4th quarter 2016/17

Clinical Assessment Protocols CHT Onewa

Percentage of assessments

- Triggered (L1)
- Triggered (L2)
- Triggered (L3)

Clinical Assessment Protocols National

Percentage of assessments

- Triggered (L1)
- Triggered (L2)
- Triggered (L3)

Clinical Assessment Protocols (CAPs)

Mood CAP is the second most commonly triggered CAP at CHT Onewa, this is proportionately higher than the national average (figure 19). This is not a surprise, given the high proportion of residents with anxiety and depression diagnoses. This CAP focuses on identifying depression, with a pre-existing diagnosis or a depressed mood state that requires attention and possible diagnosis and treatment.

A person-focused approach

CHT Onewa has a designated interRAI assessment room, where the interRAI assessor sits down with the resident to go through the assessment.

Angela feels she really gets to know her residents, and the residents appreciate the time she takes to ask those questions directly. 'They feel like they are getting the attention they deserve,' Angela explains. The families also appreciate that there is a process in gathering information about the person, their past, their family, learning about their culture and ritual. Even families that live far away feel included and involved.

On average, Angela spends 4 to 6 hours to complete an initial interRAI Long Term Care Facilities (LTCF) assessment for a newly admitted resident and two to four hours to complete a routine reassessment. This includes the time to check doctors' notes, medication lists and develop the care plan. This is about the average time for a competent interRAI assessor to complete an assessment. However, there will be cases where the resident is too sick to complete the assessment in one go, or the facility had a number of new admissions at once, which could impact on the assessor work load.

The suite of quarterly reports for aged residential care facilities can be used to resource plan in advance.

Between April and June 2017, CHT Onewa interRAI assessors completed 30 interRAI assessments. The vast majority of the assessments were routine assessments. Routine assessments can help service providers monitor the changes in the health of an older person over time to ensure that their care plan is appropriate and current.

There was a higher proportion of first assessments for that time period compared to the previous three quarters (see figure 19).

Figure 19. Reason for assessments completed at CHT Onewa for each quarter between July 2016 and June 2017
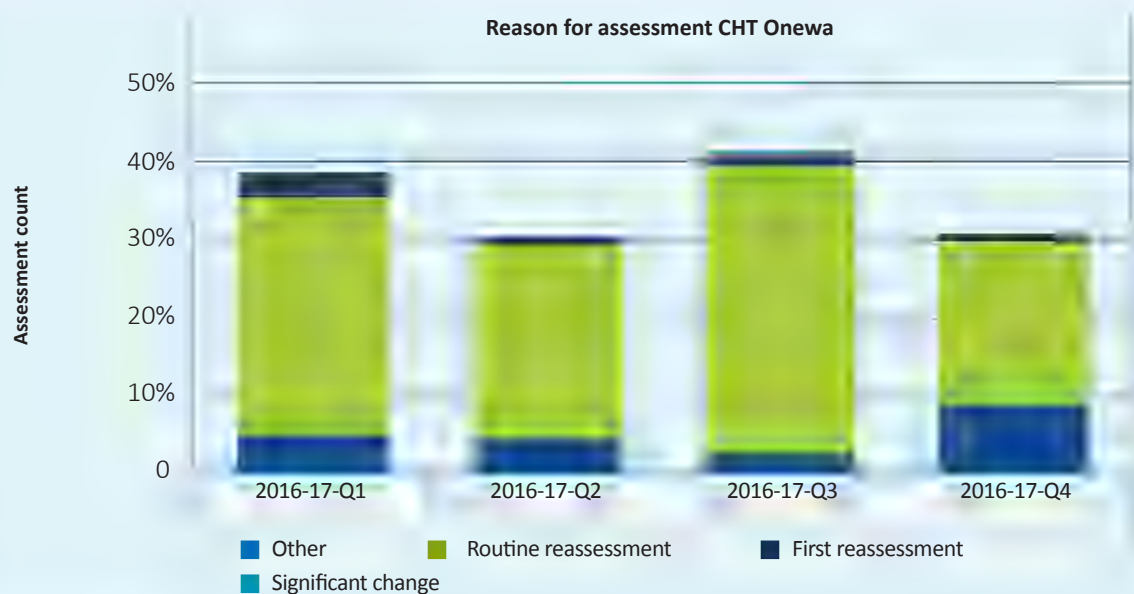
Entering the data directly is efficient

interRAI assessment data is entered and reviewed using computer software. There are several benefits of using an electronic web-based system:

- It provides consistency and standardisation of the assessment process

- Information can be easily transferred across different health care settings

- The assessment software has built in analytical functions which produce summary reports

For some assessors, using software presents a challenge, and Angela admits that she still prefers to record the assessment information using a pen and paper: 'I don't want the laptop screen to be in the way when I ask my residents questions, I want to look them straight in the eyes.'

The recommended assessment process is to enter the assessment information into the software while undertaking the assessment. It might seem difficult to start with, navigating through assessment modules, asking questions and typing answers all at once. However, it will get easier and assessors will save a lot of time and still be able to form a personal connection with their resident.

'I talk with residents if I can, talk to their physician, then enter interRAI assessment information, then develop the care plan.'

Care planning with interRAI

Despite the amount of time Angela spends on each interRAI assessment, she is impressed with what she can do with the information gathered. 'I talk with residents if I can, talk to their physician, then enter interRAI assessment information, then develop the care plan. I often take the care plan to the family, asking them whether they are happy with the plan, whether anything needs to be explained, anything to add. It's quite fulfilling for me – I've done the right thing and talked to the right people.'

Angela's facility has developed their own care plan template. The care plan documents a resident's issues and needs as highlighted by outcome scales and Clinical Assessment Protocols (CAPs) in interRAI, and it flows on to goals and interventions to address those problems and needs.

Under Angela's care, a female resident, retains a strong attachment to the Māori language, culture and customs. From her interRAI assessment, the social relationship CAP was triggered which means reduced social relationships have been identified. Angela found that this lady speaks Te Reo Māori as her primary language and used to have strong social and whānau connections with other Māori people.

Using the interRAI assessment information gathered, Angela was able to develop realistic and achievable goals and interventions which support her client to maintain cultural and whānau connections. She worked with the client's whānau and friends to recognise the Māori tikanga (protocols) and communicated with the rest of the health care team.

More analysis to do

It has been three years since Angela first used interRAI:
'I am becoming more efficient doing the assessments.
And, I am good at identifying issues by just looking at the
ADL (activities of daily living) hierarchy, depression rating
score – that's straight forward and just enough to do
the care planning. I know I could do so much more with
interRAI, for example using the CHESS (Changes in Health,
End-Stage Disease, Signs, and Symptoms Scale) score.
But in reality, the assessment is time consuming and it's just
not realistic to go into depth.'

The report section within the interRAI assessment software
produces some useful integrated reports at a click of a
button. The most relevant ones for assessors like Angela,
are 'outcome analysis' and 'CAP trending' reports
(see figure on page 34). These reports provide care plan
quality checks where areas of improvement or decline can
be easily identified and the care plan can be checked to
ensure it has been adjusted accordingly.

The figure below is a screenshot of a CHT Onewa resident assessment outcome scores across three separate assessments. At the first assessment, this resident had:

- low level of health instability (CHESS score = 2);
- some difficulties performing activities of daily living (ADL long form = 5);
- low level of depression (Depression scale = 1);
- daily pain (Pain scale = 2);
- low risk of developing pressure ulcer (Pressure Ulcer Risk = 1) and
- signs of aggressive behaviours (Aggressive Behaviour = 2).

The most recent assessment has shown improvement in all outcome measure areas. This indicates the care plan was well designed and adequate care was provided to this resident.

