

s47E(c), s47F

From: DAY, Robert
Sent: Monday, 11 April 2022 4:14 PM
To: 'Jenna Dennison'
Subject: RE: NCDC Papers [SEC=OFFICIAL]

Hi Jenna

Yes, they all came through to us successfully – thanks.

I'm just following up with Michael now about whether it's him or me who will send the response we promised to you and s47F following our meeting on Thursday. That shouldn't be too far away.

Cheers

Rob

Robert Day

Assistant Secretary
 Dementia, Diversity and Design Branch

Market and Workforce Division | Ageing and Aged Care Group
 Australian Government Department of Health
 T: 02 6289 8883 | M: s47E(c), s47F E: robert.day@health.gov.au
 Location: Sirius 4.S.217

PO Box 9848, Canberra ACT 2601, Australia

From: Jenna Dennison
Sent: Monday, 11 April 2022 1:58 PM
To: DAY, Robert
Subject: NCDC Papers

REMINDER: Think before you click! This email originated from outside our organisation. Only click links or open attachments if you recognise the sender and know the content is safe.

Dear Robert

I just want to make sure the documents I sent through on Thursday made it through to your end – I sent through the email 'compatible' sized versions so hopefully all OK.

Please do not hesitate to let me know if you have any queries / suggestions regarding the documents.

Cheers

Jenna

--

Jenna Dennison
 Project Director
 National Network of Comprehensive Dementia Centres
 M: 0409 121 634

E: s47F @dementia.org.au

NCDC Lead Partner Organisations:



I acknowledge the local Aboriginal people of the Bundjalung Nation, their Elders past, present and emerging, on whose lands I meet and work.

This document has been released under
the Freedom of Information Act 1982 (Cth)
By the Department of Health, Disability and Ageing

s47E(c), s47F

From: DAY, Robert
Sent: Tuesday, 12 April 2022 6:14 PM
To: 'Jenna Dennison'
Subject: RE: NCDC Brochure & Business Case [SEC=OFFICIAL]

Hi Jenna

Really happy to discuss point 2 with you in more detail although I am pretty heavily booked, I'm afraid. Is next Friday (22 April) too late for you?

Kind regards
 Robert

From: Jenna Dennison
Sent: Tuesday, 12 April 2022 8:56 AM
To: s47F AC ; DAY, Robert
Cc: LYE, Michael ; STRAPP, Eliza
Subject: RE: NCDC Brochure & Business Case [SEC=OFFICIAL]

REMINDER: Think before you click! This email originated from outside our organisation. Only click links or open attachments if you recognise the sender and know the content is safe.

Dear Robert

Thank you very much for your consideration and the feedback. I will work with the s47F and the other members of the Steering Committee to work through these matters / implementation opportunities.

I know that there is work on foot following the Aged Care Royal Commission regarding dementia care pathways with the PHNs and that there has been a recent paper released from the Primary Health Reform Steering Committee. In light of these, are you available this week for me to discuss dot point 2 in more detail?

Thank you again for the feedback and I look forward to moving the proposal forward.

Cheers

Jenna

--

M: 0409 121 634

E: s47F @dementia.org.au

From: s47F
Sent: Monday, 11 April 2022 6:59 PM
To: DAY, Robert <Robert.Day@health.gov.au>
Cc: Jenna Dennison s47F @dementia.org.au; LYE, Michael <Michael.LYE@health.gov.au>; STRAPP, Eliza <Eliza.Strapp@health.gov.au>
Subject: Re: NCDC Brochure & Business Case [SEC=OFFICIAL]

Thanks Robert. That feedback is very important. As you note, these are matters that should now be placed on the priority list for further work over the short term, in the context of the development and implementation of the NCDC project. Much appreciate your time and input on this.

Cheers

s47F

s47F

On 11 Apr 2022, at 6:55 pm, DAY, Robert <Robert.Day@health.gov.au> wrote:

Dear s47F and Jenna

Thanks for meeting with us on Thursday to discuss the NCDC business case. The proposal speaks to some significant challenges and opportunities in dementia diagnosis and care and we recognise the significant group of experts and organisations that you have built around the idea.

From our perspective, we would be interested in the business case articulating a vision that solves the whole problem even if we need to look at staged implementation to achieve that vision. We are conscious that at this stage the current business case will only directly serve a small proportion of the total number of people diagnosed with dementia each year and although there is an intention for the network to drive change more widely that doesn't feel concretely defined in the business case. There may be opportunities to strengthen the planned approach by:

- More clearly articulating the relationships between the state capital-based hubs and existing memory clinics, building on the hub and spoke concept referenced in the paper
- Exploring opportunities to leverage and build the capacity of primary care to undertake the care coordination function going beyond the advisory service and building on existing reform work in this area
- Considering options for phased implementation toward a more comprehensive solution.

We don't think any of these represent red flags which would prevent you from further circulating the business case for consideration. Rather, they are issues which we could continue to engage with you as that consideration is progressed.

Kind regards
Robert

Robert Day
Assistant Secretary
Dementia, Diversity and Design Branch

Market and Workforce Division | Ageing and Aged Care Group
Australian Government Department of Health
T: 02 6289 8883 | M: s47E(c), s47F E: robert.day@health.gov.au
Location: Sirius 4.S.217

PO Box 9848, Canberra ACT 2601, Australia

From: Jenna Dennison s47F [redacted] <s47F@dementia.org.au>
Sent: Thursday, 7 April 2022 12:27 PM
To: LYE, Michael <Michael.LYE@health.gov.au>; DAY, Robert <Robert.Day@health.gov.au>; STRAPP, Eliza <Eliza.Strapp@health.gov.au>
Subject: NCDC Brochure & Business Case

REMINDER: Think before you click! This email originated from outside our organisation. Only click links or open attachments if you recognise the sender and know the content is safe.

Dear Michael, Robert and Eliza

Thank you for meeting with s47F [redacted] and me this morning.

As promised, please see attached the NCDC Brochure & Business Case.

Please do not hesitate to contact me with any questions.

Look forward to hearing from you soon and we can move forward from there.

Cheers

Jenna

--

Jenna Dennison
 Project Director
 National Network of Comprehensive Dementia Centres
 M: 0409 121 634
 E: s47F [redacted] <s47F@dementia.org.au>

NCDC Lead Partner Organisations:



I acknowledge the local Aboriginal people of the Bundjalung Nation, their Elders past, present and emerging, on whose lands I meet and work.

"Important: This transmission is intended only for the use of the addressee and may contain confidential or legally privileged information. If you are not the intended recipient, you are notified that any use or dissemination of this communication is strictly prohibited. If you receive this transmission in error please notify the author immediately and delete all copies of this transmission."

s47E(c), s47F

Subject: RE: NCDC Brochure & Business Case [SEC=OFFICIAL]

Start: Fri 22/04/2022 11:30 AM
End: Fri 22/04/2022 12:00 PM
Show Time As: Tentative

Recurrence: (none)

Meeting Status: Not yet responded

Organiser: DAY, Robert
Required Attendees: Jenna Dennison
Optional Attendees: GATTRINGER, Michelle

Hi Jenna

I hope this time will work for you but let me know if it doesn't.

Kind regards
 Robert

From: Jenna Dennison s47F <[REDACTED]@dementia.org.au>
Sent: Wednesday, 13 April 2022 8:44 AM
To: DAY, Robert
Subject: RE: NCDC Brochure & Business Case [SEC=OFFICIAL]

REMINDER: Think before you click! This email originated from outside our organisation. Only click links or open attachments if you recognise the sender and know the content is safe.

Dear Robert

Next Friday will work for me. I have a meeting from 10 – 11 but otherwise available.

What time would work for you?

Cheers

Jenna

--

M: 0409 121 634

E: s47F [REDACTED] <[\[REDACTED\]@dementia.org.au](mailto:[REDACTED]@dementia.org.au)>

From: DAY, Robert <Robert.Day@health.gov.au>
Sent: Tuesday, 12 April 2022 6:14 PM
To: Jenna Dennison <s47F [REDACTED] <[\[REDACTED\]@dementia.org.au](mailto:[REDACTED]@dementia.org.au)>>
Subject: RE: NCDC Brochure & Business Case [SEC=OFFICIAL]

Hi Jenna

Really happy to discuss point 2 with you in more detail although I am pretty heavily booked, I'm afraid. Is next Friday (22 April) too late for you?

Kind regards

Robert

From: Jenna Dennison <s47F [REDACTED] <[\[REDACTED\]@dementia.org.au](mailto:[REDACTED]@dementia.org.au)>>
Sent: Tuesday, 12 April 2022 8:56 AM
To: s47F [REDACTED] DAY, Robert <Robert.Day@health.gov.au>
Cc: LYE, Michael <Michael.LYE@health.gov.au>; STRAPP, Eliza <Eliza.Strapp@health.gov.au>
Subject: RE: NCDC Brochure & Business Case [SEC=OFFICIAL]

REMINDER: Think before you click! This email originated from outside our organisation. Only click links or open attachments if you recognise the sender and know the content is safe.

Dear Robert

Thank you very much for your consideration and the feedback. I will work with the s47F and the other members of the Steering Committee to work through these matters / implementation opportunities.

I know that there is work on foot following the Aged Care Royal Commission regarding dementia care pathways with the PHNs and that there has been a recent paper released from the Primary Health Reform Steering Committee. In light of these, are you available this week for me to discuss dot point 2 in more detail?

Thank you again for the feedback and I look forward to moving the proposal forward.

Cheers

Jenna

--

M: 0409 121 634

E: s47F [@dementia.org.au](mailto:s47F@dementia.org.au)

From: s47F

Sent: Monday, 11 April 2022 6:59 PM

To: DAY, Robert <Robert.Day@health.gov.au>

Cc: Jenna Dennison s47F [@dementia.org.au](mailto:s47F@dementia.org.au); LYE, Michael <Michael.LYE@health.gov.au>; STRAPP, Eliza <Eliza.Strapp@health.gov.au>

Subject: Re: NCDC Brochure & Business Case [SEC=OFFICIAL]

Thanks Robert. That feedback is very important. As you note, these are matters that should now be placed on the priority list for further work over the short term, in the context of the development and implementation of the NCDC project. Much appreciate your time and input on this.

Cheers

s47F

s47F

On 11 Apr 2022, at 6:55 pm, DAY, Robert <Robert.Day@health.gov.au> wrote:

Dear s47F and Jenna

Thanks for meeting with us on Thursday to discuss the NCDC business case. The proposal speaks to some significant challenges and opportunities in dementia diagnosis and care and we recognise the significant group of experts and organisations that you have built around the idea.

From our perspective, we would be interested in the business case articulating a vision that solves the whole problem even if we need to look at staged implementation to achieve that vision. We are conscious that at this stage the current business case will only directly serve a small proportion of the total number of people diagnosed with dementia each year and although there is an intention for the network to drive change more widely that doesn't feel concretely defined in the business case. There may be opportunities to strengthen the planned approach by:

- More clearly articulating the relationships between the state capital-based hubs and existing memory clinics, building on the hub and spoke concept referenced in the paper

- Exploring opportunities to leverage and build the capacity of primary care to undertake the care coordination function going beyond the advisory service and building on existing reform work in this area
- Considering options for phased implementation toward a more comprehensive solution.

We don't think any of these represent red flags which would prevent you from further circulating the business case for consideration. Rather, they are issues which we could continue to engage with you as that consideration is progressed.

Kind regards

Robert

Robert Day

Assistant Secretary

Dementia, Diversity and Design Branch

Market and Workforce Division | Ageing and Aged Care Group

Australian Government Department of Health

T: 02 6289 8883 | M: s47E(c), s47F | E: robert.day@health.gov.au

Location: Sirius 4.S.217

PO Box 9848, Canberra ACT 2601, Australia

From: Jenna Dennison s47F [@dementia.org.au](mailto:jenna.dennison@dementia.org.au)>

Sent: Thursday, 7 April 2022 12:27 PM

To: LYE, Michael <Michael.LYE@health.gov.au>; DAY, Robert <Robert.Day@health.gov.au>; STRAPP, Eliza <Eliza.Strapp@health.gov.au>

Subject: NCDC Brochure & Business Case

REMINDER: Think before you click! This email originated from outside our organisation. Only click links or open attachments if you recognise the sender and know the content is safe.

Dear Michael, Robert and Eliza

Thank you for meeting with s47F and me this morning.

As promised, please see attached the NCDC Brochure & Business Case.

Please do not hesitate to contact me with any questions.

Look forward to hearing from you soon and we can move forward from there.

Cheers

Jenna

--

Jenna Dennison

Project Director

National Network of Comprehensive Dementia Centres

M: 0409 121 634

E: s47F [@dementia.org.au](mailto:s47F@dementia.org.au)

NCDC Lead Partner Organisations:

I acknowledge the local Aboriginal people of the Bundjalung Nation, their Elders past, present and emerging, on whose lands I meet and work.

"Important: This transmission is intended only for the use of the addressee and may contain confidential or legally privileged information. If you are not the intended recipient, you are notified that any use or dissemination of this communication is strictly prohibited. If you receive this transmission in error please notify the author immediately and delete all copies of this transmission."

"Important: This transmission is intended only for the use of the addressee and may contain confidential or legally privileged information. If you are not the intended recipient, you are notified that any use or dissemination of this communication is strictly prohibited. If you receive this transmission in error please notify the author immediately and delete all copies of this transmission."

-- Do not delete or change any of the following text. --

When it's time, join your Webex meeting here.



More ways to join:

Join from the meeting link

<https://health-au.webex.com/health-au/j.php?MTID=m58d6ebb708a3abfcc49f76fe37a96a0e>

Join by meeting number

Meeting number (access code): 2654 782 2412

Meeting password: MXvWcXE2Y36

Tap to join from a mobile device (attendees only)

+61-2-9338-2221,,26547822412## Australia Toll

Join by phone

+61-2-9338-2221 Australia Toll

Global call-in numbers

Join from a video system or application

Dial [26547822412@health-au.webex.com](tel:26547822412)

You can also dial 210.4.202.4 and enter your meeting number.

Join using Microsoft Lync or Microsoft Skype for Business

Dial [26547822412.health-au@lync.webex.com](tel:26547822412)

If you are a host, [click here](#) to view host information.

Need help? Go to <https://help.webex.com>

This document has been released under
the Freedom of Information Act 1982 (Cth)
By the Department of Health, Disability and Ageing

s47E(c), s47F

From: Jenna Dennison s47F @dementia.org.au>
Sent: Friday, 29 July 2022 11:42 AM
To: DAY, Robert
Cc: s47E(c), s47F
Subject: August NCDC Touch Base Meeting

Follow Up Flag: Follow up
Flag Status: Completed

REMINDER: Think before you click! This email originated from outside our organisation. Only click links or open attachments if you recognise the sender and know the content is safe.

***Could you set this up, please s47E(c), s47F

Dear Robert

I am following up on our recent catch up last week and seeking to find a 30 min time with your toward to the end of August.

I have had some queries from some of the NCDC partners and geriatricians who we have consulted and are also being engaged with the National Framework consultations. When we next meet I would be keen to know more about the overall process for the Framework consultations etc. I have also been asked if there is an evaluation of the 2015 – 19 Framework.

It would be great to arrange an opportunity to touch base in late August.

Look forward to hearing from you.

Cheers

Jenna

--

Jenna Dennison
 Project Director
 National Network of Comprehensive Dementia Centres
 M: 0409 121 634
 E: s47F @dementia.org.au

NCDC Lead Partner Organisations:



I acknowledge the Kurna people as the Traditional Owners and Custodians on whose lands I meet and work.

s47E(c), s47F

From: Jenna Dennison s47F @dementia.org.au>
Sent: Thursday, 8 September 2022 9:04 AM
To: s47E(c), s47F
Cc: DAY, Robert
Subject: [ATTACHMENT UNSCANNED]NCDC Touch Base Meeting

REMINDER: Think before you click! This email originated from outside our organisation. Only click links or open attachments if you recognise the sender and know the content is safe.

Dear s47E(c), s47F

I hope you are well.

I am writing to see if I can lock in my next catch up with Robert re: NCDC. We last met in late August and wondering if the first week of October may be a possibility.

Cheers

Jenna

--

Jenna Dennison
 Project Director
 National Network of Comprehensive Dementia Centres
 M: 0409 121 634
 E: s47F @dementia.org.au

NCDC Lead Partner Organisations:



I acknowledge the Kurna people as the Traditional Owners and Custodians on whose lands I meet and work.

s47E(c), s47F

From: DAY, Robert
Sent: Monday, 28 November 2022 11:29 AM
To: 'Jenna Dennison'
Cc: s47E(c), s47F
Subject: RE: NCDC Meeting - 6th December [SEC=OFFICIAL]

Hi Denna

I'd be happy to include s47F in our discussion in December. (And also happy to reschedule to fit his availability if necessary.)

s47 – would you mind include s47F in the invitation, please?

F,
 s47
 Thanks
 E(c)
 Rob

From: Jenna Dennison
Sent: Monday, 28 November 2022 9:52 AM
To: DAY, Robert
Cc: s47E(c), s47F
Subject: NCDC Meeting - 6th December

REMINDER: Think before you click! This email originated from outside our organisation. Only click links or open attachments if you recognise the sender and know the content is safe.

Dear Robert

I understand that you may be on leave – but thought I would try my luck.

If s47F is free on 6th December I am wondering if you would mind if I invited him to our meeting. The NCDC Steering Committee meet this week and I thought that it would be valuable to get that perspective as well when we meet.

If you are supportive of forwarding the invitation his email is: s47F

I have had a chance to read through the National Dementia Action Plan once and look forward to discussing (I suspect I will read it a few more times yet!)

I can put together an agenda like last time.

Cheers

Jenna

--

Jenna Dennison
 Project Director
 National Network of Comprehensive Dementia Centres

M: 0409 121 634

E: s47F@dementia.org.au

NCDC Lead Partner Organisations:



I acknowledge the Kurna people as the Traditional Owners and Custodians on whose lands I meet and work.

This document has been released under
the Freedom of Information Act 1982 (Cth)
By the Department of Health, Disability and Ageing

s47E(c), s47F

From: Jenna Dennison s47F @dementia.org.au>
Sent: Monday, 12 December 2022 4:27 PM
To: DAY, Robert
Cc: s47E(c), s47F
Subject: NCDC - Discussion Early 2023

REMINDER: Think before you click! This email originated from outside our organisation. Only click links or open attachments if you recognise the sender and know the content is safe.

Dear Robert

Thank you for meeting with s47F and me last week. It never seems to slow before Christmas!

With the risk of being too eager, I wonder if I could schedule our next meeting for either late January or early February 2023.

I plan to take next week off for Christmas but otherwise will be on deck throughout the Christmas / School holiday period.

Cheers

Jenna

--

Jenna Dennison
 Project Director
 National Network of Comprehensive Dementia Centres
 M: 0409 121 634
 E: s47F @dementia.org.au

NCDC Lead Partner Organisations:



I acknowledge the Kaurna people as the Traditional Owners and Custodians on whose lands I meet and work.

s47E(c), s47F

From: Jenna Dennison s47F @dementia.org.au>
Sent: Tuesday, 12 September 2023 2:55 PM
To: DAY, Robert
Cc: s47E(c), s47F
Subject: NCDC Addendum

REMINDER: Think before you click! This email originated from outside our organisation. Only click links or open attachments if you recognise the sender and know the content is safe.

Dear Robert

I hope that all is going well.

I write to provide a quick update that I aim to have an NCDC Addendum endorsed by the NCDC Steering Committee when they meet at the end of the month.

The document sets out more information on the following three areas:

- Phased Implementation: Building a Network of Comprehensive Dementia Centres
- Accessing Dementia Care Across Australia: Regional Footprint
- Empowering and Supporting General Practitioners

In light of this I wonder if it may be timely for us to arrange a meeting for mid-October to discuss.

Cheers

Jenna

--

Jenna Dennison
 Project Director
 National Network of Comprehensive Dementia Centres
 M: 0409 121 634
 E: s47F @dementia.org.au

NCDC Lead Partner Organisations:



I acknowledge the Kaurna people as the Traditional Owners and Custodians on whose lands I meet and work.

NATIONAL NETWORK OF COMPREHENSIVE DEMENTIA CENTRES

AN OVERVIEW

*Imagine a world where dementia can be rapidly detected, treated and even prevented.
A world where the path to managing dementia is clear and easy to follow.
Where links to cutting-edge research are easy to find.
We believe we can make the jump to create this reality.*

A partnership between





AUSTRALIANS LIVING WITH DEMENTIA ARE ASKED TO NAVIGATE A CONFUSING, INCONSISTENT PATHWAY TO DIAGNOSIS AND INTERVENTIONS.

It's time to change that.

AN AUSTRALIAN-FIRST SOLUTION FOR PEOPLE LIVING WITH OR AT RISK OF DEMENTIA

We want to shape a world where people living with dementia have a clear and comprehensive pathway to access an accurate diagnosis, treatment and support tailored to their needs.

Our vision is to establish a national network of comprehensive dementia centres which brings together people impacted by dementia, primary health care professionals and clinical specialists, support services, educators, innovators and researchers to support a unified approach to timely diagnosis, evidence-based clinical care and treatment, and ongoing support for people with dementia, their families and their carers.

Research is fundamental to delivering better dementia care and finding a cure. Our aim for the network is to set the standard for quality care as well as drive innovation and breakthroughs in the prevention, diagnosis and treatment of dementia.

AN AUSTRALIAN-FIRST SOLUTION FOR PEOPLE LIVING WITH OR AT RISK OF DEMENTIA

We call on the Australian Federal and State Governments to work with us to reimagine the delivery of comprehensive dementia care and how we can better work together to prevent and find a cure for dementia.

The establishment of comprehensive research and care centres for dementia would place Australia as a global leader in dementia treatment, care, education, training and research, and will:

- Actively address this **National Health Priority Area** and reinvigorate the **National Framework for Action on Dementia** (2015 – 2019) – noting that dementia is the leading cause of death in women in Australia and likely to become the leading cause of death for all Australians within 5 years.
- Begin to address a **health issue expected to affect up to 6.4 million Australians** at a cost of \$1 trillion dollars in the next 40 years.¹
- Substantially reduce the number of people living with dementia. For every 5% reduction in the prevalence of dementia there will be a cost saving of \$5.7 billion over 10 years and \$120 billion over the next 40 years given our aging population as outlined in the **National Dementia Strategy**.²
- **Reduce the burden of disease** associated with dementia. Australian estimates place dementia as the second leading cause of total burden (accounting for 7.8% of years of life lost due to illness or death), and the leading cause of non-fatal burden (accounting for 10% of years of life lost due to living with the disease).³
- Strengthen the interface between aged care and primary/acute care and improve health professional workforce capacity under the **National Aged Care Workforce Strategy**.⁴
- **Enhance the diagnostic capability and capacity** across Australia, and support development of the skillset of community-based medical and health practitioners.
- Improve the management of dementia in groups disproportionately affected by dementia, such as in **Aboriginal and Torres Strait Islander people**.⁵
- Help address some of the gaps and limits in care for people with dementia identified by the **Royal Commission into Aged Care Quality and Safety** including people living with younger onset dementia and other vulnerable populations including culturally and linguistically diverse communities, LGBTQI+ communities, regional and remote communities, lower socioeconomic areas as well as people living with other disabilities.
- Routinely provide people who are at risk of, or living with dementia, as well as their carers, opportunities to participate in ground-breaking research into prevention, treatment and care, and ensure their voice is integral in setting the research agenda.
- Support the **Australian Institute of Health and Welfare** to address dementia data gaps and opportunities through the **ADNeT Clinical Quality Register**.



1 Economic Cost of Dementia in Australia 2016-2056 Report. Prepared for Alzheimer's Australia by Professor Laurie Brown, Erick Hansnata and Hai Anh La NATSEM at the Institute for Governance and Policy Analysis, University of Canberra February 2017.

2 Ibid.

3 Australian Institute of Health and Welfare 2018. Australia's health 2018. Australia's health series no. 16. AUS 221. Canberra: AIHW

4 A Matter Of Care: Australia's Aged Care Workforce Strategy Report of the Aged Care Workforce Strategy Taskforce June 2018 - Strategic Action Number 9.

5 Radford, K., Lavrencic, L. M., Delbaere, K., Draper, B., Cumming, R., Daylight, G., Mack, H. A., Chalkley, S., Bennett, H., Garvey, G., Hill, T. Y., Lasschuit, D., & Broe, G. A. (2019). Factors Associated with the High Prevalence of Dementia in Older Aboriginal Australians. *Journal of Alzheimer's disease : JAD*, 70(s1), S75–S85. <https://doi.org/10.3233/JAD-180573>

DEMENTIA – A GLOBAL EPIDEMIC

Dementia is a progressive disease that can strip people of their memory, independence, ability to communicate and more. It is degenerative, irreversible and has no known cure. It robs families of their loved one.

It is universally accepted that dementia is one of the greatest health challenges of the 21st century. Worldwide, around 55 million people have dementia and there are nearly 10 million new cases of dementia every year. Alzheimer's disease is the most common form of dementia and may contribute to 60-70% of cases.⁶

Dementia is one of the major causes of disability and dependency among older people worldwide. The impact of dementia is far reaching. It has a physical, psychological, social, and economic impact, not only on people with dementia, but also on their carers, families, the health and age care system and our society at large. Dementia is more common among older people. As such, this impact is set to increase as the proportion of older Australians grows and life expectancy increases. In the absence of a medical breakthrough, over 1.1 million Australians are estimated to be living with dementia in 2058 at a cost of more than \$36.8 billion to our economy. Australia needs to take immediate steps to stop this dementia epidemic becoming a reality.

ONE HUNDRED DOORS TO TREATMENT – AND YET NO CLEAR HOME

A timely diagnosis can provide people with dementia and their families with peace of mind, management plans and access to clinical trials, which can greatly improve quality of life and independence. However, many people living with dementia and their families liken the process of tracking down a diagnosis and treatment to trying to navigate their way through a hundred different doors.

We need to work better together in our pursuit of dementia prevention as well as the provision of truly comprehensive care for people living with dementia. We know that collaborative dementia care management improves quality of life and is cost-effective, reducing hospitalisations, increasing quality-adjusted life years and delaying admission to residential aged care facilities.⁷ **The Royal Commission into Aged Care Quality and Safety**, together with a number of aged care reviews, has made it clear that

Australians of all ages want to be assisted to live independently in their own home during their retirement years rather than ever having to go to an aged care facility. We want to support people to live well and age well.

It is important to acknowledge the work already underway through the Federal Government's 5 year 5 pillar response to the Royal Commission into Aged Care Quality and Safety including the increased support for the National Dementia Helpline and the National Dementia Support Program; however, there is still so much more to be done for the almost half a million Australians currently living with dementia – and indeed for all Australians, as our aging population increases. The dementia care pathway remains fragmented, complex and uncertain – from risk reduction interventions, seeking an accurate and timely diagnosis to navigating the maze of care options, delayed services and lack of access to clinical trials and new research opportunities. Care partners consistently report not knowing where to go or what is the next practical step following a dementia diagnosis.

⁶ <https://www.who.int/news-room/fact-sheets/detail/dementia>

⁷ Michalowsky, B., Xie, F., Eichler, T., Hertel, J., Kaczynski, A., Kilimann, I., ... & Hoffmann, W. (2019). Cost-effectiveness of a collaborative dementia care management—Results of a cluster-randomized controlled trial. *Alzheimer's & Dementia*, 15(10), 1296-1308.

TODAY, A DEMENTIA DIAGNOSIS CAN FEEL LIKE THE END OF THE ROAD. WE WANT TO CHANGE THIS.

Our goal is to establish the national Network of Comprehensive Dementia Centres (NCDC) with Hubs that truly integrate with existing health and support services and government portals to ensure that ‘there is no wrong door’ for people to access the support they need. Like comprehensive cancer centres, the delivery of high-quality care together with world class research will transform the treatment for people living with or at risk of dementia, support independent living and quality of life, and pursue the medical breakthroughs that will one day lead to prevention or cure.

We know that primary health care professionals are key to supporting a timely diagnosis and ongoing care management as well as supporting preventative action and ‘brain health checks’ early on. Unlocking capacity within the existing health care system is critical to supporting the growing number of people living

with, and at risk of dementia. In order to improve the impact and efficacy of primary care in relation to dementia we need to provide direct ‘hands on’ experience and training for current medical and health professionals as well as invest in and inspire the next generation of clinicians and researchers. This knowledge and confidence will be critical in changing the way we talk about our brain health and address prevention and dementia management.

With no known cure for dementia and limited treatment options, a coordinated research agenda is needed to drive advances in the prevention, diagnosis, treatment and care of people living with dementia. To have the greatest impact for people living with, or at risk of dementia, our research needs to be coordinated across jurisdictions and supported by appropriate research infrastructure (e.g., access to the information technology systems to accurately and securely capture data, advanced imaging and analysis technology, biobanking and clinical trials sites).⁸ While we pursue biomedical breakthroughs to prevent or slow the disease progression, we also need to invest in evidence-based care that improves quality of life and ensures dignity and compassion for people impacted by this life-changing disease.

To achieve all this, we need to work collaboratively and bring clinical dementia care and support, clinical education and research opportunities together.



8 [National Clinical Trials Governance Framework | Australian Commission on Safety and Quality in Health Care](#)

OUR VISION – TRANSFORMING DEMENTIA DIAGNOSIS, TREATMENT AND CARE

Our vision is to bring together people impacted by dementia, clinicians, educators, researchers and policymakers to:

- prevent or delay the onset of dementia, provide diagnostic services and ongoing comprehensive care and support to improve outcomes for people impacted by dementia
- deliver best-practice interdisciplinary clinical care and enhance clinical capability across Australia
- develop a collaborative environment to transform the research landscape to accelerate research translation with real life impact



The NCDC will provide a comprehensive model of diagnosis, treatment, care and research coordination for people living with, or at risk of dementia or concerned about cognitive decline. Our ambition is to set up at least one NCDC Hub in each Australian state and territory networked with the other NCDC Hubs, and integrated with existing metropolitan, regional, rural and remote health and community service organisations which currently provide diagnosis, treatment and care for people living with dementia or at risk of dementia, their families and carers.⁹

Collectively these Hubs will become Australia's largest memory and cognition clinics - supporting a diagnosis and delivering comprehensive dementia care management. As centres of clinical excellence, the Hubs will be training the next generation of clinicians and upskilling the current medical and primary health workforce while also facilitating ground-breaking translational research to improve outcomes. The NCDC will lead and influence the delivery of dementia management and care that will have a real impact across all Australian communities.

⁹ Including memory clinics identified through the ADNeT Memory Clinic Initiative and Victoria's Cognitive Dementia and Memory Service (CDAMS) clinics, general practice clinics, community hubs and support programs.

OUR VISION – TRANSFORMING DEMENTIA DIAGNOSIS, TREATMENT AND CARE

Similar to the comprehensive cancer centres across Australia, the NCDC partners want to shape a world where people living with dementia only need to go through one door to be on the clear track to timely information, an accurate diagnosis, evidence-based interventions & treatments and ongoing post-diagnostic support. The NCDC Hubs will be accessible to all Australians – whether in person or through virtual and telehealth platforms and will be home to:

- **Dedicated multidisciplinary memory & dementia clinics**
- A **Virtual Clinical Advisory Hub** to support community-based health professionals with dementia prevention, diagnosis and care management
- **Integrated community-based case management and optimising referrals** through:
 - A new workforce of **Dementia Care Clinicians** – clinical dementia experts providing coordinated person-centred case management in person and online
 - **Referrals to Dementia Australia** – experts in dementia education and social support and other appropriate services
- **Applied training and learning opportunities** for medical, nursing & allied health students, trainees Hubs and current medical and health professionals

- **Collaborative research and learning environment** to drive **innovation, increase research trials & participation and better translate** research into real-world impact for people living with, or at risk of dementia.

Learning from leading centres around the world, such as the UK Dementia Research Institute, Alzheimer Center of the VU University Medical Center and Aging and Disability Resource Centers in the USA, comprehensive centres must be in or near a precinct that can offer:

- access to the very best dementia research activity;
- availability of investigative genomic and imaging technology;
- comprehensive medical care; and
- ease of access to individuals and families.

On consideration of these factors, we have identified possible sites and partners in Brisbane, Sydney, Melbourne, Adelaide, Tasmania and Perth's biomedical & health precincts, which would be ideal to establish the flagship Hubs to act as exemplars for the national network. These innovative Hubs will bring together medical research, medical care and access to social services, closely aligning with available care and leveraging existing world class technologies to avoid duplication and improve integrated care.



DEVELOPING THE NCDC MODEL OF CARE

An extensive six month consultation process with people impacted by dementia, clinicians, researchers and educators was critical in identifying the central elements of a comprehensive dementia care pathway:

- Access to **clear, trusted and empowering information** about dementia and cognitive decline in a safe and flexible manner.
- Access to a **timely and accurate diagnosis** of dementia or a prodromal dementia syndrome (such as mild cognitive impairment (MCI)).
- **Equity of access to excellent health care delivery** regardless of location, socio-economic status or cultural background.
- Greater **support to navigate and coordinate** clinical treatment and therapies (both pharmacological and non-pharmacological).
- **Consistent and reliable referral processes** to facilitate access to post-diagnostic supports. The (multiple) systems are complex, fragmented and difficult which can lead to frustration, disempowerment and disengagement for people living with dementia, their family and care partners.
- Understanding the dementia care pathway is also difficult for health professionals.
- Provide **enhanced dementia education and training opportunities** for undergraduate and postgraduate medical, nursing and allied health students as well as the established clinical workforce.
- **Better support for general practitioners** and other primary health care clinicians to increase their dementia knowledge, confidence, and skillset to ensure better care coordination and support for people living with dementia in the community from diagnosis through to end of life care.
- Establish **coordinated person-centred treatment, care and ongoing support** that addresses medical needs as well as biological, social and psychological needs and preferences.
- Facilitate an **ongoing discussion with persons at risk of or impacted by dementia** to advise and inform as well as participate in **high-quality research studies**.
- **Integration of clinical service provision** with research, to accelerate **high quality research** into dementia prevention, treatment and care, and **facilitate efficient translation of research** findings into practice.



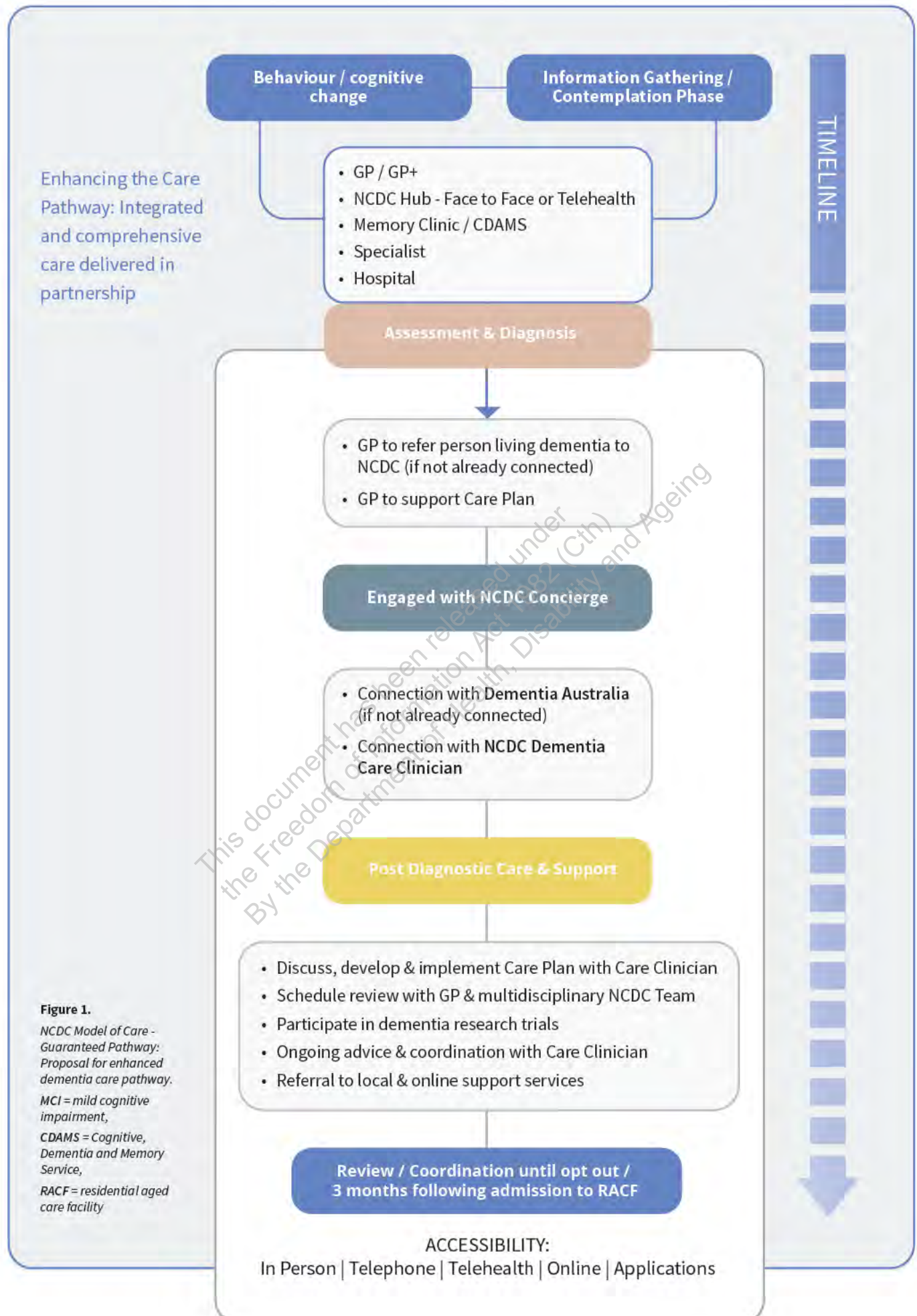
THE NCDC AND THE MODEL OF CARE

This new integrated approach to dementia management will give a sense of hope and peace of mind that is missing in the currently fragmented systems. It will radically improve the accessibility, consistency and quality of care for people with dementia and their families and will dramatically accelerate research capability. The NCDC Hubs will bring together specialised diagnostic services together with personalised comprehensive post-diagnostic clinical care and support alongside clinical training & education services and dementia research.



- **NCDC Hub and Concierge:** Each NCDC Hub concierge and reception will direct thousands of calls ensuring a 'no wrong door policy' – linking Australians with the Hub's diagnostic services, post-diagnostic coordination and supports including Dementia Australia and the expanding National Dementia Support Program, and research opportunities – or to other service providers or government portals, as appropriate. These calls may come from a range of sources, for example, referrals from the National Dementia Helpline or General Practitioners or direct contact. As the NCDC Hubs will be integrated with existing services a person will be able to be linked to a local, more appropriate or preferred diagnostic service to attend, if desired (e.g., due to location, a person's need and other available services).
- **Interdisciplinary Assessment & Diagnostic Clinic:** The NCDC will be a network of clinical excellence, managed through the respective state based health services / partners, and each year the network will provide clinical interdisciplinary assessments & diagnostic sessions for over 6,000 new patients, 13,000 follow up appointments and over 3,000 clinical advisory sessions with community-based primary care health professionals to support local diagnosis and management. Dementia Australia will also have a community-facing presence at each of the NCDC Hubs.
- **Post Diagnostic Clinical Care Management and Referral Optimisation:** Following a dementia diagnosis, a person will be connected with a **Dementia Care Clinician** for clinical case management and care coordination to support the development and implementation of a care plan and to ensure that a person living with dementia is receiving the medical, health & social services they need and desire in order to improve quality of life for them as well as their families and care partners. The Dementia Care Clinician is a newly created role envisaged to be undertaken by a nurse or allied health professional. It is estimated that over 11,000 Australians living with dementia and their families will be supported by a Dementia Care Clinician across Australia each year. Early connection with a Dementia Care Clinician will enable people living with dementia to develop a robust, personalised plan that utilises their own supports while also accessing existing and new medical, health and social connections to improve outcomes, live well and independently with dementia for as long as possible.
- The NCDC model of care will also optimise referrals to **Dementia Australia** for support programs and services such as those provided under the **National Dementia Support Program** for people living with dementia, their families and care partners.¹⁰
- **Clinical Education & Training:** The NCDC Hubs will deliver high-quality 'hands on' learning and placements in a collaborative training environment for:
 - Undergraduate medical, nursing and allied health students
 - Registrars in General Practice and relevant specialties
 - The established clinical workforce, including opportunities for primary healthcare providers to develop their knowledge, skills and confidence in dementia clinical care through a virtual **clinical advisory hub** service as well as a more comprehensive peer-led training program at the NCDC Clinic for medical & health practitioners with a special interest in dementia, and opportunities for clinical secondments
 - Graduate and postgraduate students, and postdoctoral research associates in a broad range of disciplines including biomedical sciences, information technology and engineering.
- **Research Opportunities:** The NCDC will increase Australia's capacity in biomedical and translational research, grow the capacity of the clinical workforce in the delivery of excellent evidence-based care, and ultimately, improve outcomes for people with dementia and their families – like the quantum leaps in cancer treatment that were catalysed with the establishment of comprehensive cancer centres. We will invest in the research infrastructure including collaborative interdisciplinary research environments and clinical trial rooms to better support innovation, research participation and translation into practice. Working across a national network will allow for greater coordination, collaboration and capacity for a national research agenda.

10 As well as people concerned about their memory and people with a prodromal dementia syndrome (e.g., mild cognitive impairment).



THE NCDC AND THE MODEL OF CARE

OUTCOMES OF THE NCDC

Establishing the NCDC and delivering comprehensive dementia clinical and social care, enhancing clinical education and a collaborative research environment will ensure:

- **Enhanced quality of life for people living with dementia and their carers**
 - Access to up to date information for people concerned about their memory or with suspected dementia
 - A clearly articulated care pathway with access to an accurate and timely diagnosis
 - Comprehensive post-diagnostic clinical care coordination and social support
- **Improved Health Practitioner Experience and Expertise**
 - Clear and supported referral pathway for GPs and other primary health professionals
 - Support from dementia specialists through the Virtual Clinical Advisory Hub
 - Training opportunities for medical, nursing and allied health tertiary students
 - Training and mentoring opportunities for primary care trainees and professionals
- **Improved Research Collaboration and Translation**
 - The development and implementation of a coordinated national dementia research agenda across the NCDC
 - A greater number of clinical trials conducted in a broader range of dementia fields, with growth in the number of patients involved with and participating in clinical trials and dementia research
 - Increased capacity and capability of the dementia research and scientific community as well as medical, nursing and allied health workforce
 - Accelerated translation of research advances into standard care for older Australians and people living with dementia, their families and carers
- **Enhanced Healthcare Value**
 - Greater identification and modification of risk factors to reduce overall prevalence and disease burden
 - People living with dementia remain at home for longer and delay admission to RACF (if preferred and in the best interest)
 - Reduction in unexpected hospitalisations and crisis incidents
 - Reduced duplication and better streamlining and integration of dementia care with existing service providers
 - Increased institutional collaboration and greater investment in dementia research and care
 - Improved clinical workforce education, capacity and capability



THE NCDC AND THE MODEL OF CARE

INVESTMENT IN COMPREHENSIVE DEMENTIA CARE TO DRIVE SYSTEMIC CHANGE

Bringing together existing initiatives with an investment of \$300 million over 5 years we seek to implement a staged rollout of a truly national network that will transform the delivery of dementia care, clinical training and dementia research in Australia. The NCDC model will enable Australia to take the next steps to create – not imagine – a different reality for people living with dementia, their families and carers. We want to work with the Commonwealth and State Governments, industry and philanthropy to deliver this national approach to collaborative comprehensive dementia care.

An overview of the funding request is set out below:

FUNDING	YEAR 0	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Capital	\$11.5M					
Recurrent - Operational		\$6M	\$6M	\$6M	\$6M	\$6M
Recurrent - Personnel		\$53M	\$54M	\$55M	\$56M	\$57M
Less MBS Revenue ¹¹		\$4.5M	\$4.5M	\$4.5M	\$4.5M	\$4.5M
Less Savings ¹²		\$Nil	\$73M	\$73M	\$73M	\$73M
Funding sought to establish 5 year operation of the NCDC: \$300M						

The investment includes:

- \$11.5M of capital expenditure** to establish the founding NCDC Hubs in each state. This involves the renovation and / or fit out of six NCDC Hub sites across Australia and includes:
 - Entry / Reception / Concierge for all people attending the NCDC Hub
 - Dementia & Memory Clinic – Consultation, Testing and Interview Rooms
 - Care Clinicians Client Meeting Rooms
 - Clinical Administration
 - Research and Education rooms and collaborative space
 - Clinical Trial & Coordination Rooms
 - Treatment rooms
 - Multi-Disciplinary Team Areas - Shared and Flexible Space
 - Laboratory area for centrifuge and short-term bio-fluid storage

This expenditure does not include the establishment of the regional community spokes. These spokes may be existing clinics or community hubs.

- \$6M (recurrent) operating expenditure** across the NCDC which includes the rent and outgoings for each site, individual ICT costs and consumables across the national network.
- \$53M (recurrent) personnel expenditure** for the:
 - National executive, strategy and corporate services with the national education and research leads (19 FTE).
 - NSW | QLD | VIC – clinical and administrative workforce together with the state based educational and research support functions (3 x 67.4 FTE).
 - SA | TAS | WA – clinical and administrative workforce together with the state based educational and research support functions (3 x 38.8 FTE).

The reception, concierge and clinical teams will be collocated with the education and research support workforce as well as:

- Members of the Dementia Australia team who will maintain a community-facing physical presence at all the NCDC Hubs continuing to provide specialist information to the broader community as well as people directly engaged with the NCDC Hub dementia & memory clinic
- Research fellows and PhD candidates from the NCDC research partners as well as the ADNeT Management Team (in Melbourne)
- The NCDC national executive and policy team (through a distributed leadership model)

We believe that by investing in comprehensive collaborative community-based dementia care that is supported by a strong research and education foundation we can improve the outcomes for people living with dementia and experiencing cognitive decline.

We anticipate establishing the national NCDC as a joint venture, backed by the eleven founding partners and expanding over time to include additional organisations. The funding model would require a mixture of support from the founding institutional partners, Federal and State Governments, industry and philanthropy.

We are confident that this investment will translate into medium to long term savings for both Federal and State Governments through reduced acute hospital admissions, delayed residential aged care admissions, improved primary health diagnostic and management capacity as well as medical and technological breakthroughs.

11 Estimated MBS revenue through the assessment, diagnostic and follow up clinical services.

12 Savings are calculated on the residential care costs (excluding the health care costs) of delaying 1100 people living with dementia from admission to residential aged care facility (RACF) for one year each year due to comprehensive care coordination and management. There are an average of 75 beds per RACF in Australia.

WHO WE ARE – THE NCDC PARTNER ORGANISATIONS

We are 11 leading Australian organisations in the field of dementia care and research, and with the support of both Federal and State Governments we believe we can deliver on this ambitious plan. Working together at physical NCDC Hubs as well as part of a national network will be a game changer:

DEMENTIA AUSTRALIA:

ties together the NCDC collaboration with strong advocacy and community support services. It is the national peak body and charity for people, of all ages, living with all forms of dementia, their families and carers. It is the source of trusted information, education and services for the estimated half a million Australians living with dementia, and the almost 1.6 million people involved in their care. Dementia Australia advocates for positive change and supports vital research and provides programs and services to support people impacted by dementia, and to enable them to live as well as possible, as well as their families and carers.