Outcome analysis – by resident
Provider: All

Unit: All

CHT Onewa

	07/08/2017 LTCF Assessment version 9.3 New Zealand customisation 2015: Routine assessment	09/02/2017 LTCF Assessment version 9.3 New Zealand customisation 2015: Routine assessment	30/06/2016 LTCF Assessment version 9.3 New Zealand customisation 2015: First assessment
RUG III	BA0	PA0	BA0
Rehabilitation (1-5)	-	-	-
Service Urgency (1-4)	4	-	4
Assessment Urgency (1-6)	-	-	-
BMI	32	39	31
Communication Scale (0-8)	2	2	2
Aggressive Behaviour (0-12)	0	0	2
Pressure Ulcer Risk (0-8)	0	1	1
Pain Scale (0-4)	0	2	2
IADL Performance (0-48)	-	-	-
IADL Capacity Hierarchy (0-6)	-	-	-
IADL Capacity (0-48)	-	-	-
Functional Hierarchy (0-11)	-	-	-
Depression Scale (0-14)	0	0	1
Deaf/Blind Severity Index (0-5)	-	-	-
ADL Short Form (0-16)	1	1	1
ADL Long Form (0-28)	4	4	5
ADL Hierarchy (0-6)	1	1	1
CHESS (0-5)	1	0	2
MAPLE (1-5)	-	-	-
CPS (0-6)	2	2	2

The future of assessments

Residents in aged residential care rely on nursing staff for their wellbeing, emotional support, and to be engaged with 'life'. Nurses also work with other health professionals and the resident's family and whānau so that care planning and services are 'adding life to years, not just years to life'.

'interRAI helps by providing comprehensive information on my residents, and of course in time when everyone is trained and faster at doing the assessments then things will run more smoothly,' says Angela.

The interRAI Education and Support team offers support for nurses and interRAI assessors with their assessments, including coding help on the interRAI website, support from experienced systems clinicians and educators, additional training sessions and workshops for interRAI assessors, facility managers and clinical leaders.

The National interRAI Data Analysis and Reporting Centre will continue to produce regular facility reports. And, for the first time this year, an interactive data visualisation tool that allows the user to explore all interRAI assessment outcome measures, CAPs, and social and well-being measures at the District Health Board, regional and national level.

Need support? We are here for you!

The interRAI team offers support for interRAI assessors with their assessments.
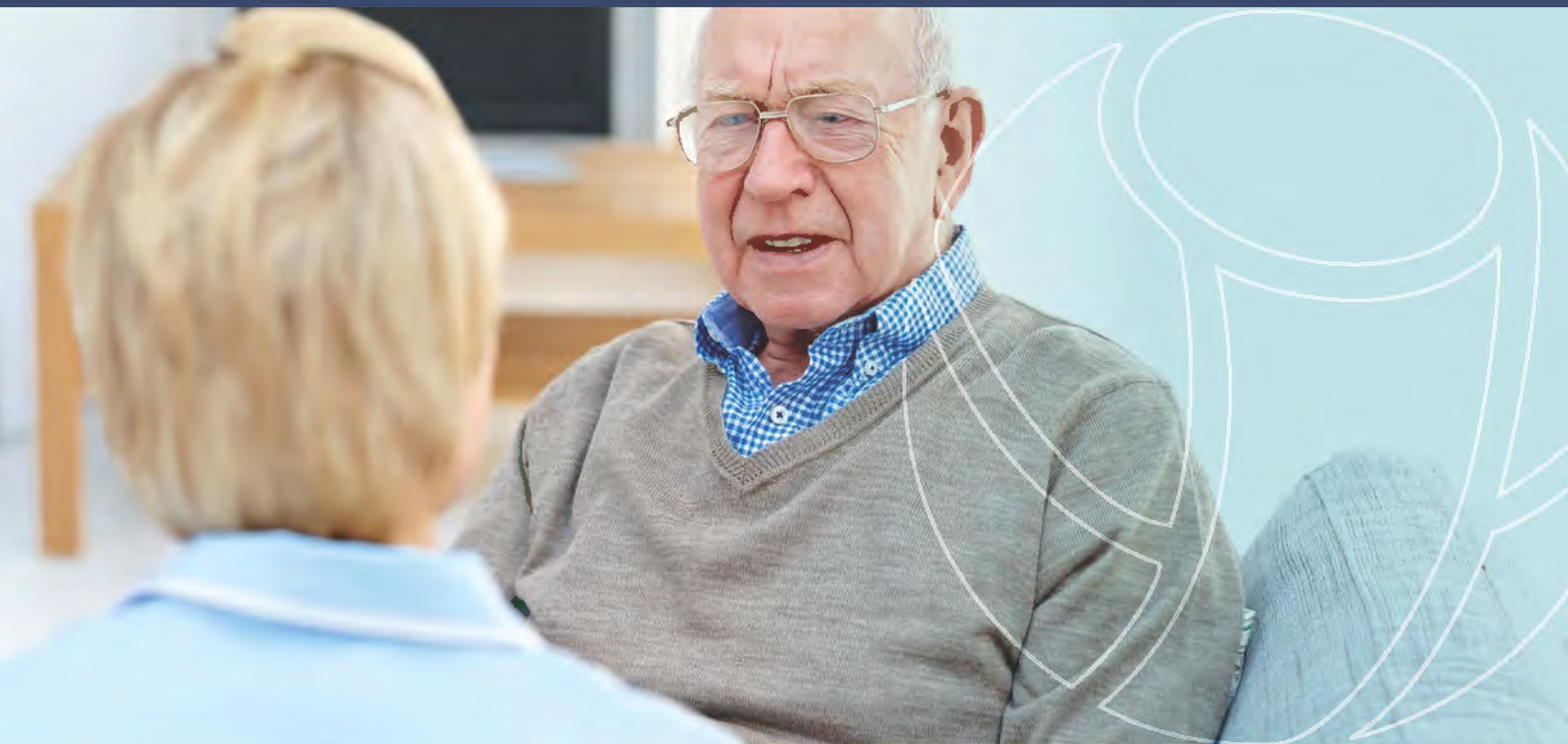Visit www.interrai.co.nz/help for online and offline help.