THE AUSTRALIAN DEMENTIA NETWORK:

is an integrated network of Australia's top dementia researchers to create a sustainable, translational research infrastructure to drive ongoing, high quality research and clinical care for Australians living with, or at risk of, cognitive impairment and dementia. Led by Professor Chris Rowe, ADNeT is comprised of 25 investigators, 12 institutions across the country and a broad spectrum of government, clinicians and consumer advisors. Such research networks are rare in Australia and this unique and valuable resource is ideally placed to co-ordinate research across the NCDC and beyond.



THE UNIVERSITY OF NEW SOUTH WALES (UNSW):

is home to one of the world's top 50 medical faculties, UNSW Medicine and Health Faculty. The faculty is home to the Centre for Healthy Brain Ageing (CHeBA) – an international centre of excellence in multidisciplinary research into the ageing brain, which undertakes innovative research and provide the empirical basis to prevent and treat dementia and achieve healthy brain ageing for all Australians, the Ageing Futures Institute, the Tyree Foundation Institute of Health Engineering (pioneering adaptive technologies), the UNSW Centre for Big Data Research in Health, and which provides training for medical students, neuropsychology students and other allied health personnel.



THE SOUTH EASTERN SYDNEY LOCAL HEALTH DISTRICT (SESLHD):

is one of the largest LHDs within NSW, serving a population of nearly 1 million, with a track record in establishing clinical services for both local community and outreach services including to aboriginal communities (through Prince of Wales Hospital), and in innovative programmes for post-diagnostic dementia support (through War Memorial Hospital).

SESLHD together with UNSW, is a foundation partner of the Randwick Health & Innovation Precinct, where the Prince of Wales Hospital has been caring for the community for more than 160 years. The Precinct brings together world-class education, research and healthcare organisations to address real-world problems across the lifespan, from newborns to centenarians. UNSW and SESLHD are also founding members of the **Mindgardens Neuroscience Network** which has been established to improve the lives of people who experience mental health, drug and alcohol and neurological disorders and brings together people with lived experience, clinicians, researchers, health service managers and students in a dynamic community focused on better outcomes through original discoveries, new models of care and system change.



THE UNIVERSITY OF MELBOURNE:

is the top ranked university in Australia and recognised world-wide for expertise in neuroscience. Dementia researchers at the University of Melbourne are recognised as pioneers in multidisciplinary approaches and ranked in the top 1% of highly cited researchers for their calibre and influence on the field.



THE ROYAL MELBOURNE HOSPITAL:

has been providing outstanding care and treatment to the sickest in our community since 1848. A world-renowned institution, the RMH plays a key role in the Victorian health sector as a major Victorian referral service for specialist and complex care being a designated state-wide provider for services. The Royal Melbourne Hospital and the University of Melbourne have had an enduring partnership in place for nearly 150 years, collaborating on the clinical teaching and training of healthcare and research leaders of the future.



THE UNIVERSITY OF QUEENSLAND:

is a research-intensive university in the top 50 universities world-wide. The University is home to the Queensland Brain Institute and Clem Jones Centre for Ageing Dementia Research (CJCADR), Australia's first dedicated dementia research centre – home to more than 90 exceptional researchers working to understand what causes dementia and how it can be treated.



THE ROYAL BRISBANE AND WOMEN'S HOSPITAL (RBWH):

is Queensland's largest hospital and provides outstanding care across an extensive range of clinical areas and is known for its preeminent cancer care, maternity, trauma and burns care. The RBWH has proud partnerships with more than 14 Queensland and national universities. With more than 150 years of caring for Queensland, the modern-day RBWH supports and produces world-leading research and education and is a prominent innovator in the pursuit of ever-improving patient outcomes. The QLD NCDC Hub will be collocated at the proposed Neurosciences QLD Research Institute which will be focused on innovation, translation and provide the best care as effectively and efficiently as possible to address Australia's predicted population growth and aging population.



THE UNIVERSITY OF TASMANIA | THE WICKING DEMENTIA RESEARCH AND EDUCATION

is at the forefront of translational research and support for issues confronting people with dementia and their carers. Projects are being carried out in Tasmania and nationally, across research fields such as neuroscience, medicine, nursing, psychology and sociology, health, economics and policy. The Tasmania NCDC Hub will build on the strength of Wicking's Island Clinic, which is a bulk-billed diagnostic interdisciplinary clinic, underpinned by research, that is available to all Tasmanian adults with suspected cognitive impairment.



AUSTRALIAN ALZHEIMER'S RESEARCH FOUNDATION (AARF):

is a not-for-profit organisation supporting medical research into Alzheimer's disease. AARF's approach is multi-factorial – conducting research from observational, preventative and treatment perspectives. AARF is located at the Ralph & Patricia Sarich Neuroscience Research Institute which is a new world class facility designed to house five of the state's premier neurological research organisations, and foster collaboration between these major neuroscience research groups in Western Australia. The proposed site for the NCDC Hub in WA is at the Neuroscience Research Institute.



SOUTH AUSTRALIAN HEALTH AND MEDICAL RESEARCH INSTITUTE (SAHMRI):

is South Australia's flagship independent not-for-profit health and medical research institute which is located in Adelaide's "BioMed City" – the largest health and medical research precinct in the Southern Hemisphere. The proposed NCDC Hub for SA will be located within the precinct at the Australian Bragg Centre building which is expected to be completed in 2023.



Thank you for your interest in our vision for world class centres that excel in diagnosis, treatment and care of persons with dementia, and that will embed research that delivers better outcomes and will lead to prevention and cure.

For more information or further enquires :

Please contact NCDC Project Director

Ms Jenna Dennison via email at:

s47F [REDACTED]@dementia.org.au

In the spirit of reconciliation the NCDC Partners acknowledge the Traditional Custodians of country throughout Australia and their connections to land, sea and community. We pay our respect to their Elders past and present and extend that respect to all Aboriginal and Torres Strait Islander peoples today.

BUSINESS CASE NATIONAL NETWORK OF COMPREHENSIVE DEMENTIA CENTRES

Endorsed by Steering Committee on: 31 March 2022

A partnership between





This document has been released under
the Freedom of Information Act 1982 (Cth)
By the Department of Health, Disability and Ageing

TABLE OF CONTENTS

1.	EXECUTIVE SUMMARY	3
2.	VISION	5
2.1	Working Together to Improve the Lives of Australians Impacted by Dementia	5
2.2	Why Invest in The National Network of Comprehensive Dementia Centres?	8
3.	DEFINING THE PROBLEM & CASE FOR CHANGE	10
3.1	What is Dementia?	11
3.2	The Dementia Epidemic	11
3.3	The Impact of Dementia	14
3.4	The Current Reality for People Impacted by Dementia in Australia	16
3.5	A Prepared System	18
3.6	Learning from Cancer – From Hopelessness to Precision	19
3.7	The Royal Commission into Aged Care Quality and Safety – Opportunities to Interlace Existing Pathways & Reforms	21
3.8	Core Components of Comprehensive Dementia Centres	21
4.	DEFINING THE OPPORTUNITY	24
4.1	Integrating the Pathways – No Wrong Door	24
4.2	Promoting Excellence in Care – Supporting Primary Health Care Professionals	24
4.3	Driving Research with Impact	25
5.	RESPONSE OPTION DEVELOPMENT	28
5.1	Developing a national model of care	28
5.2	Guiding Principles	28
5.3	Key Concepts	29
5.4	The NCDC Model of Care	29
5.5	Assessment & Diagnosis Hub – Centres of Clinical Excellence	30
5.6	Clinical Advisory Hub: Outreach in Action	34
5.7	Coordinated Care Pathway & Ongoing Supports	35
5.8	Pursuing Clinical Excellence - Clinical Education and Training	41
5.9	Research Facilitation and Collaboration	42
5.10	NCDC Education and Research Strategic Priorities	45
6.	OPTIONS	46
6.1	Preferred Option	47
6.2	Impact of No Action	47
6.3	Impact of Delay 5 – 10 years	47
6.4	What does the Preferred Option Look Like?	48
7.	PROPOSED NCDC GOVERNANCE STRUCTURE	49

TABLE OF CONTENTS

8.	PROPOSED NCDC HUB LOCATIONS	50
9.	COSTS & FINANCIAL ANALYSIS	54
9.1	Identified Costs	54
9.2	Economic Benefit of the NCDC Model	58
10.	PROJECT RISKS	62
11.	OUTCOMES & BENEFITS	63
11.1	Evidence of Benefit Delivery	63
12.	IMPLEMENTATION TIMELINES	65
13.	MONITORING & EVALUATION	66
14.	BUSINESS CASE PROJECT GOVERNANCE	67
14.1	Steering Committee	67
14.2	Stakeholder Consultation	67
	APPENDICES	74

This document has been released under
the Freedom of Information Act 1982 (Cth)
By the Department of Health, Disability and Ageing

1. EXECUTIVE SUMMARY

Imagine a world where dementia can be rapidly detected and treated; where the path to managing dementia is clear and easy to follow and links through to cutting-edge research are easy to find.

We believe we can make the jump to create this reality.

The current social, health and economic costs of dementia are enormous. In the absence of a medical breakthrough over 1.1 million Australians will be living with dementia in 2058 at a cost of more than \$36.8 billion to our economy.

We need to take immediate steps to **stop** this becoming a reality.

Eleven lead organisations across Australia in the field of dementia care and research have developed a model for a national Network of Comprehensive Dementia Centres (NCDC) which provides a comprehensive model of diagnosis, treatment, care for people living with dementia driven by innovation, research breakthroughs and clinical leadership. The partner organisations seeking to deliver on this ambitious plan are:

- Dementia Australia (National)
- University of Melbourne and The Royal Melbourne Hospital (Vic)
- University of New South Wales and South Eastern Sydney Local Health District under the umbrella of the Mindgardens Neuroscience Network (NSW)
- University of Queensland and The Royal Brisbane and Women's Hospital (QLD)
- Australian Alzheimer's Research Foundation (WA)
- South Australian Health and Medical Research Institute (SAHMRI) (SA)
- University of Tasmania – Wicking Dementia Research and Education Centre (Tas)
- Australian Dementia Network (ADNeT) (National)

Our vision is to bring together people impacted by dementia, clinicians, educators, researchers and policymakers to:

- prevent or delay the onset of dementia, provide diagnostic services and ongoing comprehensive care and support to improve outcomes for people impacted by dementia;
- deliver better clinical and social care, and enhance clinical capability across Australia;
- develop a collaborative environment to transform the research landscape to accelerate dementia research translation with real life impact.

To achieve this vision a NCDC Hub will be established in each state to provide a collaborative environment for the relevant partner organisations of each state to deliver their respective services of the NCDC model (both in person and virtually).



1. EXECUTIVE SUMMARY

For example, we would see staff from Dementia Australia, medical and health professionals from the respective health services and researchers from our university partners and ADNeT coming together at each NCDC Hub to deliver on the NCDC vision of:

- assessment & diagnostic services;
- coordinated post-diagnostic care and support;
- clinical education and training; and
- easy and direct access to enhanced research collaboration and capability.

It is our vision that this network will provide a single door, through which a person will be on a clear pathway to diagnosis and comprehensive dementia care. The NCDC Hubs and the partner organisations will be truly integrated with existing health and support services and government portals to ensure that ‘there is no wrong door’ in the NCDC.

The NCDC Hubs will be centres of excellence – training the next generation of health professionals and researchers shaping the delivery of dementia care and treatment in the future. The world-class research taking place across the NCDC, with the expertise of the eleven founding partners, will transform treatment for people living with dementia, support independent living and quality of life, and drive the medical breakthroughs that will one day lead to prevention or cure.

Bringing together existing initiatives together with a new investment of \$300 million over 5 years we seek to implement a staged rollout of a truly national network that will transform the delivery of dementia care, clinical training and dementia research in Australia. The NCDC model will enable Australia to take the next steps to create – not imagine – a different reality for people living with dementia, their families and carers. We want to work with the Federal and State Governments to deliver this national approach to collaborative dementia care.



2. VISION

2.1 WORKING TOGETHER TO IMPROVE THE LIVES OF AUSTRALIANS IMPACTED BY DEMENTIA

Australians living with dementia are asked to navigate a confusing and inconsistent pathway – from seeking a diagnosis to the care and support that follows. There is no standardised framework to help guide dementia diagnosis and management. This experience is confounded by a lack of disease modifying treatments – leading people to feel hopeless, helpless and in the shadows.

Without a major medical breakthrough, there will be more than one million Australians living with dementia by 2058.¹ The cost of dementia to the Australian economy is already enormous and growing rapidly. By 2025, the total cost of dementia in Australia is predicted to increase to more than \$18.7 billion in today's dollars, and by 2056, to more than \$36.8 billion.²

This is not the end of the story.

Rather, it is the beginning of ours – and we call on the Federal and State Governments to work with us to re imagine the delivery of comprehensive dementia care and the way that we all work together to prevent and find a cure for dementia and support people living with dementia, their families and carers. We recognise that no single organisation can deliver an integrated system design alone – this success of this vision depends on the active involvement of a broad range of stakeholders.

Our vision is to establish an Australia-wide collaborative network of comprehensive dementia centres to improve the experience and optimise outcomes for people living with dementia and their families. The national Network of Comprehensive Dementia Centres (NCDC) aims to implement a 'no wrong door' comprehensive model of dementia care – prevention, diagnosis, treatment and support - thoroughly integrated with research, education and training. The aims are to:

- Integrate the NCDC model of care with existing memory & dementia clinics and clinicians, community-based programs and support services and government portals to improve timely interventions, proactive connectivity and the overall experience for people impacted by dementia; and
- Elevate our knowledge about dementia and accelerate the translation of research findings into widespread practice to improve the lived experience of all Australians impacted by dementia.

It is envisioned that ultimately, each Australian state and territory will host one or more NCDC Hubs, networked with other Hubs, and integrated with existing metropolitan, regional and rural health and community service organisations that currently provide diagnosis, treatment and care for people living with dementia or at risk of dementia, their families and carers.³ The NCDC Hubs will collectively become Australia's largest memory and cognition clinics, delivering comprehensive dementia care management. As centres of clinical excellence training the next generation of clinicians and supporting critical research to increase our dementia knowledge, the NCDC Hubs will lead and influence the delivery of dementia management and care across all Australian communities. Similar to the comprehensive cancer centres across Australia, the NCDC partners want to shape a world where people living with dementia only need to go through one door to be on the clear track to timely information, an accurate diagnosis, evidence-based interventions & treatments and ongoing post-diagnostic support.

The NCDC Hubs will provide specialised assessment of dementia and cognitive decline together with comprehensive post-diagnostic support. The concierge and reception will direct thousands of calls ensuring a 'no wrong door policy' – linking Australians with clinical assessment services, post-diagnostic coordination and supports including Dementia Australia and the expanding National Dementia Support Program, and research opportunities through the NCDC Hub. The NCDC will be a network of clinical excellence, delivered by the respective state based health services, and each year it will provide clinical interdisciplinary assessments for over 6,000 new patients, 13,000 follow up appointments and over 3,000 clinical advisory sessions with community based primary care health professionals to support local diagnosis and management. As well as connect 11,000 people living with dementia and their families and carers across Australia each year with a Dementia Care Clinician to ensure comprehensive coordinated post-diagnostic care.

Establishing the NCDC will increase Australia's capacity for biomedical and translational dementia research, grow the capacity of the clinical workforce in the delivery of excellent evidence-based care, and ultimately, improve outcomes for people with dementia and their families and carers – like the quantum leaps in cancer treatment that were catalysed with the establishment of comprehensive cancer centres.

1 [Dementia prevalence data | Dementia Australia](#)

2 [Dementia Key Facts and Statistics | Dementia Australia](#)

3 Including memory clinics identified through the ADNeT [Memory Clinic Initiative](#) and Victoria's Cognitive Dementia and Memory Service (CDAMS) clinics, general practice clinics, community hubs and support programs.

2. VISION

The NCDC is an Australian-first. It is time to position Australia as a global leader in dementia prevention, care, treatment, education and research, and:

- a) Begin to address **a health issue expected to affect up to 6.4 million Australians** at a cost of \$1 trillion dollars in the next 40 years.⁴
- b) Substantially reduce the number of people living with dementia. For every 5% reduction in the prevalence of dementia there will be a cost saving of \$5.7 billion over 10 years and \$120 billion over the next 40 years given our ageing population as outlined in the **National Dementia Strategy**.⁵
- c) **Reduce the burden of disease** associated with dementia. Australian estimates place dementia as the second leading cause of total burden (accounting for 7.8% of years of life lost due to illness or death), and the leading cause of non-fatal burden (accounting for 10% of years of life lost due to living with the disease).
- d) Strengthen the interface between aged care and primary acute care and improve health professional workforce capacity under the **National Aged Care Workforce Strategy**.⁶
- e) **Enhance the diagnostic capability and capacity** across Australia, and support development of the skillset of community-based medical and health practitioners.
- f) Improve the management of dementia in groups disproportionately affected by dementia, such as in **Aboriginal and Torres Strait Islander people**.⁷
- g) Help address some of the gaps and limits in care for people with dementia identified by the **Royal Commission into Aged Care Quality and Safety** including people living with younger onset dementia (YOD) and other priority populations including culturally and linguistically diverse communities, LGBTQI+ communities, regional and remote communities as well as people living with other disabilities.
- h) Actively address this **National Health Priority Area**⁸

and reinvigorate the **National Framework for Action on Dementia** (2015 – 2019).

Funding of \$300 million over 5 years is sought for the establishment, staged rollout and operation of the national Network of Comprehensive Dementia Centres. This seeks to address the capital and operational expenditure and comprises of:

- \$11.5 million for capital expenditure to establish the NCDC Hubs in New South Wales, Queensland, South Australia, Tasmania, Victoria and Western Australia to provide for a dementia-friendly reception & concierge together with diagnostic consultation rooms and post-diagnostic meeting rooms, a collaborative and innovative training, education and research environment as well as clinical trial and treatment facilities (Year 0);
- \$5.78 million per year to lease and operate the clinical, support, education and research and national coordination capabilities across of the NCDC (Year 1 to Year 5);
- \$53 million (Year 1) to \$57 million (Year 5) per year for personnel to deliver a state of the art diagnostic and clinical management service, enhanced clinical training & research education and support research development, collaboration and participation.

This funding request is offset by an estimated:

- \$4.5 million of annual MBS revenue from the clinical assessment and diagnostic services provided by the medical clinicians at the NCDC Hubs.
- This is further offset by the estimated cost savings through reduced health service utilisation (e.g., lower acute hospital admissions) and delayed (or avoided) admissions to residential aged care facilities due to the comprehensive care management delivered by the Dementia Care Clinicians through the NCDC model of care.

4 [The National Centre for Social and Economic Modelling NATSEM \(2016\) Economic Cost of Dementia in Australia 2016-2056](#)

5 *Ib id.* This reduction in the incidence of dementia would lead to a 13% reduction in the number of persons with dementia in the population by 2036 and a 24% reduction by 2056 i.e. there would be 98,529 fewer people with dementia in 2036 and almost 261,000 fewer people by 2056 compared with the current projections of the prevalence of dementia over the next 40 years.

6 [A Matter Of Care: Australia's Aged Care Workforce Strategy Report of the Aged Care Workforce Strategy Taskforce June 2018 - Strategic Action Number 9](#)

7 Radford, K., Lavrencic, L. M., Delbaere, K., Draper, B., Cumming, R., Daylight, G., Mack, H. A., Chalkley, S., Bennett, H., Garvey, G., Hill, T. Y., Lasschuit, D., & Broe, G. A. (2019). Factors Associated with the High Prevalence of Dementia in Older Aboriginal Australians. *Journal of Alzheimer's disease : JAD*, 70(s1), S75–S85. <https://doi.org/10.3233/JAD-180573>

8 In August 2012, Australian Health Ministers agreed to designate dementia as the ninth National Health Priority Area due to the increased burden of disease and the rising prevalence of dementia in Australia. Recognising dementia as a National Health Priority Area creates opportunities to improve the health status and wellbeing of people with dementia and their carers.



2. VISION

2.2 WHY INVEST IN THE NATIONAL NETWORK OF COMPREHENSIVE DEMENTIA CENTRES?

In the absence of a cure, people living with dementia need, and deserve, a timely diagnosis and evidence-based treatment and care to delay the progression of the disease and to improve their quality of life – as well as their care partner's quality of life. Providing comprehensive dementia care is also likely to be a cost-effective strategy through the reduction of hospital episodes and delay in admissions to residential aged care facilities. Finding a cure also remains front of mind.

Establishing a network of comprehensive dementia centres will provide people living with dementia, their family and carers with a clear, comprehensive pathway which integrates and enhances:

- Access to a timely diagnosis and the best evidence-based interventions & treatment options;
- Care coordination and appropriate referrals to social care and support in the community;
- Opportunities for involvement in cutting edge research – from prevention to care to cure; and
- Growth in Australia's clinical and research workforce capability.

The NCDC Hubs will integrate service delivery (face-to-face and virtual) – in collaboration with existing metropolitan, regional and rural health, community service organisations and government portals⁹ to lay the foundations for a comprehensive diagnostic and post-diagnostic pathway for dementia treatment and care in Australia.

The NCDC will work to ensure all Australians with suspected dementia, or prodromal dementia syndromes, and their families are guaranteed a high quality, evidence-based pathway for assessment, diagnosis, planning and ongoing management.

The NCDC will play a key role in service delivery, clinical education and leadership as well providing facilities where biomedical and translational research can flourish (e.g., clinical trial sites and collaborative interdisciplinary research space) and support an unprecedented opportunity for people to connect with dementia research and clinical trials. The NCDC will provide the platform to not only deliver but accelerate systemic change in dementia care and research.



Figure 1. Core Elements of the National Network of Comprehensive Dementia Centres

⁹ Such as My Aged Care, National Disability Insurance Scheme (NDIS) and Carers Gateway.

These world class centres will attract established and emerging leaders in dementia clinical care and research and accelerate the growth of an outstanding clinical and research community in dementia. The NCDC will provide the support and infrastructure to accelerate 'bedside to bench' research, and the rapid translation of research findings back into practice. The colocation and integration of a clinical service with researchers will ensure that the key problems experienced by people at risk of, or living with dementia, will drive the research agenda.



Figure 2. The NCDC will be a network of learning health systems - a focus on continuous review and improvement.

The NCDC will deliver high-quality 'hands on' learning and placements in a collaborative training environment for:

- Undergraduate medical, nursing and allied health students;
- Registrars in General Practice and relevant specialties;
- The established clinical workforce, including opportunities for primary healthcare providers to develop their knowledge, skills and confidence in dementia clinical care through a state-wide virtual clinical advisory service, peer-led training

program for providers with a special interest in dementia, and opportunities for clinical secondments; as well as

- Graduate and postgraduate students, and postdoctoral research associates in a broad range of disciplines including biomedical sciences, information technology and engineering.

In short, the NCDC aims to take a leading role in Australia's response to the dementia epidemic in the following areas:

UNIFYING CARE PATHWAYS
• Articulated care pathways • Access to a timely and accurate diagnosis • Ongoing clinical care & services coordination
FACILITATING RESEARCH COLLABORATION & TRANSLATION
• Inter-disciplinary collaboration • Improved access to clinical trials & research opportunities • Accelerated research translation
ADVANCING CLINICAL EDUCATION
• Enhancing medical & health professional knowledge, capabilities & confidence • Pursuing clinical excellence

With a focus on delivering person-centred care and the integration of clinical and research excellence the NCDC will:

1. Support access to a timely diagnosis and empower people impacted by dementia to live well.¹⁰
2. Tackle the challenges of dementia prevention, diagnostics, treatment and care.
3. Inspire and train the next generation of dementia researchers and clinicians.
4. Help reduce the enormous social and economic impact of dementia in Australia.

¹⁰ **Note:** The NCDC will play a key role in service delivery; however, it is not designed to address all the outstanding demand for dementia diagnosis across Australia. The NCDC Clinics will deliver an evidence-based state of the art clinical service with the goal of influencing and supporting systemic improvements and harmonisation of dementia care in Australia, for example, through the PHNs and existing memory clinics. In 2021 the incidence of dementia in Australia was estimated to be 91,000 new cases. The proposed NCDC model will provide assessments for approximately 6,000 patients each year (as well as supporting community-based medical practitioners provide a diagnosis). It is estimated that the NCDC will address approximately 7% of the diagnostic need. It is also noted that not every patient will receive a dementia diagnosis and the number of people with mild cognitive impairment is estimated to be double the number of people living with dementia. The NCDC will have a strong focus on enhancing the standard of care across Australia through training opportunities and the clinical advisory hub initiative.

3. DEFINING THE PROBLEM & CASE FOR CHANGE

“The world is failing people with dementia, and that hurts all of us.. We need concerted action to ensure that all people with dementia are able to live with the support and dignity they deserve.”¹¹

3.1 WHAT IS DEMENTIA?

Dementia is a clinical syndrome that is characterised by a decline in cognition (thinking skills) that is significant enough to impact upon day-to-day function. In dementia, this decline in cognition cannot be explained by other reversible causes. While it is strongly associated with age, in dementia the deterioration in cognitive function is beyond what might be expected from the usual consequences of biological ageing. Dementia is almost always a progressive disease – stripping people of their memory, independence and ability to communicate and more. It is degenerative, irreversible and, at present, there is no cure. It robs individuals of their dignity and families of their loved ones.

There are multiple underlying pathological causes of dementia, including Alzheimer’s Disease (AD), Vascular Dementia, Lewy Body Disease and the Frontotemporal Dementias (FTD). AD is the most common cause of dementia and may contribute to 60 -70% of cases.¹² However, there is increasing recognition that most dementias have multiple underlying pathologies, and new discoveries and understandings into the underlying pathologies and pathogenesis in dementia continue to be made. One such breakthrough in understanding is how the pathological changes of dementia begin in the brain at least two decades before symptoms of dementia emerge. The considerable heterogeneity of pathologies contributing to dementia, the differing clinical presentations, and the recognition that dementia may have a long pre-clinical (and prodromal) phase adds to the challenges of optimising diagnosis, treatment and care, and to the complexities surrounding research efforts to identify preventions and cures.



¹¹ [Dr Tedros Adhanom Ghebreyesus, Director-General of the World Health Organization](#)

¹² [WHO Dementia Key Facts 2 September 2021](#)

3.2 THE DEMENTIA EPIDEMIC

The World Health Organisation estimates that around 55 million people live with dementia and there are nearly 10 million new cases of dementia every year. As populations age the number of people living with dementia is increasing.

Ageing is a challenge for future economic growth – the proportion of the Australian population aged over 65 years is increasing

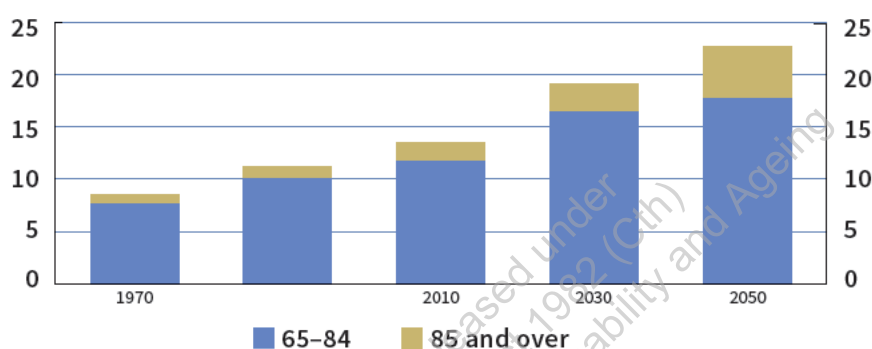


Figure 3. Australia's Ageing Population - [Australia to 2050: Future Challenges](#), [The 2010 Intergenerational Report Overview](#)

Today, close to half a million Australians live with dementia. This includes an estimated 28,800 people living with younger onset dementia.¹³ Without a medical breakthrough, this epidemic is set to grow. By 2058 about a 1.1 million Australians are expected to be living with dementia when the number of people 65 and older will reach 8.8 million.¹⁴ Refer Figure 4.

Dementia Prevalence in Australia

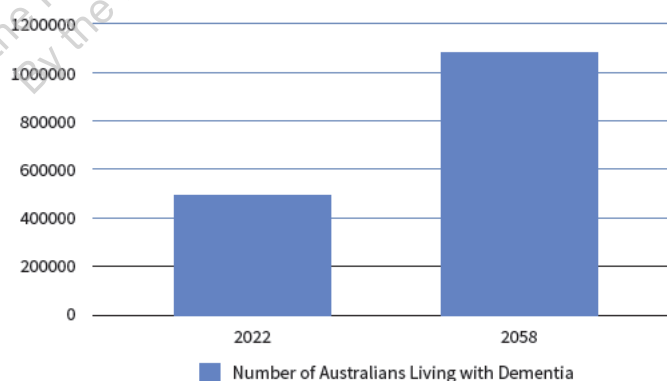


Figure 4. Number of Australians living with dementia.

¹³ The term younger onset dementia is used to describe any form of dementia diagnosed in people under the age of 65. Younger onset dementia can be diagnosed in people in their 50s, 40s and even as early as their 30s.

¹⁴ [Dementia Australia | Key Facts and Statistics January 2022](#)

3. DEFINING THE PROBLEM & CASE FOR CHANGE

Today in Australia:

- 250 people are diagnosed with dementia every day.¹⁵ The number of new cases of dementia is predicted to increase to 318 people per day by 2025 and to more than 650 people by 2056.¹⁶
- Approximately 70% of people living with dementia live in the community.¹⁷
- An estimated 1.6 million people in Australia are involved in the care of someone living with dementia.
- 54% of people residing in permanent residential aged care have dementia (~132,000 people).¹⁸
- Dementia disproportionately affects Aboriginal and Torres Strait Islander people, striking at a rate that is 3-5 times higher than non-Indigenous people.
- The number of Australians living with dementia is predicted to double by 2058 with the ageing population resulting in substantial fiscal pressures from increased demand for government services and rising health costs.¹⁹

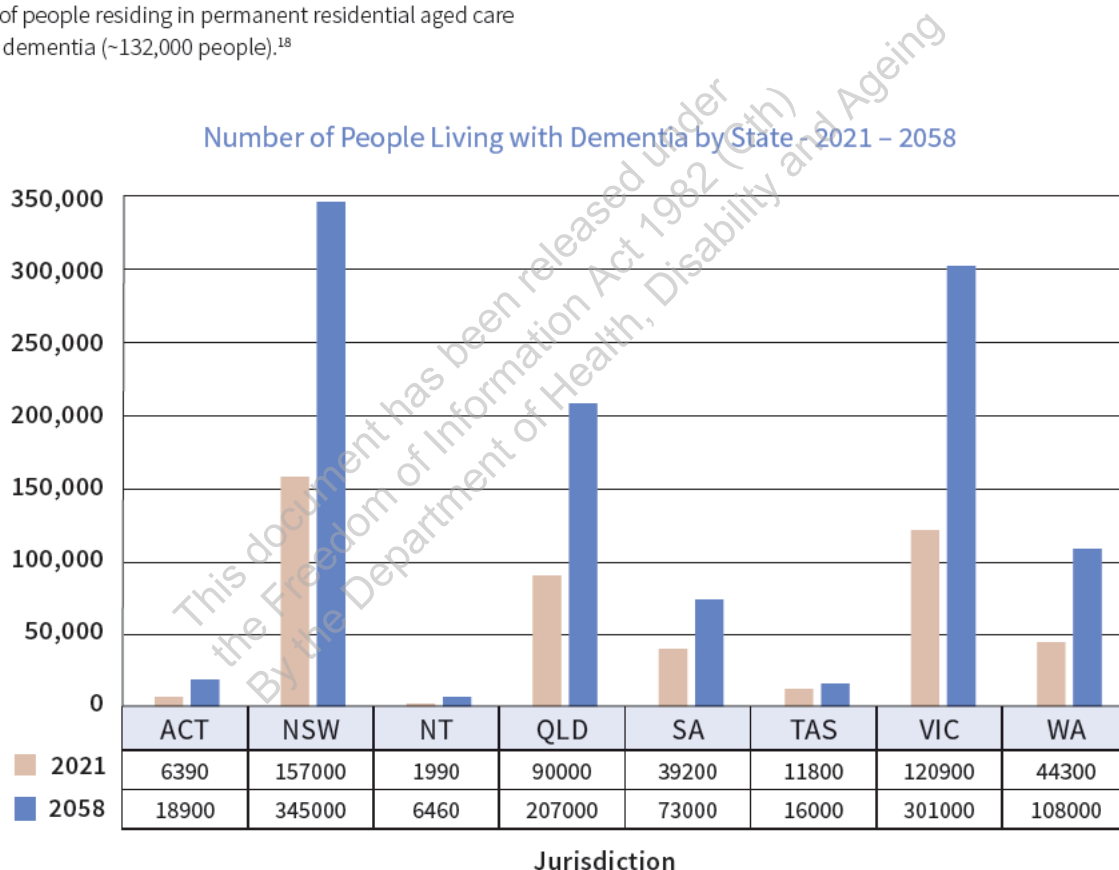


Figure 5. Source: Dementia Australia (2018). Dementia Prevalence Data 2018-2058, commissioned research undertaken by NATSEM, University of Canberra.
<https://www.dementia.org.au/information/statistics/prevalence-data>

¹⁵ [Dementia Australia | Key Facts and Statistics January 2020](#)

¹⁶ Note: There is ongoing and emerging work to improve dementia prevalence and incidence estimates. Australian Institute of Health and Welfare 2020. Dementia data gaps and opportunities. Cat. no. AGE 105. Canberra: AIHW

¹⁷ [Australian Institute of Health and Welfare. Dementia in Australia. Cat. no DEM 2. Canberra: AIHW](#)

¹⁸ [Australian Institute of Health and Welfare. Dementia in Australia. Cat. no DEM 2. Canberra: AIHW](#)

¹⁹ [Australia to 2050: Future Challenges. The 2010 Intergenerational Report Overview](#) Also note that by 2050 nearly one quarter of the Australian population will be 65 years and over.

In 2021 NSW, Victoria and Queensland were home to nearly 80% of Australians living with dementia. Modelling indicates that approximately 80% of people living dementia in 2056 will continue to reside in NSW, Victorian and Queensland.²⁰

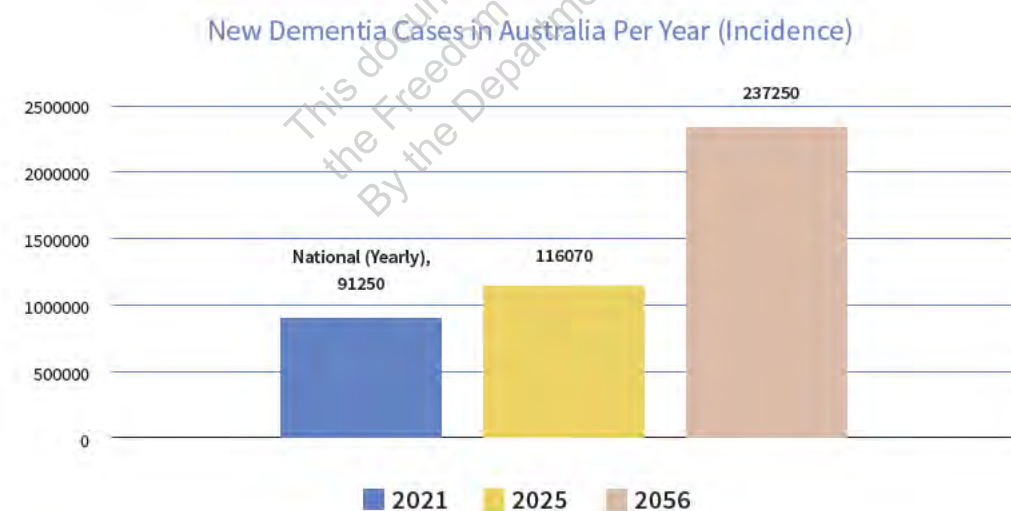
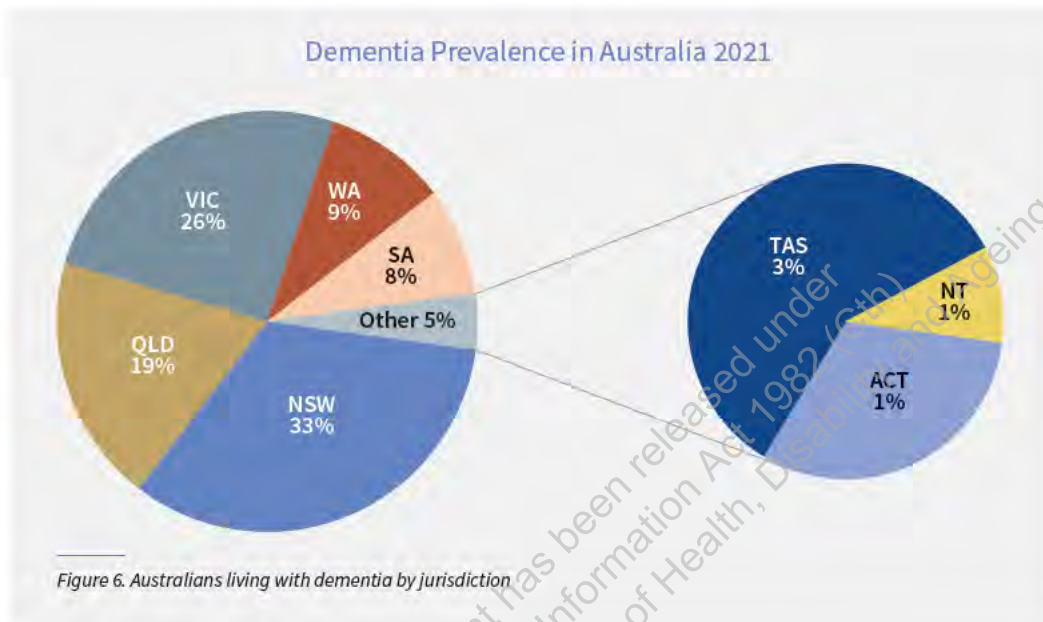


Figure 7. Dementia Incidence in Australia - Currently, an estimated 250 people are joining the population with dementia each day. The number of new cases of dementia is expected to increase to an estimated 318 people per day by 2025 and more than 650 people per day by 2056. Source: <https://www.dementia.org.au/sites/default/files/documents/2020%20Dementia%20Key%20facts&stats.pdf>

²⁰ Australia to 2050: Future Challenges. The 2010 Intergenerational Report Overview

3. DEFINING THE PROBLEM & CASE FOR CHANGE

The number of Australians in older age groups is expected to grow strongly

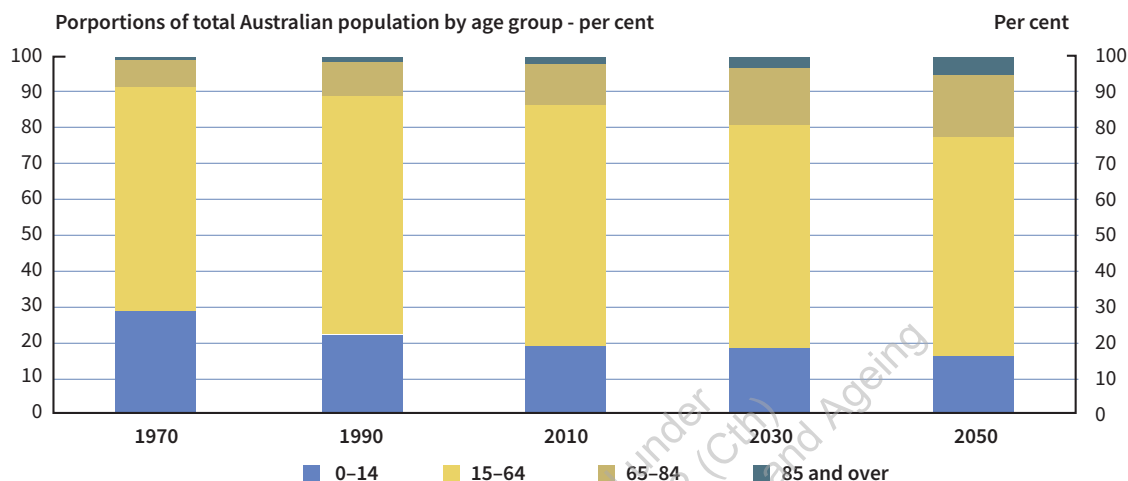


Figure 8. Older Age Groups are expected to grow strongly - Australia to 2050: Future Challenges. The 2010 Intergenerational Report Overview

With a transformative demographic shift on our doorstep, it is imperative that Australia:

- develops a nationally coordinated, equitable and innovative approach to delivering high quality, sustainable dementia care; and
- accelerates research into practice to:
 - actively address the significant impact of dementia on people living with, or at risk of dementia, their families and care partners, the health and aged care sectors and the Australian economy as a whole; and
 - change the disease course through medical interventions
- prepares primary healthcare professionals to be better placed to triage and support dementia risk modifying interventions, diagnosis, treatment and ongoing care.

We need a national approach: to **work collaboratively** and to **act now**.

3.3 THE IMPACT OF DEMENTIA

Dementia leads to impairments in cognitive functions – our thinking skills – such as memory, language and behaviours. In dementia, these changes impact day-to-day function, usually manifesting as difficulties with more complex tasks first, like financial management and driving, but later on, dementia impacts the ability to complete the most basic activities of day-to-day life, such as being able to get dressed, washed, and toilet independently. Dementia eventually affects communication, mobility, and ultimately, a person's independence and their quality of life.

People living with dementia usually require support to maintain independence. This support may be provided by family and other informal caregivers as well as aged care services. Dementia frequently leads to an eventual need for entry into residential aged care facilities, as all too often, the challenges of meeting the complex care requirements of someone living with dementia exceed the capabilities and capacities of even the most devoted and resourceful caregivers.

In addition to impacting cognition and daily functioning, dementia is accompanied by other troubling comorbidities. These include neuropsychiatric symptoms, such as anxiety, depression, apathy, agitation, or even psychotic symptoms. Dementia is a strong risk factor for falls, which in older people can have significant ramifications, leading to series injuries. Dementia affects the brain's ability to regulate sleep and wake cycles, leading to fragmented sleep not only for the person with dementia, but also for their family members.

Dementia is associated with weight loss, and risk of malnutrition. People living with dementia in the community have up to a three-fold risk of being hospitalised, and once in hospital, have higher risks of hospital acquired complications, such as falls, functional decline, and delirium, whilst for hospitals, persons with dementia experience longer lengths of stay. And because dementia overwhelmingly affects an older age group, dementia often interacts with other chronic medical conditions, such as diabetes, and frailty, adding to the complex clinical and care needs for people living with dementia.

The impact of dementia is not just confined to the person receiving the diagnosis. Caregiver stress, be it financial, family, physical or psychological is significant; affecting the health and wellbeing of the carer and increasing the likelihood that the person they care for being permanently admitted to residential aged care facilities earlier than they would if greater support for them existed.²¹

People with dementia must often move between different locations of care. Transitions can be unplanned, disruptive, and stressful for people with dementia and their families. They involve an increased risk of poor health outcomes, including complications, morbidity, and mortality.

Globally:

- Dementia is one of the major causes of disability and dependency among older people. It is universally accepted that AD will represent one of the major health problems of the 21st century.
- Dementia has a physical, psychological, social, and economic impact, not only on people with dementia, but also on their carers, families, the health system and society at large. Until breakthroughs are made in prevention or curative treatment, dementia will constitute an increasing challenge to health-care systems worldwide.

In Australia:

- Dementia is the leading cause of death in Australian women, the second leading cause of death for Australians overall and likely to become the leading cause of death within five years.
- Dementia is the single greatest cause of disability in older Australians (aged 65 years or older) and the third leading cause of disability burden overall.^{21,22,23}
- People with dementia have 1.4 to 4 times more hospital admissions than others with similar illnesses.²⁵ Hospitalisation in people with dementia is associated with adverse, unintended consequences, including distress, functional and cognitive decline, and high economic costs.
- In 2018–19, \$185 million was spent on public hospital admitted patient care for dementia. Of this, 54% or \$100 million was for hospitalisations where dementia was the principal diagnosis or the main reason for admission.²⁶
- The individual annual cost of dementia is AUD\$88,000²⁷ – almost twice the average lifetime cost of cancer. The cost of dementia to the Australian economy is already enormous and growing rapidly. By 2025, the total cost of dementia in Australia is predicted to increase to more than \$18.7 billion in today's dollars, and by 2056, to more than \$36.8 billion.²⁸
- A 5% reduction in the annual incidence of dementia in persons aged 65 years or over would mean there would be 98,529 fewer people with dementia in 2036 and almost 261,000 fewer people by 2056 compared with the current projections. This would deliver total savings of \$26.8 billion in the costs of dementia over the next twenty years and \$120.4 billion by 2056.²⁹

21 Brodaty, H., & Donkin, M. (2009). Family caregivers of people with dementia. *Dialogues in clinical neuroscience*, 11(2), 217–228.

<https://doi.org/10.31887/DCNS.2009.11.2/hbrodaty>

22 Dementia Australia (2020) Alzheimer's disease. Available at <https://www.dementia.org.au/about-dementia/types-of-dementia/alzheimers-disease>. Accessed November 2021.

23 Australian Bureau of Statistics (2021). Causes of Death, Australia, 2020. Available at <https://www.abs.gov.au/statistics/health/causes-death/causes-death-australia/latest-release>. Accessed November 2021.

24 World Health Organization (WHO) (2021). Dementia. <https://www.who.int/news-room/fact-sheets/detail/dementia>. Accessed November 2021.

25 Livingston G, Huntley J, Sommerlad A, et al. (2020) Dementia prevention, intervention, and care: 2020 report of the Lancet Commission *Lancet*.

26 <https://www.aihw.gov.au/reports/dementia/dementia-in-aus/contents/health-and-aged-care-expenditure-on-dementia/total-health-expenditure-and-expenditure-on-hospital-services-1>

27 Gnanamanickam ES, Dyer SM, Milte R, Harrison SL, Liu E, Easton T, Bradley C, Bilton R, Shulver W, Ratcliffe J, Whitehead C, Crotty M. Direct health and residential care costs of people living with dementia in Australian residential aged care. *Int J Geriatr Psychiatry*. 2018 Jul;33(7):859-866. doi: 10.1002/gps.4842. Epub 2018 Jan 2. PMID: 29292541; PMCID: PMC6032872.

28 [Dementia Australia | Key Facts and Statistics January 2020](#)

29 [The National Centre for Social and Economic Modelling NATSEM \(2016\) Economic Cost of Dementia in Australia 2016-2056](#)

- \$3 billion of the total direct health and aged care system expenditure in 2018-19 was directly attributable to dementia. 5% of this expenditure relates to out of hospital diagnostic services (GP & specialists, allied health, imaging, pathology) pharmaceuticals, support services and training – as set out below.³⁰

Health and aged care spending directly attributable to dementia by service area/ program in 2018-19

Service area/ program	Expenditure	%
Residential aged care facilities	\$1.7 billion	55.6
Community based aged care services	\$596 million	19.8
Hospital services	\$383 million	12.7
Respite care services	\$133 million	4.4
Out of hospital medical services	\$99.2 million	3.3
Flexible aged care services	\$53.0 million	1.8
Dementia support services	\$50.6 million	1.7
Aged care assessments	\$21.3 million	0.7
Total	\$3.0 billion	100.0

Notes:

1. 'Respite care services' include residential respite care and community-based respite care.
2. 'Flexible aged care services' include the Transition Care Program and the National Aboriginal and Torres Strait Islander Flexible Aged Care program.
3. 'Out of hospital medical services' include general practice, diagnostic imaging, specialist, allied health and pathology services as well as pharmaceuticals.
4. 'Dementia support services' include the Severe Behaviour Response Teams, the Dementia Behaviour Management Advisory Service, the National Dementia Support Program, the Specialist Dementia Care Program and the Dementia Training Program.