Request training at www.interrai.co.nz/training

Further reading

The interRAI website, and a number of other websites, holds more information about interRAI and how we use it in New Zealand:

- interRAI New Zealand at www.interRAI.co.nz
- interRAI International at www.interRAI.org
- TAS at www.tas.health.nz
- The Ministry of Health at www.moh.govt.nz

www.interrai.co.nz/help

Glossary of terms

ADL	Activities of daily living
Assessor	A person who uses the interRAI tools to undertake care needs assessments
CAPs	Clinical Assessment Protocols
CHESS	Changes in Health, End-Stage Disease, Signs, and Symptoms
Contact assessment (CA)	An interRAI Contact assessment is a brief standardised clinical assessment that provides information to support the home care assessment intake and emergency department referral. It is not a substitute for a comprehensive interRAI assessment. The Contact assessment can be done face to face or over the phone and takes about 30 minutes to complete.
COPD	Chronic obstructive pulmonary disease
CPS	Cognitive Performance Scale
DHB	District Health Board
DRS	Depression Rating Scale
Home Care (HC) assessment	An interRAI Home Care assessment is a comprehensive clinical assessment designed for people with more complex needs who are able to live at home.
IADL	Instrumental activities of daily living
Long Term Care Facilities (LTCF) assessment	An LTCF assessment is a comprehensive clinical assessment designed for people in residential care to inform their care plans.
MAPLe	Method of Assigning Priority Level
PURS	Pressure Ulcer Risk Scale