Governments must prepare for the increase in demand and need for healthcare services as a result of ageing populations, improved diagnostics, including biomarkers, and emerging pharmacological treatments.³¹

We need to work **together** and act **now**.

3.4 THE CURRENT REALITY FOR PEOPLE IMPACTED BY DEMENTIA IN AUSTRALIA

“Ensuring people living with dementia receive the support and services that they need does not begin when they access aged care services. Dementia care extends across a continuum from diagnosis through to palliative care, and includes prevention, primary care and hospital care”

We engaged in an extensive consultation process with people impacted by dementia and their families, with clinicians and health professionals, and with leading researchers to provide advice on the optimal care pathway for people living with dementia (or a prodromal dementia syndrome).

The outcomes were disheartening. And they were consistent. Dementia care in Australia needs to change.

People living with dementia, and their families, relay stories of the difficulties in obtaining a diagnosis. Globally, 75% of people with dementia are estimated to be undiagnosed, equating to 41 million people and clinical stigma is still a major barrier to diagnosis, with one in three clinicians believing that nothing can be done.³²

There are challenges of knowing where to go and whom to turn to, and when an appropriate service is found, there is often a long and anxiety-provoking wait.

An early diagnosis can provide people with dementia and their families with peace of mind, time to plan and opportunities to participate in research studies, including in clinical trials, all of which can greatly improve quality of life and independence. However, many people living with dementia and their families liken the process of tracking down diagnosis and treatment to trying to navigate their way through 100 different doors. Australia is currently lacking clear diagnostic pathways for people with dementia and cognitive decline, which may delay an early diagnosis. And this is not only the case for community members. Health professionals themselves describe the process as obfuscated, and confusing.

“Pathways and access to information, support, diagnosis and services is complex and not timely.”³³

30 Australian Institute of Health and Welfare 2021. Dementia in Australia 2021: Summary report. Cat. no. DEM 3. Canberra: AIHW. Source: <https://www.aihw.gov.au/getmedia/13eeb292-dc65-445c-9ba0-874ef2f54996/aihw-dem-3.pdf.aspx?inline=true>

31 Gauthier S, Rosa-Neto P, Morais JA, & Webster C. 2021. World Alzheimer Report 2021: Journey through the diagnosis of dementia. London, England: Alzheimer's Disease International.

32 Gauthier S, Rosa-Neto P, Morais JA, & Webster C. 2021. World Alzheimer Report 2021: Journey through the diagnosis of dementia. London, England: Alzheimer's Disease International.

33 A roadmap for quality dementia care. Parliamentary Friends of Dementia paper 16 March 2021. Accessed 29 June 2021 at <https://www.dementia.org.au/sites/default/files/2021-03/PFOD-Roadmap-paper-noPrev-March-2021.pdf>

This is a common refrain for people living with dementia, their families and carers. It is well documented that complex clients with health and social support needs in primary care experience fragmentation and gaps in service delivery.³⁴ Unfortunately, the pathway to a timely and accurate diagnosis is unclear, fragmented and confusing and access to ongoing support is uncertain, limited and fragile.

Much like the disease itself, the path to a dementia diagnosis is painfully muddled. Diagnostic services are dispersed and inconsistent, and people are often bounced between various GPs, clinics and specialists before they secure a diagnosis. There is also considerable variability with respect to funding structure, staffing and assessment procedures in Australian memory clinics.³⁵

Accessing memory and cognitive services can take 6 to 12 months - valuable time for a person experiencing dementia symptoms. While most memory clinics offer a follow up assessment less than a third offer any form of cognitive intervention.³⁶ Only a small number of clinics include allied health professionals, and this, together with a lack of funding and adequate training, is likely to restrict post-diagnostic care options provided by these services.³⁷ Even after a diagnosis is made, people with dementia and their families need to try to navigate a maze of fragmented care options, delayed services, and a lack of access to clinical trials and new research.

Despite dementia not being “curable” with current treatments, there are still interventions that can impact the trajectory and outcomes positively. And yet, what evidence we have suggests large scale variations in adherence to best practice guidelines. For example, in the prescription of dementia medications, that may improve cognitive symptoms in some people, and conversely, in the overuse of antipsychotic medications to manage neuropsychiatric symptoms.³⁸

When it comes to enabling research that has the potential to prevent dementia, or alter its unremitting course, too few people are given opportunities to be part of studies, or even know about opportunities, let alone have ample scope for involvement to drive the research agenda.

The disconnect between research opportunities and the clinical service provision for people living with, or at risk of dementia,

also has significant impacts on the research agenda itself. Leading dementia researchers, and talented young scientists and clinician researchers, are too often stymied by lack of opportunities to connect in with the dementia community. Current clinical services for people with dementia operate separately from academic institutes, even if geographically close, and a culture of research participation and integration of clinical and academic activities is the exception, not the norm, for dementia clinical care. This limits opportunities to set a clinically relevant research agenda, to grow capacity in basic and translational research, and it dissuades talented researchers and clinician scientists from continuing in the field.

A significant contributor to these unsatisfactory experiences is the disjointed model of care that currently exists in Australia (refer Figure 9). It is clearly not fit for purpose for a disease with so much complexity and diversity in need.

The consultation process also identified the following elements as central to a comprehensive care pathway:

- a) Access to **clear, trusted and empowering information about dementia** and cognitive decline in a safe and flexible manner.
- b) Access to a **timely and accurate diagnosis** of dementia or a prodromal dementia syndrome (such as mild cognitive impairment (MCI)).
- c) **Equity of access to excellent health care delivery** regardless of location, socio-economic status and in particular for vulnerable groups and diverse populations such as First Nations’ peoples, women, people with disabilities, LGBTIQ+, and culturally diverse cohorts.
- d) Greater support to **navigate and coordinate clinical treatment** (both pharmacological and non-pharmacological).
- e) **Consistent and reliable referral processes** to facilitate access to post-diagnostic supports. The (multiple) systems are complex, fragmented and difficult which can lead to frustration, disempowerment and disengagement for people living with dementia, their family and care partners. Understanding the dementia care pathway is also difficult for health professionals.

34 Carter, N., Valaitis, R.K., Lam, A. et al. Navigation delivery models and roles of navigators in primary care: a scoping literature review. BMC Health Serv Res 18, 96 (2018). <https://doi.org/10.1186/s12913-018-2889-0>

35 Mehrani I, Kochan NA, Ong MY, et al. Organisational aspects and assessment practices of Australian memory clinics: an Australian Dementia Network (ADNeT) Survey. BMJ Open 2021;11:e038624. doi:10.1136/bmjopen-2020-038624

36 Mehrani I, Kochan NA, Ong MY, et al. Organisational aspects and assessment practices of Australian memory clinics: an Australian Dementia Network (ADNeT) Survey. BMJ Open 2021;11:e038624. doi:10.1136/bmjopen-2020-038624

37 Ib id.

38 Cations M, Lang C, Ward SA, Caughey GE, Crotty M, Whitehead C, Ahern S, Maddison J, Inacio MC. Using data linkage for national surveillance of clinical quality indicators for dementia care among Australian aged care users. Sci Rep. 2021 May 21;11(1):10674. doi: 10.1038/s41598-021-89646-x. PMID: 34021203; PMCID: PMC8140144.

3. DEFINING THE PROBLEM & CASE FOR CHANGE

- f) **Provide enhanced dementia education and training opportunities** for undergraduate and postgraduate medical, nursing and allied health students as well as the established clinical workforce.
- g) **Better support for general practitioners** and other primary health care clinicians to increase their dementia knowledge, confidence, and skillset to ensure better care coordination and support for people living with dementia in the community from diagnosis through to end of life care.
- h) Establish **coordinated person-centred treatment, care and ongoing support** that addresses medical needs as well as biological, social and psychological needs and preferences.
- i) Facilitate an ongoing discussion with persons at risk of or impacted by dementia to advise and inform as well as participate in **high-quality research studies**.
- j) Integration of clinical service provision with research, to accelerate high quality research into dementia prevention, treatment and care, and facilitate efficient **translation of research findings into practice**.

3.5 A PREPARED SYSTEM

In late 2021 *The Future of Alzheimer's Disease in Australia: Preparing our health care system to deliver optimal care for Australians impacted by Alzheimer's Disease* (the White Paper) was launched.³⁹

Informed by the outcomes of an expert think tank and an extensive consultation process, it states that without adequate preparation, across the length of the clinical pathway and within primary, secondary and community/residential aged care settings, it will not be possible to provide timely access to newly emerging therapies that may be able to, for the first time, modify the course of AD.

The White Paper highlights system-wide recommendations to improve support for people living with AD, namely:

1. Improvements in **case finding** to support **early diagnosis**
2. Clarity and structure on **diagnostic pathways**
3. Establishing infrastructure and skills to help **deliver treatment** options
4. Determining the **role of primary care**
5. Establishing **system-wide integration and collaboration**

Current processes for the diagnosis and management of MCI and dementia due to AD are inadequate to deal with the anticipated increase in patient demand.⁴⁰ Baxi et al. found that the most pressing constraint is the availability of dementia specialists to evaluate and diagnose patients, followed by average waiting times of a few months for biomarker testing to confirm diagnosis and infusion delivery of the treatment.⁴¹

There is an ever decreasing window of opportunity to prepare the sector and ensure models of care, infrastructure and the workforce can meet the needs of this increasing population.

That window of opportunity is **now**.

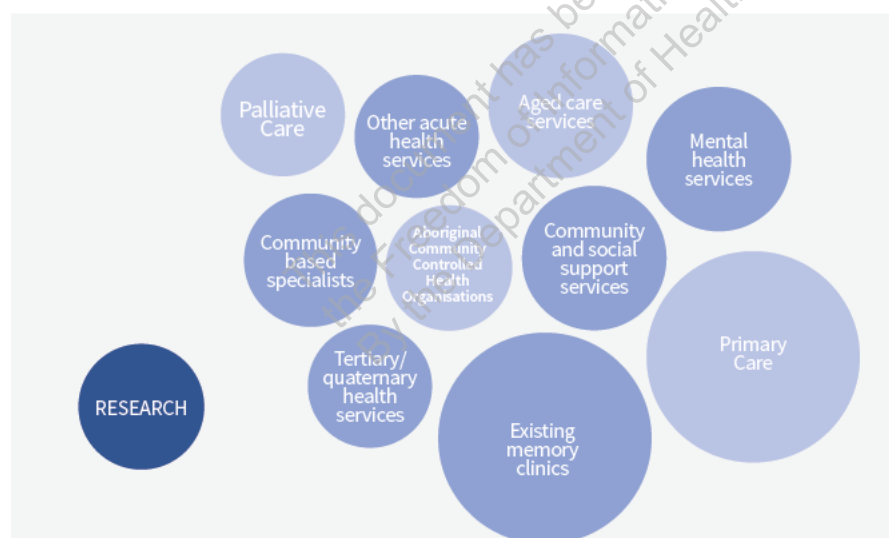


Figure 9. Conceptual illustration of Australia's current fragmented dementia service sector

Australia can seek to enhance its foundation, by establishing a NCDC which champions a comprehensive care model and complements existing services, delivering a clear path to comprehensive clinical care, support and research to individuals with dementia and their families across the dementia disease course.

³⁹ Biogen sponsored the development of The White Paper.

⁴⁰ Baxi, Sangita M., Federico Girosi, and Jodi L. Liu, Assessing the Preparedness of the Australian Health Care System Infrastructure for an Alzheimer's Disease-Modifying Therapy. Santa Monica, CA: RAND Corporation, 2019. https://www.rand.org/pubs/research_reports/RR2891.html.

⁴¹ Ibid.

3.6 LEARNING FROM CANCER – FROM HOPELESSNESS TO PRECISION

Like with dementia today, in the 1970s the outlook for an individual diagnosed with cancer also seemed hopeless. There were few known treatments, a great deal of stigma surrounded cancer, there was little understanding of the disease and no comprehensive centres for collaborative research, education and care.

In the 1980s, the cancer survival rate was less than 50%. Today, almost seven in 10 Australians will survive for at least five years after a cancer diagnosis and in some cancers the survival is as high as 90%.⁴²

We need a bold investment to transition the dementia narrative from one of hopelessness, frustration and fragmentation to one of coordinated person-centred care, clinical excellence and evidence-driven disease modifying therapies and interventions.

Australians impacted by dementia deserve to easily understand and access the clinical and support pathways which will provide them with the appropriate care, information and support. A dementia diagnosis impacts more than the person living with dementia and inevitably requires the support from family, care and health professionals and community networks.

We believe that we can learn from the comprehensive cancer centre model - both nationally and globally. We want to change the way people impacted by dementia, health professionals and researchers come together to improve the outcomes and experience for people impacted by dementia.

a) National Cancer Act of 1971 – United States of America

The National Cancer Institute was established and represented the US commitment to the 'war on cancer', which had become the nation's second leading cause of death by 1970. The cancer centres program was set up to facilitate the integration of academic and research institutions in order to provide a broad, co-ordinated and interdisciplinary approach to all aspects of cancer research. Specifically, cancer centres are expected to:

- (i) Fully integrate the full range of capabilities within an institution to enable the translational of clinical observations to the laboratory, and to develop clinical and public health intervention strategies from basic scientific discoveries.

- (ii) Act as a local, regional and national resource for the development of cancer education and preventative methods and provide a means of disseminating these methods to the local community.
- (iii) Where possible, provide the highest quality of medical treatments and diagnosis of cancer.⁴³

Nowadays, cancer is often detected early, prevented, for some it is cured and for many is a chronic disease, not a death sentence. This has been the result of fundamental biological research, clinical research and clinical translation together with advances in imaging, diagnostics and precision medicine.⁴⁴

This is our goal for dementia.

b) The Victorian Comprehensive Cancer Centre Alliance

Critical to the quantum leaps in cancer treatments and care has been the integration of research, education and care programs. Comprehensive centres for cancer around the world have led the way in breakthrough treatments from the 'bench to the bedside'.

The powerful alliance of the 10 leading partners in the Victorian Comprehensive Cancer Centre Alliance (VCCCA), in particular the University of Melbourne, the Walter and Eliza Hall Institute, the Peter MacCallum Cancer Centre and The Royal Melbourne Hospital, has led the acceleration of translating scientific evidence into patient and community benefit.

The VCCCA is Australia's first facility conceived and designed to save lives by connecting the world's best in cancer research, education, treatment and care. In addition, the Australian Bragg Centre for Proton Therapy and Research in South Australia is expected to come online in 2023.

c) Ongoing support for Cancer Patients and Survivors - Breast Care Nurses

The NCDC is not only looking to improve access to a timely and accurate diagnosis – but also enhance ongoing and coordinated post-diagnostic advice and support. We can learn a lot from the optimal care pathways established for people diagnosed with cancer. The Breast Care Nurse (BCN) model here in Australia together with international post-diagnostic dementia support models provides guidance on best practice opportunities for the NCDC.^{45,46,47}

42 Australian Institute of Health and Welfare 2019. *Cancer in Australia: In brief 2019. Cancer series no. 122. Cat no. CAN 126. Canberra: AIHW.*

43 Sullivan R. Has the US Cancer Centre model been 'successful'? Lessons for the European cancer community. *Mol Oncol.* 2009 Jun;3(3):192-203. doi: 10.1016/j.molonc.2009.03.002. Epub 2009 Apr 1. Erratum in: *Mol Oncol.* 2009 Dec;3(5-6):483. PMID: 19393582; PMCID: PMC5527857.

44 *HER2 Genetic Link to Breast Cancer - National Cancer Institute* and *Stories of Discovery - National Cancer Institute*

45 Admiral Nurses (UK), Alzheimer Scotland Dementia Nurse Consultants and Alzheimer Scotland Post Diagnostic Support.

46 João Delgado, Philip H Evans, Denis Pereira Gray, Kate Sidaway-Lee, Louise Allan, Linda Clare, Clive Ballard, Jane Masoli, Jose M Valderas and David Melzer. Continuity of GP care for patients with dementia: impact on prescribing and the health of patients *British Journal of General Practice* 2022; 72 (715): e91-e98. DOI: <https://doi.org/10.3399/BJGP.2021.0413>

47 The NICE quality statement for coordinating care states: People with dementia have a single named practitioner to coordinate their care: <https://www.nice.org.uk/guidance/qs184/chapter/Quality-statement-4-Coordinating-care>

3. DEFINING THE PROBLEM & CASE FOR CHANGE

A BCN is an expert clinical nurse who plays a significant role in the continuity of care of women and men with breast cancer as well as their families. The role of BCNs in Australia has expanded since the 1990s and includes support to the patient and their family by:

- Providing information and explaining treatment
- Providing support through the hospital experience
- Providing emotional support
- Organising support after leaving hospital
- Providing wound management
- Referral to other services
- Acting as a link with all members of the treatment team
- Coordinating care from the time of diagnosis through treatment and follow up.⁴⁸

The roles and functions undertaken by BCNs are essential elements in providing enhanced patient- and family-centred care. In a qualitative study conducted by Luck et al. BCNs reported the following as important to their position:

- being a clinical expert;
- being a care coordinator;
- being a patient educator; and
- being a patient advocate.⁴⁹

Breast cancer and BCNs have received widespread awareness and acknowledgement through the McGrath Foundation which raises funds for BCNs. A recent evaluation of the McGrath Foundation's BCN (MBCN) initiative demonstrated that access to a MBCN results in an improved experience for patients and clinicians, and that these impacts are more profound when MBCNs meet with their patients at the time of diagnosis. Furthermore, the evaluation revealed that there are cost savings, through reduced health service utilisation, to the health system when breast cancer patients have early access to an MBCN. The net saving produced by the program was estimated to be worth \$6,323,257 per year, or \$1,527 per new breast cancer patient seen.⁵⁰

There is a clear similarity to BCNs and Admiral Nurses in the UK. Admiral Nurses are specialist dementia nurses who help people living with dementia stay independent for longer and support families manage complex needs and advise other healthcare professionals. Furthermore, researchers have found that higher **continuity of GP care for patients with dementia** is associated with safer prescribing and lower rates of major adverse events.⁵¹ We want to create a model which increases continuity of care for patients with dementia in order to improve treatment and outcomes.



48 Luck L, Chok HN, Scott N, Wilkes L. The role of the breast care nurse in patient and family care. J Clin Nurs. 2017 Nov;26(21-22):3422-3429. doi: 10.1111/jocn.13704. Epub 2017 Feb 20. PMID: 28029724.

49 Ib id.

50 Mahony, J., Masters, H., Townsend, J., Hagerty, F., Fodero, L., Scuteri, J., & Doromal, D. (2019). The Impact of Breast Care Nurses: An Evaluation of the McGrath Foundation's Breast Care Nurse Initiative. Asia-Pacific journal of oncology nursing, 6(1), 28–34. https://doi.org/10.4103/apjon.apjon_61_18

51 Continuity of GP care for patients with dementia: impact on prescribing and the health of patients. João Delgado, Philip H Evans, Denis Pereira Gray, Kate Sidaway-Lee, Louise Allan, Linda Clare, Clive Ballard, Jane Masoli, Jose M Valderas and David Melzer. British Journal of General Practice 2022; 72 (715): e91-e98. DOI: <https://doi.org/10.3399/BJGP.2021.0413>

3.7 THE ROYAL COMMISSION INTO AGED CARE QUALITY AND SAFETY – OPPORTUNITIES TO INTERLACE EXISTING PATHWAYS & REFORMS

The Commission's Final Report stated that:

*"Ensuring people living with dementia receive the support and services that they need does not begin when they access aged care services. Dementia care extends across a continuum from diagnosis through to palliative care, and includes prevention, primary care and hospital care"*⁵²

The Federal Government's generational reform agenda for aged care includes a \$229.4 million investment in specific measures to improve quality of life and care for people living with dementia.⁵³ The NCDC partner organisations welcome these reforms and the commitment to people living with dementia. Indeed, the NCDC model of care (Refer **Section 5.1**) aims to dovetail and galvanise existing roadmaps, pathways and government supported initiatives. For example, the NCDC will:

- Support **Dementia Australia's Roadmap for Quality Dementia Care** through the **National Dementia Helpline**. People will be informed about the NCDC and make contact to access services through the state-based NCDC Hub. **Dementia Australia** will also have a physical presence at each Hub.
- Integrate, co-ordinate and streamline clinical and social services, especially post-diagnostic support, to allow people to live well with dementia at home for longer, in accordance with their goals and preferences. This vision would see people across Australia with a diagnosis of dementia or a prodromal dementia syndrome (such as mild cognitive impairment (MCI)) referred to **Dementia Australia** for early support and post-diagnostic interventions through the expansion of the **National Dementia Support Program** and additional outreach capacity for the **National Dementia Helpline**.
- Promote clinical excellence through the benchmarking of service by participation in the **Australian Dementia Network (ADNeT) Clinical Quality Register** and the implementation (and ongoing evaluation) of the **Memory and Cognition Clinic Guidelines** for specialised dementia and cognitive decline assessment services developed by **ADNeT**. The Guidelines

have had extensive nation-wide input from dementia experts and persons living with dementia and their carers.

- Collaborate across the national NCDC to accelerate knowledge translation through competitive grant schemes such as the **Medical Research Future Fund Dementia, Ageing and Aged Care Mission** and the Federal Government's proposed **National Aged Care Research Strategy**.

The NCDC seeks to provide the national network and infrastructure to embed and build on the aged care reforms to provide a truly comprehensive model for dementia care, clinical excellence and research collaboration – rising to the challenges and optimising the future management of dementia in Australia.

3.8 CORE COMPONENTS OF COMPREHENSIVE DEMENTIA CENTRES

*"Only by linking scientific research to patient care, the necessary progress can be made in the fight against dementia."*⁵⁴

The following international comprehensive dementia centres were reviewed to develop an understanding of their core components.



⁵² Royal Commission into Aged Care Quality and Safety – **Final Report Summary** at p. 92.

⁵³ <https://www.health.gov.au/sites/default/files/documents/2021/05/aged-care-reforms-to-support-people-living-with-dementia-and-their-carers.pdf>

⁵⁴ <https://www.alzheimercentrum.nl/>

3. DEFINING THE PROBLEM & CASE FOR CHANGE

A comprehensive review of leading international centres shows that comprehensive dementia centres typically have four core elements:



The care provided by the international centres was largely consistent with the best practice approaches to comprehensive dementia care identified from within the literature. The core components of the international centres have been synthesised and presented below in Table 1.

Best-practice approaches to comprehensive dementia care includes:

- The use of multidisciplinary teams;
- Regular case management and care planning;
- Family and carer involvement and support for carers/care partners;
- Home-based care where feasible;
- Early advanced care planning;
- Integration of services;
- Evidence based care;
- Individualised patient-centred care; and
- Ongoing service and program evaluation.

Table 1. Core components of comprehensive dementia centres

Setting	Predominantly outpatient centres with some capacity for short inpatient stays (e.g. for infusion and observation etc.). Inpatient stays may be relevant for Phase I clinical trials. Most centres indicate that all services (excluding some diagnostics) can be provided into a patient's home, or an alternative health service, using telehealth technology.	
Clinical & diagnostic	• Self, GP or specialist referral • Some centres request patients to undertake a blood test, CT and MRI prior to first appointment • Assessment and diagnosis - Undertaken by a multidisciplinary team - Patient and family interview and examination of the patient's mental status and neurological function - Diagnostic tests may include: Blood tests, CT, MRI, PET • Follow-up visit - Patient received diagnosis and prognosis - Development of a patient care plan – care plan made available online and can be shared/ added to by other healthcare providers. Can be accessed by families/cares.	- Coordination of follow-up care with patient's primary care physicians and/or specialist - Referral to support services and other appropriate services • Review - Patients may be reviewed 6 to 12 months following diagnosis • Treatments - Care plan details treatment recommendations - Some centres provide treatment services on site (e.g. OT led- sessions, physical therapy, cognitive therapy, and speech-language programs)
Support	• Most centres provide initial counselling for patients following a diagnosis • Some centres provide support services and programs e.g. facilitating social clubs and family/carer support groups • Most centres refer patients, families, and carers to external support services	
Research	• All patients have access to clinical trials • Treatment and support programs are informed by research undertaken at the centre • Collection of all patient data into data registry	
Education	• Development of tools and standards for health care providers • Some centres offer fellowship programs and professional development programs • Public campaigns and online resources to raise awareness of dementia and modifiable risk factors	
Workforce	• Multidisciplinary approach including: Neurologists, geriatricians, psychiatrists, neuropsychologists, psychologists, counsellors, social workers, nurses, nurse practitioners, OTs, speech pathologists, dieticians, exercise physiologists, researchers, database managers.	

While there is no cure for dementia, there is ample evidence suggesting that the quality of clinical care and comprehensive management of individuals with dementia, or a prodromal dementia syndrome, results in better health, social and economic outcomes for individuals, their families and their carers.⁵⁵

- **Delayed onset of dementia** can delay functional decline thereby improving health outcomes, enhance autonomy and independence, in turn facilitating social connectedness and reduced health service utilisation.⁵⁶
- **Risk factor identification** and, where possible, modification of risk factors can improve health outcomes and reduce, prevent or delay associated effects of disease.⁵⁷
- **Enhanced quality of life** for patient, carer and family promotes independence, wellbeing and engagement in the decision-making process.^{58,59,60}
- **Effective transition approaches** involve people with dementia and their carers establishing goals of care, education about the likelihood of transitions in different care settings, timely communication of information, and connecting inter-professional teams of medical, social and supportive carers and caregivers.⁶¹
- **Delayed admission** into residential aged care services increases quality of life for the person with dementia, reduces total per capita healthcare spending, increases quality-adjusted life years (QALYs) and reduced caregiver burden.^{62,63,64}
- **Multidisciplinary, collaborative team enabling person-centred care**, including case management and care coordination ensures best-practice care across a wide range of settings optimises health outcomes while ensuring the patient is at the core of the decision-making process.^{65,66}
- **Early advance care planning** assists in maintaining quality of life, allows patient to be involved in decision making while they still have capacity, facilitating autonomy. May reduce health service utilisation through a comprehensive care plan and management process.⁶⁷
- **Referral to support services** facilitates access to both physical and psychosocial support services.⁶⁸

The NCDC aims to be an exemplar of comprehensive dementia care and supporting a research environment dedicated to a broad spectrum of research areas including finding preventative medical interventions and treatments, improving detection and diagnostic techniques, quality care and intervention as well as evaluating system-wide value-based health care.

- 55 Somme, D., Trouve, H., Dramé, M., Gagnon, D., Couturier, Y., & Saint-Jean, O. (2012). Analysis of case management programs for patients with dementia: a systematic review. *Alzheimer's & Dementia*, 8(5), 426-436.
- 56 Tom, S. E., Hubbard, R.A., Crane, P.K., et al (2015). Characterization of dementia and Alzheimer's disease in an older population: updated incidence and life expectancy with and without dementia. *American Journal of Public Health* 105(2), 408-13
- 57 Livingston G, Huntley J, Sommerlad A, et al. (2020) Dementia prevention, intervention, and care: 2020 report of the Lancet Commission Lancet.
- 58 Prince M, Bryce R, Ferr C. (2011). Alzheimer's Disease International World Alzheimer Report 2011: The benefits of early diagnosis and intervention. Institute of Psychiatry King's College London Alzheimer's Disease International.
- 59 Rasmussen, J., & Langerman, H. (2019). Alzheimer's disease—why we need early diagnosis. *Degenerative Neurological & Neuromuscular Disease*, 9, 123.
- 60 Ford, E., Greenslade, N., Paudyal, P., Bremner, S., Smith, H. E., Banerjee, S., Cassell, J. (2018). Predicting dementia from primary care records: a systematic review and meta-analysis. *PLoS one*, 13(3), e0194735.
- 61 Hirschman KB, Hodgson NA. Evidence-Based Interventions for Transitions in Care for Individuals Living With Dementia. *Gerontologist*. 2018 Jan 18;58(suppl_1):S129-S140. doi: 10.1093/geront/gnx152. PMID: 29361067.
- 62 Banerjee, S., & Wittenberg, R. (2009). Clinical and cost effectiveness of services for early diagnosis and intervention in dementia. *International Journal of Geriatric Psychiatry: A journal of the psychiatry of late life and allied sciences*, 24(7), 748-754.
- 63 Michalowsky, B., Xie, F., Eichler, T., Hertel, J., Kaczynski, A., Kilimann, I., ... & Hoffmann, W. (2019). Cost-effectiveness of a collaborative dementia care management—Results of a cluster-randomized controlled trial. *Alzheimer's & Dementia*, 15(10), 1296-1308.
- 64 Reilly, S., Miranda-Castillo, C., Malouf, R., Hoe, J., Toot, S., Challis, D., & Orrell, M. (2015). Case management approaches to home support for people with dementia. *Cochrane Database of Systematic Reviews*, (1).
- 65 Roett, M. A., & Coleman, M. T. (2013). Practice improvement, part II: collaborative practice and team-based care. *FP essentials*, 414, 11-18.
- 66 Goodrich, D. E., Kilbourne, A. M., Nord, K. M., & Bauer, M. S. (2013). Mental health collaborative care and its role in primary care settings. *Current psychiatry reports*, 15(8), 383.
- 67 Harrison Denning, K., Sampson, E.L., De Vries, K. (2019). Advance care planning in dementia: recommendations for healthcare professionals. *Palliat Care*. 2019;12:1178224219826579. Published 2019 Feb 27. doi:10.1177/1178224219826579
- 68 Gitlin, L. N., Maslow, K., & Khillan, R. (2018). National research summit on care, services, and supports for persons with dementia and their caregivers. Report to the National Advisory Council on Alzheimer's Research, Care, and Services.

4. DEFINING THE OPPORTUNITY

“Pathways and access to information, support, diagnosis and services is complex and not timely.”⁶⁹

The NCDC presents a unique and timely opportunity – bringing together a national collaboration of leaders in dementia care and research – with a vision to deliver a model of care for people living with dementia (or a prodromal dementia syndrome) which:

- Supports access to optimal diagnostic and post-diagnosis care and support;
- Enhances the direct delivery of clinical training and advisory support for medical, nursing and allied health professionals and trainees to improve dementia knowledge and capability; and
- Facilitates high quality research collaboration and accelerates the translation of research excellence into standard dementia care practice.

In developing the NCDC vision we have consulted some of the world’s best medical and research minds and brought together Australia’s leading dementia organisations for the lived-experience, diagnosis, care, research and education in a ground-breaking new partnership.

The three challenges the NCDC will address are set out below:

4.1 INTEGRATING THE PATHWAYS – NO WRONG DOOR

A dementia diagnosis is a significant diagnosis for patients and their families.⁷⁰ Australians who are concerned that they have dementia should be able to access a timely and accurate assessment and be provided with a clear pathway for holistic post-diagnostic care. With a rapidly ageing population, the demand for a guaranteed, high quality, evidence-based pathway for assessment, diagnosis, planning and ongoing management will continue to grow.

Today, a dementia diagnosis can feel like the end of the road. We want to change this – for all Australians including identified priority populations:

- First Nations Australians;
- people from culturally and linguistically diverse backgrounds;

- people diagnosed with younger onset dementia (YOD);
- people living with another disability;
- LGBTIQ+ communities;
- people living in regional and remote communities; and
- people living in low socioeconomic environments.

In a systematic review of different models of home and community care services for older persons Lee-Fay Low et al. concluded that an ideal model for home and community care should incorporate multiple key elements: a fully integrated care system which facilitates access to health and community services, in which consumers receive case management to maximise clinical outcomes and prevent unnecessary institutionalisation and hospital use, and where consumers have as much control of their own care as they wish.⁷¹

We want people to **feel empowered** to know what to do and where to go when they are concerned about their memory, cognition and the onset of dementia. Australians deserve access to up to date information, a timely and accurate dementia diagnosis and ongoing supports to improve their experience and quality of life. We want to work together with people living with dementia and our partners to enhance the pathway so that it:

- is clear and easy to access;
- delivers integrated care;
- provides ongoing support.⁷²

4.2 PROMOTING EXCELLENCE IN CARE – SUPPORTING PRIMARY HEALTH CARE PROFESSIONALS

Similar to other chronic illnesses, primary healthcare professionals are critical to improving dementia diagnosis, coordination and ongoing care in the community. However, general practitioners and other primary healthcare professionals need more information and support in:

- dementia awareness
- assessment & diagnosis;
- ongoing care; as well as
- to be more comfortable, understanding, and positive in communicating with people with dementia.⁷³

69 A roadmap for quality dementia care. Parliamentary Friends of Dementia paper 16 March 2021. Accessed 29 June 2021 at <https://www.dementia.org.au/sites/default/files/2021-03/PFOD-Roadmap-paper-noPrev-March-2021.pdf>

70 Australian Commission of Safety and Quality Health Care (2016)

71 Low, LF., Yap, M. & Brodaty, H. A systematic review of different models of home and community care services for older persons. BMC Health Serv Res 11, 93 (2011). <https://doi.org/10.1186/1472-6963-11-93>.

72 Lee-Fay Low et al.’s research found that: case management improves function and appropriate use of medications, increases use of community services and reduces nursing home admission, integrated care increases service use though does not improve clinical outcomes, and consumer directed care appears to increase satisfaction with care and community service use but has little effect on clinical outcomes.

73 Banerjee S, Farina N, Daley S. How do we enhance undergraduate healthcare education in dementia? A review of the role of innovative approaches and development of the Time for Dementia Programme. Int J Geriatr Psychiatry. 2017;32:68–75.

Australia's population is ageing, with the proportion of people aged over 65 years rising. By 2050 the number of people aged 65 to 84 years is expected to more than double and the number of people 85 and over more than quadruple. This will increase the need for more responsive and collaborative health services, new investment in health infrastructure and innovation as well as an expanded health workforce. The NCDC aims to be a leader in Australia's health response to deliver dementia care that is:

- Comprehensive and person-centred
- More efficient and innovative;
- Delivering better quality of care;
- Delivering value for money.

With the number of Australians living with dementia predicted to double to between 850,000 – 1.1 million by 2058 and the predicted costs of dementia to Australia, it is imperative that primary health professionals are well-equipped with the necessary knowledge, skills and experience to triage and facilitate timely assessment and diagnosis and provide early interventions. Increased dementia knowledge, risk modification and harmonisation of clinical care will improve the capability and capacity to assess and diagnosis or make a timely referral to the relevant specialist or clinic (including a NCDC Hub) and ensure better planning and support for people living with dementia in the community.

Furthermore, with one in three clinicians globally believing that nothing can be done with a dementia diagnosis, we need to improve the understanding of risk factors, multimorbidity and the value of a timely diagnosis. There are several training and education services providers including the nation-wide services provided by **Dementia Training Australia** and **Dementia Australia** as well as the **Wicking Dementia Research and Education Centre** and the recently established **Aged Care Centre for Growth and Translational Research**. The NCDC vision is to complement the services provided by these organisations and provide a unique opportunity to work with:

- tertiary institutions and their medical, nursing and allied health students and trainees; and
- community-based primary health registrars and professionals with an interest in dementia

to provide 'hands on' training and advice at the NCDC Hubs. This will systemically improve the education capability and capacity of the next generation of medical and health professionals and empower the current medical and health workforce to improve their dementia knowledge and skills.

4.3 DRIVING RESEARCH WITH IMPACT

Dementia is a National Health Priority Area warranting a coordinated and collaborative research approach to address the increasing prevalence and to support people and families impacted by a diagnosis or at risk of dementia. Research is fundamental to the prevention, diagnosis, treatment, and delivery of dementia care.

Dementia has been identified as a priority area for research in the Australian Medical Research and Innovation Priorities (2020 - 22). \$185M for research has been allocated for the **Medical Research Future Funds Dementia, Ageing and Aged Care Mission** (from 2018-19 to 2028-29), which aims to support older Australians to maintain their health and quality of life as they age, live independently for longer, and access quality care when they need it.

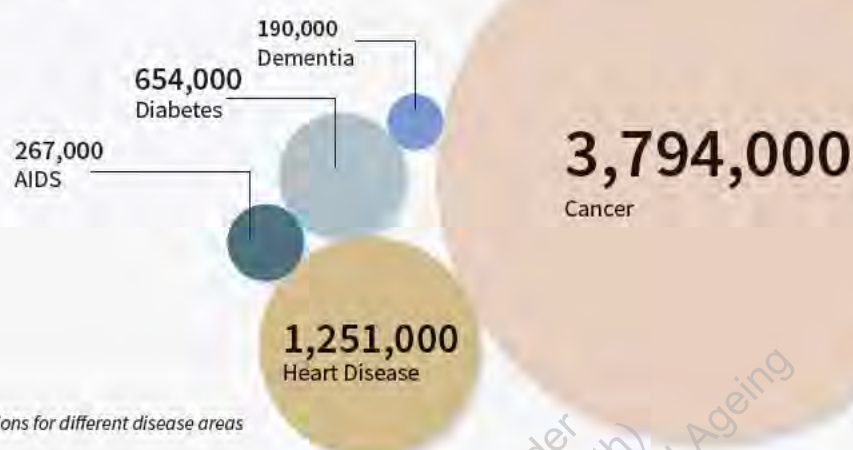
This investment is welcome, and we need to champion research that directly translates to improved quality of life for people impacted by, or at risk of dementia – this includes fundamental biological research, technological innovation and clinical quality data. Researchers located at the NCDC Hub sites and partner organisations will seek funding through these competitive processes as well as philanthropic and industry investment to pursue research to prevent and find a cure for dementia and support people living with dementia, their families and carers.

There is a need for a coordinated national research & innovation effort that is focused on tangible outcomes and real solutions for people impacted by dementia. The NCDC will build on existing research networks and establish the infrastructure to bring people living with dementia, clinicians and scientists together in order to best inform, and indeed, deliver that research agenda and drive innovation.

Regrettably, there exists a huge knowledge gap in understanding the causes and progression of dementia that has inhibited the development of effective disease and symptom modifying therapies. The lack of timely therapeutic interventions and innovation is increasing the burden of disease in the community. In 2018, PubMed published 190,000 scientific articles related to dementia. At the same time, it published almost 4 million articles related to cancer. We need to fill this knowledge gap to address this national health priority. The colocation of health professionals, researchers and educators is expected to significantly enhance collaboration, innovation and accelerate the translation of scientific evidence into patient benefit, like what has been achieved through the establishment of comprehensive cancer centres.

4. DEFINING THE OPPORTUNITY

Filling the Knowledge Gap



By investing in the infrastructure and resources to better coordinate dementia research, better connect researchers with research participants, and incorporate research findings into clinical practice, the NCDC will play a major role in filling the dementia “knowledge gap”, driving innovative practice and delivering real improvements to people at risk of developing and those living with dementia.

The **National Framework for Action on Dementia 2015 – 2019** (which has not yet been renewed) called for the promotion and support of research into:

RESEARCH PRIORITIES
CAUSES
DIAGNOSIS
CARE
TREATMENT
CARERS
RISK FACTORS AND RISK REDUCTION STRATEGIES
END OF LIFE CARE
CURE

The NCDC aims to ensure that the various types of dementia research are well represented and coordinated within its structure. By bringing such a research agenda together - in a nationally coordinated manner - this will have unequalled benefits through an improved and comprehensive research agenda, better use of resources, reduced duplication, improved co-operation, leverage

of existing networks & clinical quality registers and better targeted research investment.

However, research in isolation is not enough. It is important that we are able to accelerate the translation of high-quality research findings into practice. Translating research findings and championing their implementation into policy and practice is critical to ensure tangible outcomes and an improved quality of life for people with dementia, their families and carers – and, indeed, to prevent or treat dementia.

Research translation is also important for the ongoing sustainability and transformation of the health and aged care systems. The NCDC will play a vital role in extending the value, reach and impact of dementia research, for example, by incorporating it into state-of-the-art diagnostic clinics at each NCDC Hub. The Hubs will provide the latest in diagnostic technology, evaluate new and emerging diagnostic technologies, and then guide the medical community and government on the introduction of new diagnostic tools into the healthcare system. This highlights the value of co-location and collaboration between patients/consumers, clinical and support services and researchers. Furthermore, researchers experience significant difficulty in recruiting participants for their trials. Investing in infrastructure that is easily accessible and connects people impacted by dementia, or at risk of dementia, and clinicians to researchers and clinical trial space is imperative to accelerate research outcomes into real life impact.

We also want the best people for the job. We want to support established researchers and enhance the research potential of emerging researchers, scientists and clinicians in their research capacity. Dementia is a national priority, and we want to ensure that we attract the best and brightest minds to address this challenge. By bringing together a broad spectrum of research areas the NCDC will create an attractive environment for new and upcoming researchers. This is important for career development, creating the next generation of dementia research leaders and managing succession of current leaders.



5. RESPONSE OPTION DEVELOPMENT

5.1 DEVELOPING A NATIONAL MODEL OF CARE

Comprehensive care means that the patient receives care that is planned and coordinated around their physical, mental and cognitive health needs. The delivery of comprehensive care is based on partnering with patients, carers and families to identify, assess and manage patients' clinical risks, and determine their preferences for care; and on communication and teamwork between members of the healthcare team.⁷⁴

The vision for the NCDC is to enhance the delivery of high-quality, comprehensive care for people living with dementia, their families and care partners across Australia. Informed by the literature and working closely with **state-based advisory committees** we developed an overarching national model of care to be adopted and adapted to the local context – for example, considering existing local dementia and dementia-related services (such as the CDAMS in Victoria), population and geographic reach.

The model of care consultation process focused on two primary questions:

1. What is the optimal care pathway(s) for people living with dementia (or a prodromal dementia syndrome); and
2. What is the role of the NCDC sites in supporting this pathway both as a:
 - a) physical hub bringing together clinical care, ongoing supports, education and research excellence?
 - b) national network?

In addition, a **National Research and Education Advisory Committee** was established and tasked with identifying the strategic research and education priorities to complement and enhance the proposed model of care. Like the comprehensive cancer centres established across Australia, the intention of the NCDC is to shape a world where people living with dementia only need to go through one door to be on the clear track to an accurate, timely and supported diagnosis, appropriate treatments and ongoing support, with access to an ongoing clinical, care and research network.

This model would be supported by, and continually improved through:

- an established concierge service to support movement between NCDC affiliated services, clinical case management and optimise referrals to Dementia Australia for post-diagnostic supports – it is envisaged that this service could be delivered jointly with the expertise of Dementia Australia and the partnering hospital or health service (e.g., South Eastern Sydney Local Health District, Royal Melbourne Hospital, Royal Brisbane and Women's Hospital);
- enhanced tertiary training and clinical placements for medical & health trainees and professionals as well as biomedical research trainees and professionals;
- accelerating research participation and research translation into dementia policy, diagnostics & treatments and care practices.

5.2 GUIDING PRINCIPLES

“In order to facilitate care at home, there is a requirement for an adequate amount of support and for this support to be distributed equitably across Australia, including to rural and remote locations... For the person with dementia to continue living at home, carers should be effectively supported, and services coordinated and integrated as much as possible.”⁷⁵

The goal of the NCDC is for there to be a ‘no wrong door’ policy – and for people to be supported in their journey with dementia. People who contact their state-based NCDC Hub should have their needs identified and addressed expediently by connection with the most appropriate service – even if that service is not a service directly delivered by the NCDC partners.

The principles guiding the development of the NCDC are:

- Delivering person and family-centred care
- Ensuring equity of access including for vulnerable groups and diverse populations
- Providing high quality, evidence-based and timely services
- Promoting a coordinated and integrated care pathway

⁷⁴ Social Care Institute for Excellence, Why early diagnosis of dementia is important; 2015. (UK study).

⁷⁵ The National Framework for Action on Dementia 2015 – 2019

5.3 KEY CONCEPTS

Quality of life should be the constant and predominant aim of the aged care system. The desire for a good quality of life may change in content but does not diminish with age.⁷⁶

Through the consultation process, five overarching concepts were identified as critical for the optimal dementia care pathway:



We then considered how the NCDC would be best placed to address these key areas.

5.4 THE NCDC MODEL OF CARE

The NCDC model of care envisages the co-location of the following three key service areas:

- A dedicated multidisciplinary clinical hub to provide clinical care (diagnosis and management) both in person and by virtual consultation networked with other dementia clinics, specialists and community-based services;
- A virtual clinical advisory hub to support and provide expert dementia advice & guidance for community-based health professionals, including to GPs and regionally based specialists;
- Connection with a **Dementia Care Clinician** for clinical case management and coordination to improve quality of life and optimise referrals to **Dementia Australia** for support services for people living with dementia, their families and care partners.⁷⁷

Integration with academic partners will create opportunities for research and research translation to be embedded in each service area.

Each Australian state and territory will host a NCDC Hub, networked with existing metropolitan, regional and rural health, and community service organisations currently providing treatment, care and support.⁷⁸

The NCDC Hubs will be the centre of clinical excellence, implementing a comprehensive model of patient care (diagnosis,



treatment, and care) thoroughly integrated with educational, training and research excellence by drawing together the leading experts in clinical care, research and innovation.

The details of the model of care are set out below.



⁷⁶ The National Framework for Action on Dementia 2015 – 2019

⁷⁷ <https://agedcare.royalcommission.gov.au/sites/default/files/2021-03/final-report-executive-summary.pdf>

⁷⁸ Including GP clinics, existing memory clinics such as CDAMS and clinics identified through the ADNeT Memory Clinic Initiative as well as Dementia Australia.

5. RESPONSE OPTION DEVELOPMENT

5.5 ASSESSMENT & DIAGNOSIS HUB – CENTRES OF CLINICAL EXCELLENCE

“Comprehensive care is the coordinated delivery of the total health care required or requested by a patient. This care is aligned with the patient’s goals of care and healthcare needs, considers the impact of the patient’s health issues on their life and wellbeing, and is clinically appropriate.”⁷⁹

Each NCDC Hub will host a **dedicated multi-disciplinary dementia & memory clinic**. Each clinic will:

- Provide appropriate assessment and diagnostic services for people with suspected dementia or mild cognitive impairment (MCI) together with treatment and care planning as well as access to ongoing clinical advice.
- Provide clear community referral pathways and criteria with timely communication back to referrers and clients.
- Align with the **Memory and Cognition Clinic Guidelines** for specialised dementia and cognitive decline assessment services developed by the **Australian Dementia Network (ADNeT)**.
- Engage in monitoring, evaluation and benchmarking of service by participation in the **ADNeT Clinical Quality Registry**.
- Provide ongoing opportunities for patients and their care partners to access high quality research opportunities.
- Be centres of excellence for training, and for secondments of the primary and specialist clinical workforce.

Guaranteed Pathway: The vision is for the state NCDC Hubs to be accessible by all people seeking support for a dementia related illness – whether it be a diagnosis, treatment or post-diagnostic support. The NCDC will be integrated with existing services and will be able to link to local, more appropriate or preferred diagnostic services identified for the person to attend (e.g., due to location, a person’s need and other available services). The goal is to support the person and their family through a standardised pathway for assessment, diagnosis, planning and ongoing treatment. The NCDC will play a key role in service delivery as well as leadership and

advocacy more broadly. As the NCDC will be unable to address all the outstanding demand, proposed resources and triage protocols will be established for each Hub. As centres of excellence, the NCDC will work closely with local/state networks to support information sharing and drive systemic improvement across the network. Refer Figure 10 for patient care pathway and below for patient modelling.

The NCDC is also committed to supporting priority populations. High quality dementia care should be accessible for all Australians. For example, it is envisaged that the NCDC Hubs will connect and form formal partnerships with key Aboriginal Community Controlled Health Services and organisations representing Australians from culturally and linguistically diverse background at each location to improve access to this model of care for Aboriginal and Torres Strait Islander peoples and CALD communities. These partnerships will focus on co-designing and delivering the clinical, training and education and support models that best suit the needs of the local community and health service.