Outcome scale definitions

Assessment Urgency Algorithm (AUA) Scale The AUA scale is used in Contact assessments and is not applicable to Home Care or LTCF assessments. The AUA scale is used to determine whether or not the client needs further in-depth assessment. This scale is calculated by referring to a number of elements in the assessment that relate to the person's physical health, mood, the family's ability to cope and the person's dependence with personal hygiene.	Range of Values: 1-6
Activities of Daily Living (ADL) Self-Performance Hierarchy Scale The ADL Self-Performance Hierarchy Scale aims to describe the disablement process rather than to simply provide a summary of functional impairment. The scale shows the level of difficulty of the client/resident in relation to personal hygiene, locomotion, toilet use and eating.	Range of Values: 0-6
Aggressive Behaviour Scale (ABS) The Aggressive Behaviour Scale is a measure of aggressive behaviour based on the occurrence of verbal abuse, physical abuse, socially disruptive behaviour and resistance of care. Scale scores range from 0-12 with higher scores indicative of greater frequency and diversity of aggressive behaviour. A score of 1 to 4 on the ABS indicates mild to moderate aggressive behaviour, whereas scores of 5 or more represents the presence of more severe aggression. This scale has been validated against the Cohen Mansfield Agitation Inventory.	Range of Values: 0-12
Body Mass Index (BMI) The Body Mass Index is a measurement which represents the ratio of a person's height to weight. In the interRAI assessment suite it is recorded to monitor nutrition, hydration status and weight stability over time. The Undernutrition CAP triggers (3 levels) are based on the BMI. It is defined as the weight in kilograms divided by the square of the height in metres (kg/m^2).	Range of Values: Usually 15-40
Changes in Health, End-Stage Disease, Signs, and Symptoms Scale (CHESS) The CHESS scale is designed to identify individuals at risk of serious decline and their level of medical instability. It has a 6 point scale from 0 (not at all unstable) to 5 (highly unstable) with higher levels predictive of adverse outcomes such as mortality, hospitalisation, pain, caregiver stress, and poor self-rated health.	Range of Values: 0-5
Cognitive Performance Scale (CPS) The Cognitive Performance Scale combines information on memory impairment, level of consciousness, and executive function, with scores ranging from 0 (intact) to 6 (very severe impairment). The CPS has been shown to be highly correlated with the Mini Mental Status Exam (MMSE) in a number of validation studies.	Range of Values: 0-6
Communication Scale The higher the score on the communication scale, the poorer the communication. This scale is derived from expressive and receptive communication.	Range of Values: 0-8

Outcome scale definitions

Depression Rating Scale (DRS) The Depression Rating Scale is used as a clinical screen for depression. The higher the score the stronger the clinical indicator. Validation studies were based on a comparison of the DRS with the Hamilton Depression Rating Scale and the Cornell Scale for Depression.	Range of Values: 0-14
Instrumental Activities of Daily Living (IADL) Capacity The Instrumental ADL Scale is based on a sum of eight items: meal preparation, ordinary housework, managing finances, medications, phone use, stairs, shopping, and transportation. Individual items are summed to produce a scale that ranges from 0 to 48, with higher scores indicating a greater difficulty for a person to carry out an activity.	Range of Values: 0-48
Instrumental Activities of Daily Living (IADL) Performance The Instrumental ADL Scale is based on a sum of eight items: meal preparation, ordinary housework, managing finances, medications, phone use, stairs, shopping, and transportation. Individual items are summed to produce a scale that ranges from 0 to 48, with higher scores indicating greater dependence on others for instrumental activities for daily living.	Range of Values: 0-48
Method of Assigning Priority Level (MAPLe) The MAPLe score (1-5) is a priority indicator. Higher scores are based on the presence of ADL impairment, cognitive impairment, wandering, and behaviour problems. The MAPLe is also a predictor of carer stress. The higher the score the higher the priority for services to be commenced or increased in the community, to prevent hospitalisation or admission into residential care.	Range of Values: 1-5
Pain Scale The Pain Scale attempts to define levels of pain. The scale is highly predictive of pain on the Visual Analogue Scale (Fries et al 2001). Pain that is adequately managed does not feature in the scale.	Range of Values: 0-4
Pressure Ulcer Risk Scale (PURS) The PURS scores range from 0 (lowest risk) to 8 (highest risk) for development of pressure ulcers. This scale considers such things as any history of pressure ulcers, impaired bed mobility, impaired walking, bowel incontinence, weight loss and dyspnoea. This scale complements the Pressure Area CAP and should always be reviewed when that CAP is triggered.	Range of Values: 0-8