In Person and Telehealth: Each NCDC Hub clinic will be equipped to provide its services in person as well as via telehealth to reduce barriers and improve access to the necessary dementia expertise. Telehealth is transforming the delivery of health care. Telehealth is a fundamental component for the model of care as it will support more patients and community-based medical & health professionals to access the necessary advice and expertise to support a local and timely diagnosis.⁸⁰ This approach is supported by research demonstrating that telehealth is a valid platform to conduct a dementia assessment and diagnosis.⁸¹ Furthermore, it is envisioned that, similar to comprehensive stroke centres, each NCDC Hub will support smaller spoke/satellite sites throughout the state/territory to support people living in regional, rural and remote communities. The vision is for NCDC Hubs to connect with regional practices or designated ‘spokes’ to grow the network of dementia expertise and improve local accessibility.⁸²

Referral & Triage: A referral from a GP or other health professional is preferred to ensure that all the preliminary tests are completed, that information is made available prior to consultation, and that continuing post-diagnostic care can be facilitated. To promote capacity building, a GP / GP Registrar is included in the NCDC Hub clinic workforce mix. Each patient will be triaged by the Clinical Coordination Intake Team to determine the most appropriate patient pathway prior to scheduling the assessment consultation.

⁷⁹ <https://www.safetyandquality.gov.au/sites/default/files/migrated/Comprehensive-Care.pdf>

⁸⁰ Telehealth is also a rapidly growing and accepted method of delivering health care as experienced through the COVID-19 pandemic: <https://www.health.gov.au/ministers/the-hon-greg-hunt-mp/media/98-billion-new-investment-in-australias-health-care-and-covid-response> and Australian Government announced \$106 million for a permanent telehealth for Australian patients: <https://www.health.gov.au/ministers/the-hon-greg-hunt-mp/media/permanent-telehealth-to-strengthen-universal-medicare>

⁸¹ Loh, Ramesh, Maher, Saligari, Flicker, Goldswain (2004), ‘Can patients with dementia be assessed at a distance? The use of telehealth and standardised assessments’, *Internal Medicine Journal*, vol. 34, pp. 239-42, and Loh, Donaldson, Flicker, Maher, Goldswain (2007), ‘Development of a telemedicine protocol for the diagnosis of Alzheimer’s disease’, *Journal of Telemedicine and Telecare*, Vol, 13, pp. 90-94.

⁸² This approach would help to support the ADNeT Memory Clinic Initiative.

Assessment: Once a referral has been accepted by the central intake team, a multi-disciplinary team lead by a medical specialist will conduct the necessary assessments and investigations, this may include a neuropsychological assessment, functional assessment by an occupational therapist, additional imaging (e.g., PET scan) or biomarkers (when available).

Diagnosis: On completion of all assessment procedures a multidisciplinary case conference will be held for all patients. All team members involved in a patient's care will participate in the case conference. At the case conference a consensus diagnosis is made, and a care plan is developed with issues discussed and recommendations for action. Multiple issues are to be considered, such as suitability for medication, preventive management, the support services required, Enduring Power of Attorney (EPOA), legal and financial issues, return to driving, advance care planning, and the need for counselling and education. The multidisciplinary assessment and care plan will evolve and be discussed and updated by all relevant team members at a patient-related team review meeting.

The medical practitioner who led the team will meet with the patient (and their family / care partners) to provide the diagnosis, discuss and develop the care plan and the next steps. Follow up and review sessions may be offered within the first twelve months to ensure that a holistic and comprehensive care plan is in place for the person living with dementia and that there are plenty of opportunities to ask questions.⁸³ These may take place in person or via telehealth, as preferred. Following a diagnosis, a person will be connected with Dementia Australia and other appropriate resources and websites⁸⁴ as well as a Dementia Care Clinician who will provide ongoing care coordination and case management – discussed below at **Section 5.7**.

Mild Cognitive Impairment: If a person is not diagnosed with dementia but a prodromal dementia syndrome (e.g., MCI), a review will be scheduled at the clinic and appropriate information provided with the most up to date advice / prevention strategies & therapies together with a referral to Dementia Australia as well as research opportunities. The GP / referrer will be notified. Based on ADNeT data, it is estimated that 30% of the patients will have MCI. Providing support early will be important to help delay the progress of cognitive impairment.

Modelling and Assumptions: As noted above the NCDC Hubs will be centres of excellence. They will deliver excellent care and drive

innovation in clinical care. Collectively the NCDC will be the largest memory clinic in Australia, and it is estimated that it will be able to provide assessment & diagnostic services for approximately 7.5% of the new dementia cases.⁸⁵ The proposed resourcing model for the NCDC Hubs provides that New South Wales, Queensland and Victoria will be able to support approximately 1,400 new patients per year and nearly 3,000 follow up appointments and 700 clinical advisory sessions (with community-based health practitioners). The model proposes that the Hubs in South Australia, Tasmania and Western Australia will support approximately half the clinical load with 700 new patients and 1,500 follow up appointments and 350 clinical advisory sessions. The clinics will be established to support in person and telehealth appointments – this will improve access to the necessary expertise and also, in time, enhance the capability of primary health professionals in the triage, diagnosis and management of dementia. Access to pathology services and medical imaging (where required) will be leveraged across the local health networks – noting that the proposed NCDC Hub sites are collocated at medical and health precincts.

It is important to note that the NCDC Hub clinics will not be established to deliver services to all the outstanding demand for diagnostic services across Australia, nor will the NCDC take over from existing primary health care providers and memory clinics, or the ongoing care coordination of patients managed by existing service providers. The NCDC will be a centre of clinical and research excellence delivering services to the public as well as providing overarching support and guidance to existing service providers who require it (refer to **Section 5.6 Clinical Advisory Hub**). The NCDC Hub will work to ensure that all individuals with suspected dementia are able to access a guaranteed care pathway, irrespective of where they reside. While the NCDC will increase Australia's capacity and importantly, enhance capability to deliver assessment and diagnostic services across the regions, it is noted that:

- there are existing public and private health services which already provide assessment and diagnostic services (e.g., General Practitioner, incidentally in a hospital or in a specialised assessment service or memory clinic);
- the clinic to be hosted at a NCDC Hub may be part of an existing clinical service, for example, the Royal Melbourne Hospital Cognitive Dementia and Memory service (RMH CDAMS) - although the proposed NCDC Hub workforce will increase current capacity;

83 Additional follow up sessions with the specialist medical team will be scheduled if required; however, the Care Clinician will play an integral role in ongoing case management and liaising with the Clinical Hub.

84 For example, www.forwardwithdementia.org.au

85 Approximately 7,000 initial appointments each year for an estimated 91,000 new cases in 2021. It is acknowledged that there are people currently living with dementia who have not received a formal diagnosis and that the incidence of dementia will continue to increase. As such it will be important to support primary care practitioners in dementia diagnosis and care.

5. RESPONSE OPTION DEVELOPMENT

- there may be a more appropriate / conveniently located clinic for a person to attend – and the NCDC can discuss these options with these services / patients.
- there were an estimated 91,000 new cases of dementia in Australia in 2021; however, the true demand in Australia for diagnostic and support services is not known.⁸⁶

The AIHW does not report the dementia incidence in Australia; however, based on the incidence estimates provided in the NATSEM Economic Cost of Dementia in Australia 2016-2056 Report⁸⁷ together with the delays in receiving a diagnosis⁸⁸ and Australia's ageing population, it is reasonable to conclude that the increased diagnostics capacity to be delivered by the NCDC is urgently required and will address a clear need for people seeking a timely diagnosis and management.

Overview of the NCDC Concierge and Clinical Workforce Mix:

An NCDC concierge and reception team in each state will support the 'no wrong door' policy, providing advice and guidance for people who contact their state NCDC Hub to ensure that people are guided to the most appropriate area, for example:

- Diagnosis and management clinic
- Support and care
 - Dementia Australia
 - Post-diagnostic Dementia Care Clinician
- Clinical Trials and Research Coordination; or
- Referred to an appropriate external service to support their enquiry.

The expertise of Dementia Australia will be instrumental in developing this concierge function.

Each NCDC Hub will host an interdisciplinary dementia diagnostic and management clinic. The clinic will be overseen by a Clinical Director. The Clinical Director is a medical clinician and will oversee an interdisciplinary team including medical & academic clinicians, nurses and allied health professionals.

There will be a Clinical Intake Team to support the triaging and determination of the right pathway for patient. An experienced medical professional, nurse practitioner or allied health professional will oversee the clinical intake processes.

The clinic will include medical clinicians, (and research clinicians), GP and specialist registrars, nurse practitioners, registered nurses as well as allied health professionals including:

- Neuropsychologist
- Clinical psychologist
- Occupational therapist or Physiotherapist
- Social worker
- Speech pathologist
- Pharmacist

A portion of the FTE for the clinician / academic clinician workforce will have a dedicated teaching component to support the clinical placements for university students, registrars and current primary health practitioners as well research development within the clinician team. The Clinical Advisory Hub (refer Section 5.6) will also be staffed by this clinical workforce mix.

In addition, 1 FTE Community Liaison Allied Health Professional position will support ongoing communication and engagement activities between Aboriginal Controlled Community Health Organisations and Culturally and Linguistically Diverse community organisations. It is acknowledged that some clients may require an interpreter, and this will be funded.

The administrative and ICT support officers will ensure the appropriate support is in place for clinicians and to support in person and virtual consultations as well as clinical hub advisory sessions. A corporate and finance team will also support the clinical operations; however, it is noted that this arrangement may vary from state to state.

⁸⁶ The National Centre for Social and Economic Modelling NATSEM (2016) Economic Cost of Dementia in Australia 2016-2056

⁸⁷ The National Centre for Social and Economic Modelling NATSEM (2016) Economic Cost of Dementia in Australia 2016-2056

⁸⁸ Mehrani I, Kochan NA, Ong MY, et al. Organisational aspects and assessment practices of Australian memory clinics: an Australian Dementia Network (ADNeT) Survey. *BMJ Open* 2021;11:e038624. doi:10.1136/bmjopen-2020-038624

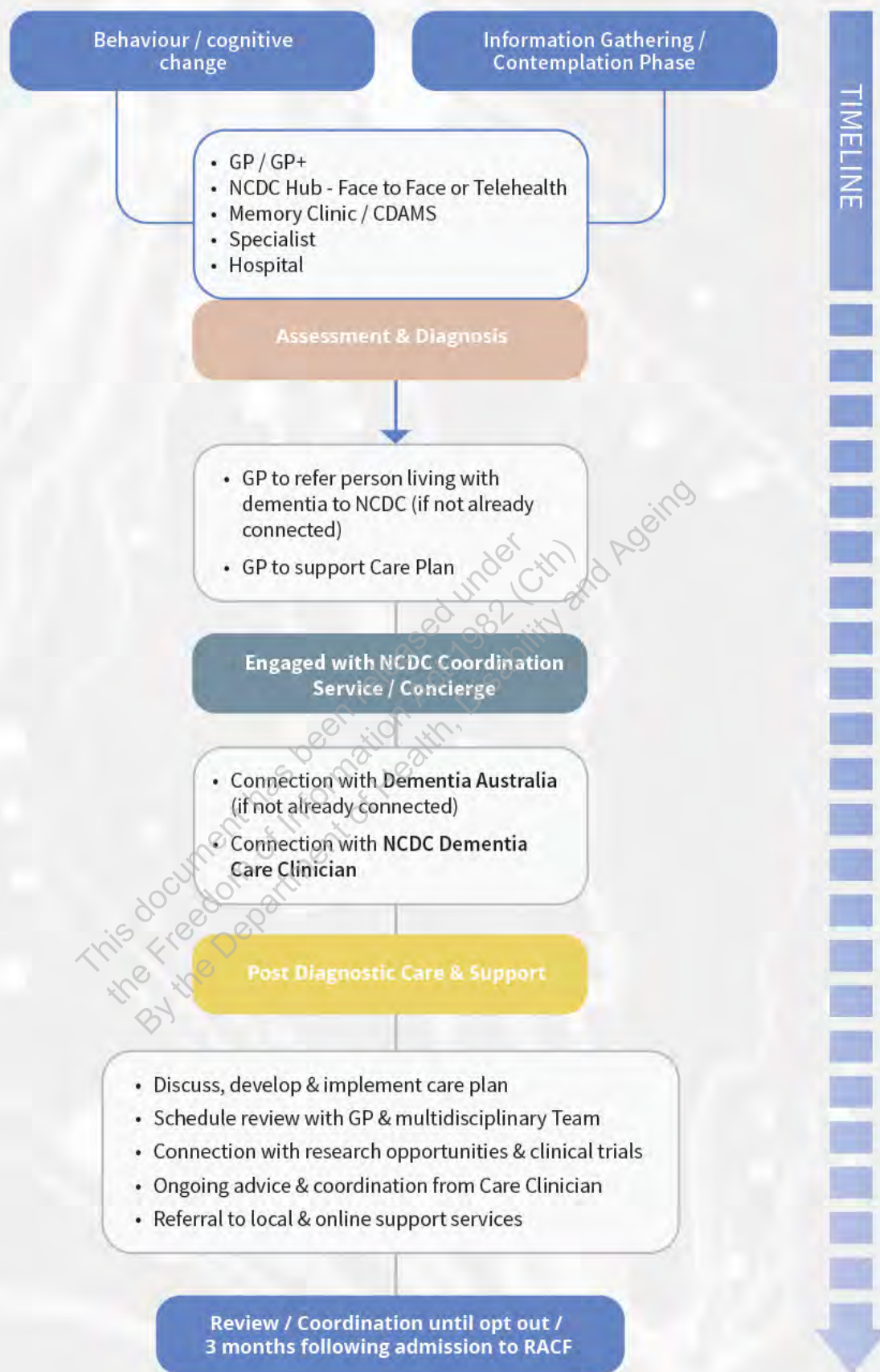


Figure 10. Guaranteed Pathway: Proposal for enhanced NCDC care pathway.
MCI = mild cognitive impairment, CDAMS = Cognitive, Dementia and Memory Service, RACF = residential aged care facility

5. RESPONSE OPTION DEVELOPMENT

5.6 CLINICAL ADVISORY HUB: OUTREACH IN ACTION

In addition to providing assessment & diagnostic services, the NCDC Hubs will establish a Clinical Advisory Hub to provide support and advice to community-based medical and allied health practitioners.⁸⁹ For example, the Clinical Advisory Hub can:

- through a telehealth case conference, assist a GP confirm a dementia diagnosis or identify further assessment needs.
- advise a GP or nurse practitioner on pharmacological and non-pharmacological treatment, rehabilitation options and management strategies including considerations for care partners.
- provide input to a care plan, for example, Chronic Disease Management, GP Management Plan or Team Care Arrangements.
- support community-based clinicians to access specialist expertise to support a diagnosis or management (e.g., neuroradiology review, interpretation of cognitive tests, advice about medications, specialist allied health support such as speech pathology).

The Clinical Advisory Hub will be staffed by the same team at the state NCDC Hub Clinic. Similar to the comprehensive stroke centre

model, the aim is to provide a 'virtual hub' where expert advice, consultation, diagnosis, treatment advice and support is provided to local primary care and specialist clinicians all over the state by expert dementia clinicians at the Clinical Advisory Hub.

This initiative aims to improve diagnostic accessibility in a local primary care setting with a GP or Nurse Practitioner as well as support greater access for people living in regional, rural or remote areas. It is possible that a consultation with the Clinical Advisory Hub may lead to a referral to a NCDC Hub (or other appropriate diagnostic clinic / service).⁹⁰

Bringing knowledge to the community and supporting primary health care professionals, particularly GPs and primary health care nurses, to conduct timely investigations, interventions & diagnosis, effective referrals and ongoing care, is a sustainable and cost-effective means of improving the journey for people with dementia and their carers – regardless of where they live.⁹¹

As the evidence base grows, it is envisioned the NCDC Hub multi-disciplinary Dementia & Memory Clinics and Clinical Advisory Hubs will evaluate, disseminate and champion information, professional development, clinical guidelines, research findings etc. including applied research that can be translated into improved and time effective processes in primary and tertiary dementia health care as well as ongoing psychosocial support systems.



⁸⁹ For example, geriatricians, neurologists and old age psychiatrists as well as nurse practitioners, psychologists, occupational therapists, speech pathologists, physiotherapists and pharmacists.

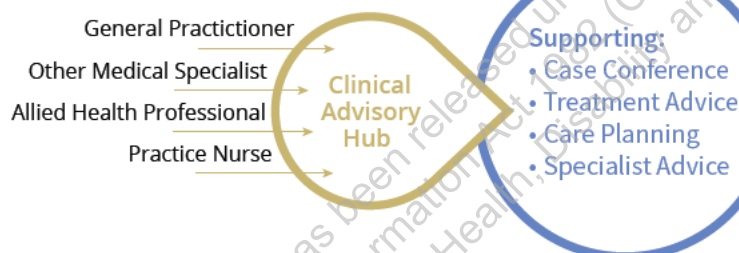
⁹⁰ There may be a local or other appropriate / preferred diagnostic clinical service other than an NCDC site / service e.g., CDAMS (in Victoria) or local geriatrician / primary care dementia service.

⁹¹ Alzheimer's Australia, [Submission to The Primary Health Care Advisory Group Discussion paper](#): Better outcomes for people with chronic and complex health conditions through primary health care. September 2015

NCDC CLINICAL ADVISORY HUB SERVICES FOR COMMUNITY-BASED MEDICAL PRACTITIONERS AND HEALTH PROFESSIONALS

Expert support and advice to:

- confirm a dementia diagnosis
- provide pharmacological / non-pharmacological treatment or intervention advice
- provide input into treatment & care plan
- provide specific diagnostic or support advice e.g., neuroradiology review, medication review, advice from speech pathologist)
- provide specific post-diagnostic care advice
- provide information regarding research opportunities
- contribute to the clinical quality register



As noted above, the multi-disciplinary Dementia & Memory Clinics and the Clinical Advisory Hub will be delivered and supported by the same workforce.

5.7 COORDINATED CARE PATHWAY & ONGOING SUPPORTS

Comprehensive care means that the patient receives care that is planned and coordinated around their physical, mental and cognitive health needs. Patients should also continue to receive comprehensive and compassionate care at the end of their life. The delivery of comprehensive care is based on partnering with patients, carers and families to identify, assess and manage patients' clinical risks, and determine their preferences for care; and on communication and teamwork between members of the healthcare team.⁹²

Receiving a dementia diagnosis is life changing – for the individual and their family. Unfortunately, following a dementia diagnosis people often feel abandoned and frustrated trying to address their needs and navigate the health, disability and aged care systems – sometimes all three. The NCDC model of care proposes a more

personalised, integrated and professional care coordination approach to enhance the post-diagnostic care pathway:

a) Optimise referrals to Dementia Australia

Dementia Australia is the national peak body and service provider for people, of all ages, living with all forms of dementia, their families and carers. Dementia Australia delivers services nationally. With consent, patients will be referred to Dementia Australia (if not already connected) for enhanced early support and access to online dementia information, the National Dementia Helpline, Post Diagnostic and Early Intervention Programs, counselling, education sessions, support groups, and peer mentoring which provides coaching, advice and support to people with dementia and carers. Dementia Australia delivers a wide range of services and programs for:

- people living with dementia
- family and carers
- people seeking additional information about dementia
- people with a prodromal dementia syndrome (e.g., MCI).

⁹² <https://www.safetyandquality.gov.au/sites/default/files/migrated/Comprehensive-Care.pdf>

5. RESPONSE OPTION DEVELOPMENT

The referral to Dementia Australia can be made prior to a dementia diagnosis (e.g., following GP appointment or referral, NCDC clinic appointment or community-based specialist appointment). A dementia diagnosis (or MCI) will allow access to diagnosis-specific programs and services.

Dementia Australia can also provide information and support about government portals and other services: My Aged Care, Aged Care Assessment Teams, National Disability Insurance Scheme, Carer Gateway, Dementia Services Australia (DBMAS) etc, as appropriate.

People may have already been in contact with Dementia Australia – this may be how they came to know about the NCDC Hub. Dementia Australia will have a community-facing physical presence at all the NCDC Hubs to continue to provide specialist information to the broader community as well as people directly engaged with the NCDC Hub dementia & memory clinic.

Note: *The expansion of the National Dementia Support Program and additional outreach capacity for the National Dementia Helpline is funded by the Commonwealth Government. These services are not limited to the NCDC model of care – this is a universal service recommended to all people seeking support or information about dementia. The aim of the NCDC model of care is to ensure that as many Australians as possible are seamlessly connected to the expert advice of Dementia Australia.*

b) Timely connection with a Dementia Care Clinician

The NCDC model of care also advocates for a timely connection with a Dementia Care Clinician following a dementia diagnosis. The NCDC model aims to combine the clinical case management model with the primary care chronic disease management model. Based on the Breast Care Nurse (BCN) model, with the aim of improving continuity of care for people living at home with dementia, the NCDC model will provide a single named practitioner to coordinate care⁹³ and provide:

- dementia-specific clinical care, case management and advice; together with
- planning (in partnership with patient, family and GP), coordination of care and support (subject to need and engagement with other coordination / navigation services); as well as

- linkage with resources following a dementia diagnosis including information about research and clinical trial opportunities.

The Dementia Care Clinician will be a health professional (i.e., a nurse or an allied health professional) who provides ongoing clinical / health advice and will be a central and consistent point of contact through the course of the disease. Ongoing support to navigate and coordinate post-diagnosis medical advice, treatment and care services has been identified, across all states and stakeholders as a large gap and need for people living with dementia and their families. Furthermore, a recent study has shown that higher continuity of GP care for patients with dementia was associated with safer prescribing and lower rates of major adverse events.⁹⁴ Increasing continuity of care for patients with dementia will help improve treatment and outcomes⁹⁵ – the NCDC model of care will embed continuity of care through the role of the Dementia Care Clinician who will work with the patient's GP and the NCDC experts, as required.

The role of a Dementia Care Clinician is essential to improving the dementia care pathway in light of the following:

- Dementia is a common and a significant diagnosis for people and their families with a perception of variability of care;⁹⁶
- Dementia is a complex neurodegenerative disease and there is an absence of disease modifying treatments as well as limited symptom modifying treatments;
- Dementia causes changes in cognition and memory, function, behaviour and mobility which often requires significant support and commitment from family and carers to complete activities of daily living. The impact of dementia is not confined to the person receiving the diagnosis – it has a significant impact on family and caregivers.

Connecting a person and their family at the time of the diagnosis will provide an opportunity to ensure that comprehensive medical and care plans, education, supports and referrals are considered and implemented – and ongoing. Being prepared, informed and supported will help Australians live at home for longer – and to live well and positively, which includes doing the things we enjoy with the people we love as well as reducing unexpected hospital admissions and delaying admissions to residential care services.

93 The NICE quality statement for coordinating care states: People with dementia have a single named practitioner to coordinate their care: <https://www.nice.org.uk/guidance/qs184/chapter/Quality-statement-4-Coordinating-care>

94 Welberry HJ, Jorm LR, Schaffer AL, Barbieri S, Hsu B, Harris MF, Hall J, Brodaty H. Psychotropic medicine prescribing and polypharmacy for people with dementia entering residential aged care: the influence of changing general practitioners. *Med J Aust.* 2021 Aug 2;215(3):130-136. doi: 10.5694/mja2.51153. Epub 2021 Jul 1. PMID: 34198357.

95 Continuity of GP care for patients with dementia: impact on prescribing and the health of patients João Delgado, Philip H Evans, Denis Pereira Gray, Kate Sidaway-Lee, Louise Allan, Linda Clare, Clive Ballard, Jane Masoli, Jose M Valderas and David Melzer *British Journal of General Practice* 2022; 72 (715): e91-e98. DOI: <https://doi.org/10.3399/BJGP.2021.0413>

96 In 2016 the Australian Commission of Safety and Quality Health Care identified dementia as priority one for a clinical quality register based on these reasons.