Clinical Assessment Protocols (CAPs) Definitions

Functional performance	
Physical Activities Promotion To increase levels of exercise and physical activity – person does <2 hours activity/day; moves and goes up/down stairs without help; increased independence possible.	Range of Values: 0-1
Instrumental Activities of Daily Living To improve IADL self-performance and capacity – decline in IADL function; increased independence possible.	Range of Values: 0-1
Home Environment Optimisation To improve safety of environment – problems with lighting, flooring, bathroom, toilet, kitchen, heating, disrepair, squalor and indicators of frailty.	Range of Values: 0-2
Activities of Daily Living To improve ADL performance or prevent avoidable functional decline – receive some ADL help; potential to improve self-performance.	Range of Values: 0-1
Institutional Risk To avoid premature admission to LTCF – identifies persons with impaired functioning who are at high risk of institutional placement.	Range of Values: 0-1
Physical Restraints This CAP identifies persons who are physically restrained.	Range of Values: 0-2
Cognitive and mental health	
Cognitive Loss To maintain independence, prevent and monitor cognitive decline – Identifies persons with CPS of 0,1,2 and associated clinical risk factors.	Range of Values: 0-2
Delirium To identify persons with active symptoms of delirium – acute change in mental status and behaviour appears different from usual functioning.	Range of Values: 0-1
Communication To improve communication ability and to prevent avoidable communication decline – moderate-severe communication issues in understanding/expression.	Range of Values: 0-2
Mood To identify, treat, monitor mood issues – negative statements, persistent anger, expressions of unrealistic fears, repetitive health complaints, repetitive anxious complaints, sad, crying, tearfulness. DRS score medium to high risk.	Range of Values: 0-2
Behaviour To prevent, manage behavioural problems – wandering, verbally abusing others, physically abusing others, socially inappropriate, disruptive behaviour, inappropriate disrobing or public sexual behaviour, resisting care.	Range of Values: 0-2

Clinical Assessment Protocols (CAPs) Definitions

Social life	
Abusive Relationship To identify potential abuse/neglect situations – fearful of family member, caregiver, close acquaintance, unusually poor hygiene, unkempt appearance, neglected, abused, mistreated – plus stressors.	Range of Values: 0-2
Activities This CAP identifies persons with some cognitive reserve who have either withdrawn from activities or who are uneasy entering into activities and social relationships.	Range of Values: 0-1
Informal Support To identify where a person needs help – not independent with meals/housework/shopping/ transport and alone for long periods or lives alone and no primary informal helper present.	Range of Values: 0-1
Social Relationship To identify reduced social relationships and facilitate engagement – feels lonely, cognition adequate, able to understand others.	Range of Values: 0-1

Clinical Assessment Protocols (CAPs) Definitions

Clinical issues	
Falls To identify and change any underlying risk factors for falls – report of multiple falls/report of a single fall.	Range of Values: 0-2
Pain To identify and treat underlying reasons for pain – high risk trigger – severe, horrible or excruciating pain; medium risk trigger – daily mild/moderate pain.	Range of Values: 0-2
Pressure Ulcer To prevent, identify and treat pressure ulcers – has or is at risk of developing a pressure ulcer.	Range of Values: 0-3
Cardiorespiratory Conditions To assess and manage cardiorespiratory conditions – symptoms of chest pain, shortness of breath, irregular pulse, dizziness and test results – blood pressure, respiratory rate, heart rate, oxygen saturation.	Range of Values: 0-1
Undernutrition To address and manage under nutrition – based on a person's BMI score.	Range of Values: 0-2
Dehydration To identify and treat underlying causes of dehydration – insufficient fluid intake; and diarrhoea, vomiting, delirium, fever, dizziness, syncope, constipation, weight loss.	Range of Values: 0-2
Feeding Tube To identify persons with a feeding tube and manage – has feeding tube and some residual cognitive abilities/absence of cognitive abilities.	Range of Values: 0-2
Prevention To prevent illness and disability – blood pressure, colonoscopy, dental exam, hearing exam, flu vax, mammogram, pneumovax.	Range of Values: 0-2
Appropriate Medications To identify and promote appropriate medication management – 9+ medications and 2 of the following – chest pain, dizziness, oedema, shortness of breath, poor health, recent deterioration.	Range of Values: 0-1
Tobacco and Alcohol Use To identify strategies to help people cease smoking/ cut back on excessive drinking – daily smoker; alcohol intake, pressure to cut back.	Range of Values: 0-1
Urinary Incontinence To facilitate improvement and prevent decline in bladder function – reoccurring episodes of incontinence, minimal cognitive abilities, locomotion impaired; possibility of improvement.	Range of Values: 0-3
Bowel Conditions To facilitate improvement and prevent decline in bowel function – risk of decline and improvement in bowel continence.	Range of Values: 0-2

Disease diagnosis descriptions

Hip Fracture

Includes any hip fracture that occurred during the past 30 days (or since the last assessment, if it was less than 30 days ago) that continues to have a relationship to current status, treatments, monitoring, etc. Hip fracture diagnoses also include femoral neck fractures, fractures of the trochanter, and subcapital fractures.

Other Fracture

Any fracture other than hip (for example, wrist) due to any condition, such as falls or weakening of the bone as a result of cancer. Fracture to have occurred during the past 30 days (or since the last assessment, if it was less than 30 days ago).

Alzheimer's Disease

A degenerative and progressive dementia that is diagnosed by ruling out other dementias and physiological reasons for the dementia.

Dementia other than Alzheimer's Disease

Includes diagnoses of organic brain syndrome (OBS) or chronic brain syndrome (CBS), senility, senile dementia, multi-infarct dementia, and dementia related to neurological diseases other than Alzheimer's (such as Pick's, Creutzfeldt-Jakob, Huntington's disease, etc.).

Hemiplegia

Paralysis (temporary or permanent impairment of sensation, function, motion) of both limbs on one side of the body. Usually caused by cerebral haemorrhage, thrombosis, embolism, or tumour. There must be a diagnosis of hemiplegia in the person's record to code this item.

Multiple Sclerosis

A disease in which there is demyelination throughout the central nervous system. Typical symptoms are weakness, incoordination, paraesthesia, speech disturbances, and visual complaints.

Paraplegia

Paralysis (temporary or permanent impairment of active motion) of the lower part of the body, including both legs.

Parkinson's Disease

A disorder of the brain characterised by tremor; muscle rigidity; and difficulty with walking, movement, and coordination.

Quadriplegia

Paralysis (temporary or permanent impairment of sensation, function, motion) of all four limbs and trunk.

Stroke/CVA

A sudden rupture or blockage of a blood vessel within the brain, causing serious bleeding or local obstruction.

Coronary Heart Disease

A chronic condition marked by thickening and loss of elasticity of the coronary artery, and caused by deposits of plaque containing cholesterol, lipoid material, and lipophages.

Chronic Obstructive Pulmonary Disease (COPD)

Any long-standing condition that impairs airflow in and out of the lungs.

Congestive Heart Failure

A condition in which the heart cannot pump out all of the blood that enters it, which leads to an accumulation of blood in the vessels, fluid in the body tissues, and lung congestion.

Anxiety

A non-psychotic mental disorder. There are five types, which include generalised anxiety disorder, obsessive-compulsive disorder, panic disorder, phobias and post-traumatic stress disorder.

Bipolar Disorder

Includes documentation of clinical diagnosis of either manic depression or bipolar disorder. "Bipolar disorder" is the current term for manic-depressive illness.

Depression

A mood disorder often characterised by a depressed mood (for example, the person feels sad or empty; appears tearful); decreased ability to think or concentrate; loss of interest or pleasure in usual activities; insomnia or hypersomnia; loss of energy; change in appetite; feelings of hopelessness, worthlessness, or guilt. May include thoughts of death or suicide.

Schizophrenia

A disturbance characterised by delusions, hallucinations, disorganised speech, grossly disorganised behaviour, disordered thinking, or flat affect. This category includes schizophrenia subtypes (for example, paranoid, disorganised, catatonic, undifferentiated, residual).

Pneumonia

Inflammation of the lungs, most commonly of bacterial or viral origin.

Urinary Tract Infection

Includes chronic and acute symptomatic infection(s) in the last 30 days. Code only if there is current supporting documentation and significant laboratory findings in the clinical record.

Cancer

Any malignant growth or tumour caused by abnormal and uncontrolled cell division. The malignant growth or tumour may spread to other parts of the body through the lymphatic system or the blood stream.

Diabetes Mellitus

Any of several metabolic disorders marked by persistent thirst and excessive discharge of urine. Includes insulin-dependent diabetes mellitus (IDDM) and diet-controlled diabetes mellitus (NIDDM or AODM).