We know from the Royal Commission into Aged Care Quality and Safety that Australians of all ages want to be assisted to live independently in their own home during their retirement years rather than ever having to go to an aged care facility.⁹⁷ If we aim to improve comprehensive care at home and in the community, together with better reablement in the community and rehabilitation in sub-acute care, we can reduce demand for hospital and residential care.⁹⁸ Furthermore, service innovation, particularly as the digital revolution gathers pace, will make more complex care at home increasingly feasible.⁹⁹

The Dementia Care Clinician will ensure much needed knowledge, support and coordination with the benefit of also reducing health service utilisation and delaying (or indeed avoiding) admission to a residential aged care home.

It is acknowledged that there are differences in the disease trajectory, timing and available treatment for a cancer and dementia diagnosis. However, the complexity of the disease and the impact on the cognition, behaviour and function for people living with dementia as well as their care partners in the context of no disease modifying treatments and an ageing population necessitates the need for greater community-based support, investment and dignity for people impacted by dementia.

Inspired by the BCN model and the progress made in cancer care, now is the time to create a comprehensive approach to community-based dementia care across Australia.

Does Services Australia already provide this service?

Existing / proposed aged Care Finder navigation service through Services Australia / My Aged Care will be valuable for advice regarding dementia and aged care services, eligibility and payment arrangements but they will not be established to provide personalised clinical advice or service coordination. The Services Australia roles do not have an ongoing case management role.¹⁰⁰

There are clear connections between the care finding, and care finding support, for older people proposed by the Federal Government and the role of the Dementia Care Clinician. It is not proposed that the Dementia Care Clinician duplicate functions of the proposed Services Australia Care Finders – but that the Dementia Care Clinician ensure that dementia needs, and preferences (medical, health and social) are actioned and integrated into any broader individual social support plans. Indeed, we would

wish for Services Australia to ensure people worried about memory or cognition are connected with the NCDC services and Dementia Australia as well as advised about local services. Dementia, like other chronic health conditions such as cancer, diabetes and vascular disease warrants the ongoing attention of the necessary medical and clinical experts.

The Dementia Care Clinician is intended to be universally available for people living at home and not exclusive to people who receive a diagnosis at an NCDC clinic. It is to be an option available to all people living in the community who have a confirmed dementia diagnosis and is in addition to the referral to Dementia Australia.

The Dementia Care Clinician will assist in:

- Discussing the diagnosis and information provided by diagnosing medical specialists. The Dementia Care Clinician may be present at the diagnosis appointment
- Providing timely and ongoing advice and emotional support
- Planning, implementation and review of the treatment and care plan in accordance with the patient & care partner goals, preferences and medical advice
- Co-ordinating and case managing the treatment plan with GP and other medical, health and care specialists
- Providing referrals to other social or support services
- Providing advice (or facilitating access to advice) about disease modifying treatments (when available) and (pharmacological and non-pharmacological) symptom modifying treatments & interventions
- Supporting navigation and access to health, disability and aged care portals / services and support connections between inter-professional medical and wellbeing teams with family / carers¹⁰¹
- Provide information about advance care planning¹⁰²
- Provide information regarding access to clinical trials and research opportunities

Professional and Timely Navigation

The Government Review on system navigator models identified that, overall, stakeholders favoured professional navigation models

97 <https://agedcare.royalcommission.gov.au/news-and-media/australia-talks-about-older-age-and-aged-care>

98 Duckett, S. and Swerissen, H. (2021). Unfinished business: Practical policies for better care at home. Grattan Institute.

99 Ib id and Cations et al (2020). Cations, M., Lang, C., Crotty, M., Wesselingh, S., Whitehead, C. and Inacio, M. C. "Factors associated with success in transition care services among older people in Australia". BMC Geriatrics 20.1, p. 496. <https://doi.org/10.1186/s12877-020-01914-z>.

100 Duckett, S. and Swerissen, H. (2021). Unfinished business: Practical policies for better care at home. Grattan Institute.

101 This may also be supported by Dementia Australia

102 Information about advance care planning may also be covered in the post diagnostic support program provided by Dementia Australia

5. RESPONSE OPTION DEVELOPMENT

delivered by a quality workforce.¹⁰³ Connecting with a Dementia Care Clinician, a qualified health practitioner, at the earliest opportunity will support proactive planning and reduce feelings of hopelessness and abandonment following a dementia diagnosis. One of the principal findings of the BCN evaluation was that early contact with a McGrath Breast Care Nurse resulted in the biggest impact on patients, health services, and the health system.

As the disease progresses the Dementia Care Clinician will be able to provide navigated exposure to support the ongoing and changing needs and preferences of the person living with dementia. The frequency and the need for this service may change over time – there may be times which require significant involvement and support while there may be periods of relative stability requiring only a scheduled review / check-in. The level of support and coordination should be tailored depending on the complexity of the person's needs and it is important that people can get access to their Dementia Care Clinician as their needs change and if problems / risks are identified. A timely diagnosis together with early engagement, as demonstrated with BCNs, is expected to lead to an improved experience, for patients and clinicians as well as savings in health service utilisation.¹⁰⁴

Supporting people to live well at home

Living at home is often a personal preference for Australians that is also cost-effective for the aged care system. However, it is acknowledged that as dementia progresses people usually require the higher level of assistance which cannot be provided in the home yet is available in residential aged care. The NCDC model of care aims to maximise the time a person can live well and safe at home.

The Dementia Care Clinician service is focused on people living with dementia at home. However, some people will still transition to residential care – this can be a stressful experience (and may include hospital transitions as well). The Dementia Care Clinician will support a 3 month service transition period when a person enters a residential aged care home to ensure that there is time for the person living with dementia, their family, the Dementia Care Clinician and the residential aged care team to share all the appropriate information to best ensure continuity of care. The Dementia Care Clinician will also be able to support the family through this period.

In Person and Virtual Engagement

It is expected that the Dementia Care Clinicians will deliver care in a hybrid manner – both in person and via telephone / online networks. The Dementia Care Clinicians may be based at an NCDC Hub or located throughout the state spoke sites for greater face to face outreach opportunities – for example, at the proposed regional aged care offices¹⁰⁵ or a GP clinic or existing memory clinic or community health centre. This distributed model is again supported by the Evaluation of the Aged Care System Navigator Measure Final Report.

Supporting Care Partners

The needs of family, friends and informal carers of people living with dementia are significant. Informal or unpaid care can be a substitute or supplement for domestic, personal care or nursing work. While the provision of care is a testament to love and duty, the negative impact and detrimental effects of providing care for people with dementia are well established in the literature.¹⁰⁶ Caregiver stress, be it financial, family, physical or psychological, can be significant; affecting the health and wellbeing of the carer and increasing the likelihood that the person they care for may need more intensive support in a residential setting. Connecting a person living with dementia and their loved ones with a Dementia Care Clinician will better support the whole family in navigating the disease and provide the personalised support that aims to improve the experience for everyone and support people to live well at home for longer. As noted above, Dementia Australia (and other service providers such as Dementia Support Australia) also provide a range of programs and services to support carers. The Dementia Care Clinician will be integral in coordinating social services and medical care to support and guide families and care partners.

There may be no cure for dementia, but we can empower people living with dementia and their families to access the medical, health and care services which they need and desire and proactively address risks and mitigate crisis points to prevent adverse events, reduce unexpected hospital admissions and delay admission to residential aged care homes. Combined with better rehabilitation in sub-acute care, comprehensive care delivered at home and in the community can reduce demand for hospital and residential care.¹⁰⁷ Ongoing support from the Dementia Care Clinician, together with service innovation and assistive technologies, will make more complex care at home increasingly feasible.

103 Australian Healthcare Associates, 2020, Evaluation of the Aged Care System Navigator Measure Final Report, Australian Government Department of Health accessed at: https://www.health.gov.au/sites/default/files/documents/2021/05/evaluation-of-the-aged-care-system-navigator-measure-final-report_1.pdf

104 Rasmussen, J., & Langerman, H. (2019). Alzheimer's disease—why we need early diagnosis. *Degenerative Neurological and Neuromuscular Disease*, 9, 123.

105 Department of Health (2021) as referenced in Duckett, S. and Swerissen, H. (2021). Unfinished business: Practical policies for better care at home. Grattan Institute at p.11.

106 Brodaty, H., & Donkin, M. (2009). Family caregivers of people with dementia. *Dialogues in clinical neuroscience*, 11(2), 217–228. <https://doi.org/10.31887/DCNS.2009.11.2/hbrodaty>

107 Duckett, S. and Swerissen, H. (2021). Unfinished business: Practical policies for better care at home. Grattan Institute

NCDC Modelling Assumptions

The Dementia Care Clinician role will be performed by a registered nurse or an allied health professional. The modelling provides that each Dementia Care Clinician will maintain a caseload of 150 clients (and care partners / families) with 8 hours of direct and indirect client support per year – this equates to 1200 hours per year per clinician. The proposed workforce model will provide approximately 20,000 hours of post-diagnostic care and coordination in each of the larger jurisdictions and 10,000 hours in each the smaller jurisdictions. It is estimated that over 11,000 people / families will be supported by a Dementia Care Clinician across Australia each year. The service may be delivered via a hybrid model – in person, telephone and online. It is estimated that the continuity of care will be maintained for between 2 – 4 years;¹⁰⁸ however, it is noted that:

- the level of need / service required for an individual and their family may change over time and people will also pass away
- not all people with a dementia diagnosis will require or desire access to the service
- people may opt in and out of the service and there will be scheduled reviews for all clients
- a 3 month transition period will be supported when a person living with dementia moves into a residential care home.

A confirmed dementia diagnosis is required to be connected to a Dementia Care Clinician; however, the diagnosis does not need to have been provided by a medical practitioner from an NCDC Clinic.

It will take time to develop and scale the Dementia Care Clinician workforce to full capacity (e.g., it is not expected to operate at 100% capacity in Year 1). In the absence of a medical breakthrough, it is expected the demand for Dementia Care Clinicians to coordinate

comprehensive dementia care will grow. The 5-year funding model for the proposed Dementia Care Clinician workforce mix is unable to meet the expected community demand – noting that 70% of people with dementia live in the community. However, this national workforce will be instrumental in defining, delivering and leading innovation in comprehensive community-based dementia care. As our understanding of dementia develops and this workforce matures together with assistive technologies, the way we deliver comprehensive dementia care will continue to evolve and be evaluated – our aim is to provide a strong foundation from which to grow, reimagine and scale the delivery of quality dementia care across the dementia sector.

Overview of the NCDC Post-Diagnostic Workforce Mix:

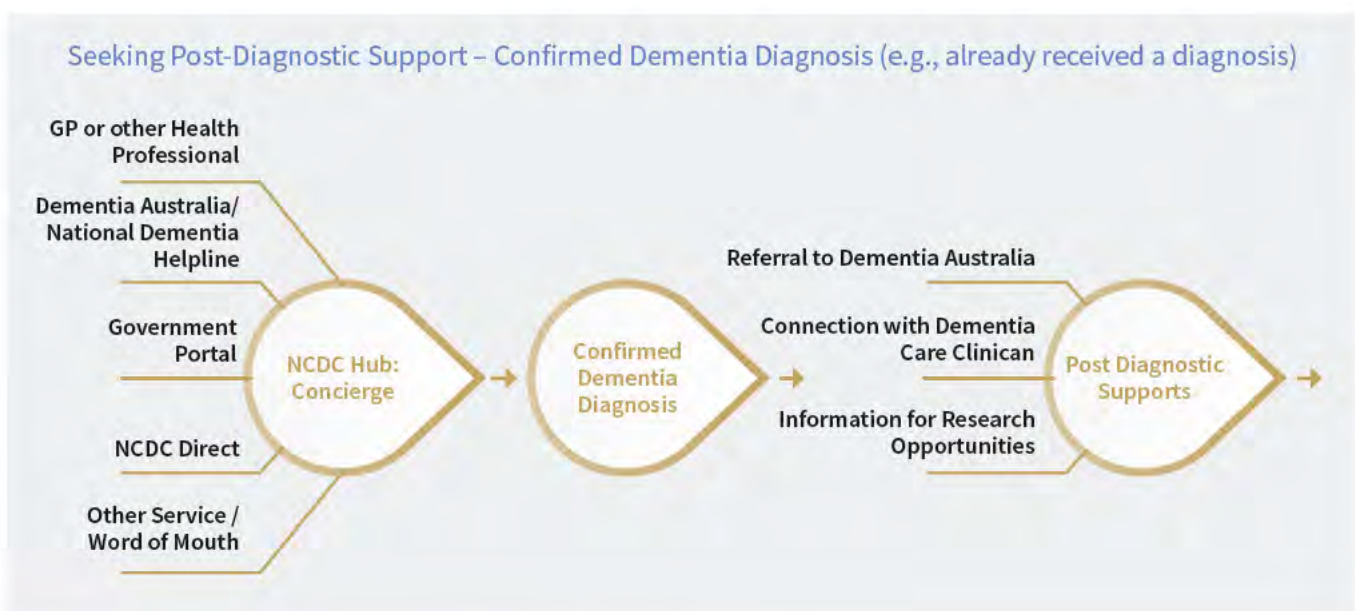
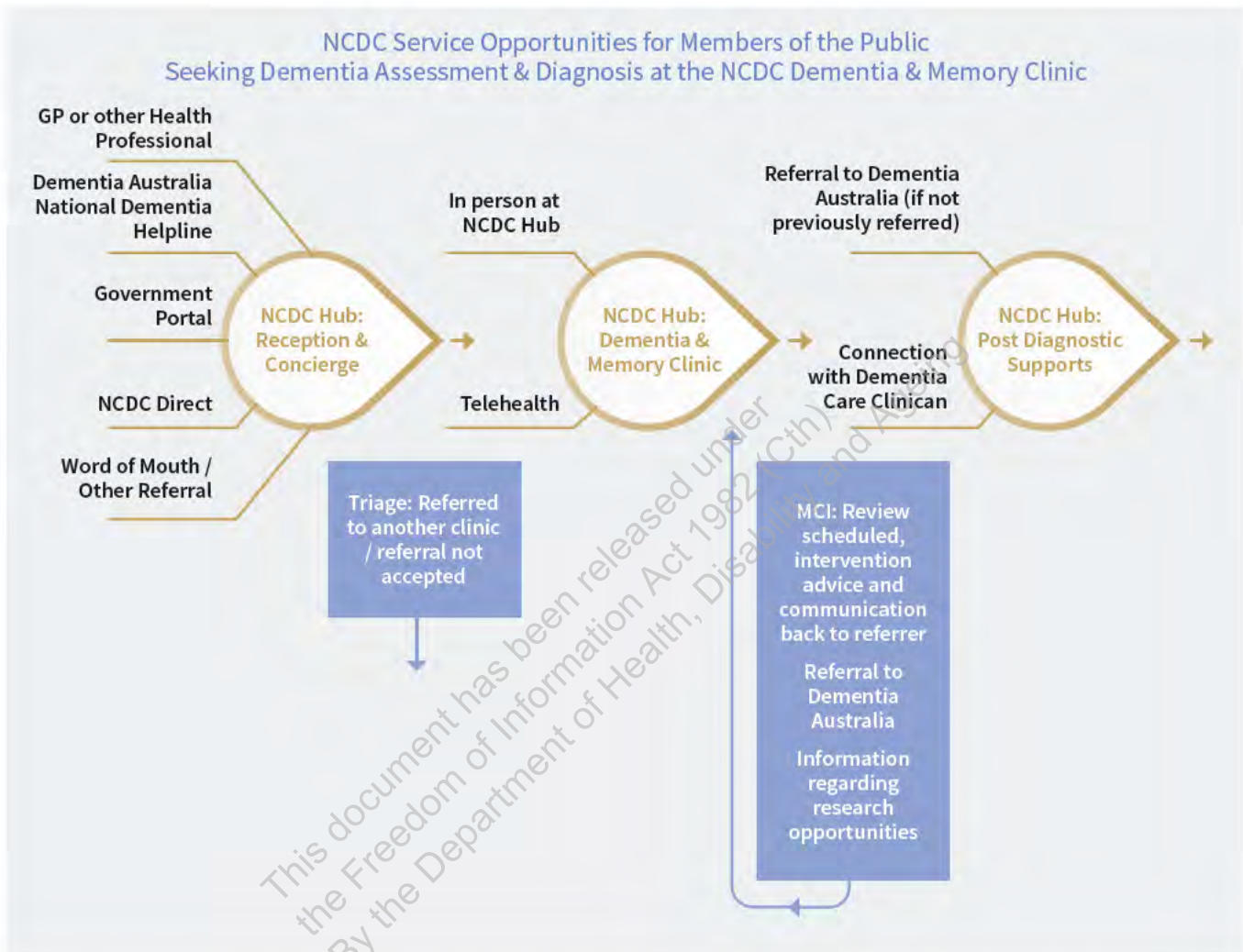
This workforce will work closely with the NCDC Hub concierge / reception (receiving external referrals), dementia and memory clinic as well as the Research Support Officers about clinical trials and research opportunities. The Dementia Care Clinician Coordinator (1 / 0.5 FTE) will oversee and support the Team Leaders (2 FTE per large state and 1 FTE per smaller state) and Dementia Care Clinicians (16 FTE per large state and 8 FTE per smaller state).

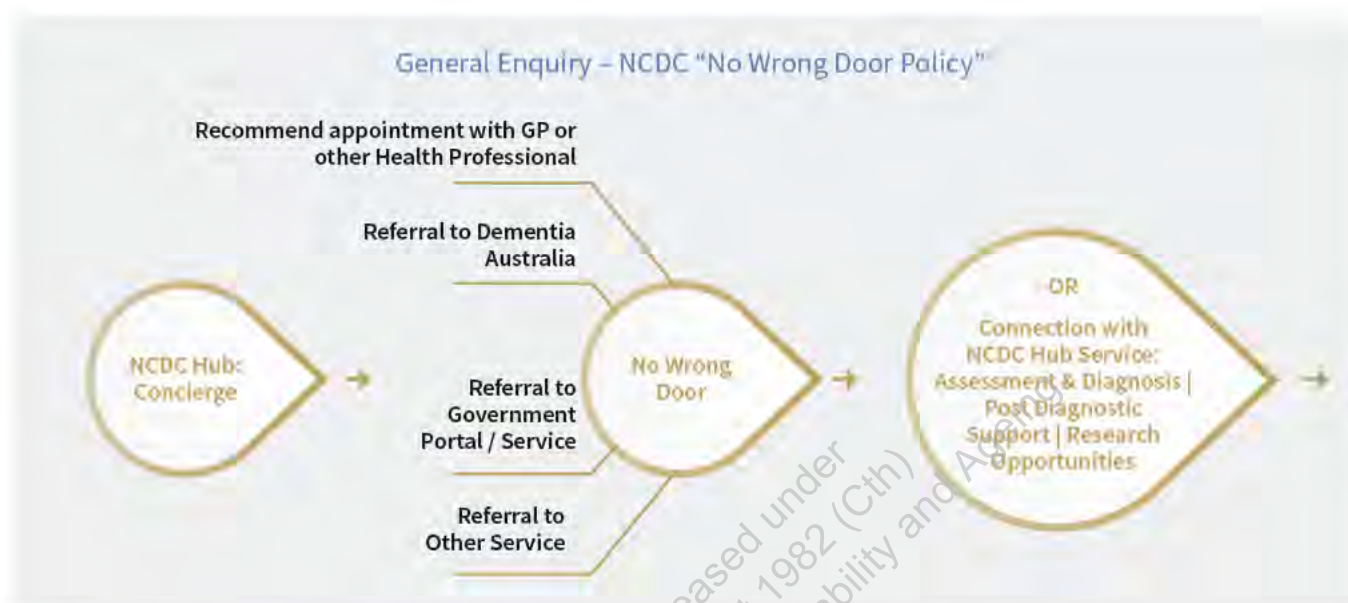
The Dementia Care Clinicians will be a clinical workforce comprised of registered nurses and allied health professionals with experience (and ongoing development) in dementia care. There will also be a number of Dementia Care Clinician research roles (4 FTE per large state and 2 FTE per smaller state) to support the development of research capability of the clinician workforce. This will help build research capability, drive innovation and translate key findings into practice which can be shared and implemented across the network. The Dementia Care Clinician Team will also be supported by administrative officers.



¹⁰⁸ This is an estimate based on the average length of a home care package (24.6 months) but noting that there will be people who will require support over a longer period (e.g., people with younger onset dementia) and that the Dementia Care Clinician service itself is expected to delay admission to aged care facilities. Furthermore, advancements in diagnostic processes / capability will lead to more timely diagnosis which will result in a timelier connection with the Dementia Care Clinician and comprehensive post-diagnostic care.

5. RESPONSE OPTION DEVELOPMENT





5.8 PURSUING CLINICAL EXCELLENCE - CLINICAL EDUCATION AND TRAINING

A highly skilled, capable and dedicated clinical workforce is essential for the delivery of high-quality, person-centred dementia care. The upskilling and advancement of the clinical dementia workforce (e.g., general practitioners and medical specialists, practice nurses and allied health professionals) is critical to support a timely diagnosis and the ongoing care and support for a person living with dementia – as well as supporting preventative action and ‘brain health checks’ early on.

Enhancing the ‘hands on’ clinical training opportunities for medical and other health discipline university students and professionals is an education priority for the NCDC and its affiliated universities. Primary health care professionals have a critical role to play in prevention, case finding and early investigation, timely and accurate diagnosis, treatment and management of dementia. Primary health care must be a key part of the national strategy for dementia care.

To be effective, concerns or symptoms should not be readily dismissed as part of ageing and GPs and primary health professionals need to:

- Assist in normalising the concept of ‘brain health checks’ and discuss cognitive health with their patients – similar to heart health discussions.
- be alert and responsive to patients/ their families with cognitive symptoms;

- facilitate the preliminary investigations and tests;
- be supported to undertake preliminary investigations and make a timely referral.

There are existing national and state organisations which provide education and training services for the medical and health professionals as well as the broader aged care and residential care workforce such as **Dementia Australia, Dementia Training Australia, Dementia Services Australia, The Wicking Dementia Research and Education Centre** and the newly established **Aged Care Centre for Growth and Translational Research**.

The NCDC aims to work with and complement these existing education services and programs, prioritising initiatives that will address a gap, deliver significant national impact for primary health professionals and leverage the expertise of the NCDC partners. As such, each NCDC Hub clinic will provide ‘hands on’ clinical dementia training through:

- applied training opportunities for university medical, nursing and allied health students at the NCDC Hub clinic.
- training and professional opportunities for postgraduate medical and primary health trainees (e.g., GP Registrar) and professionals including potential for secondment opportunities for staff within host health services.
- upskilling General Practitioners (GPs) and primary care nurses with special interest in dementia under the supervision and mentorship of experienced NCDC (and other) clinical specialists (telehealth or in person).¹⁰⁹

¹⁰⁹ In a similar manner to the GP+ model implemented by NSW Health and ISCHERF various chronic health conditions where specialists are partnered with GPs who are interested to develop their scope of practice in a partial clinical area: <https://ishc.org.au/doctor-resources/gp-fellowship-opportunity/> and <https://www.cesphn.org.au/documents/population-health/cancer-screening/1147-skin-cancer-fellowship-tacs-june-2016/file>

5. RESPONSE OPTION DEVELOPMENT

The NCDC Hubs also provide an opportunity to promote clinical excellence by:

- implementing (and ongoing evaluation) the **Memory and Cognition Clinic Guidelines** for specialised dementia and cognitive decline assessment services developed by ADNeT and
- supporting the AIHW dementia data gaps¹¹⁰ and opportunities through the **ADNeT Clinical Quality Register**;
- partnering with Aboriginal Controlled Community Health Services and organisations representing Australians from culturally and linguistically diverse background to ensure culturally appropriate training and education for health professionals in dementia diagnosis and management and co-development of health service dementia protocols.
- Exploring opportunities with, for example, the **Royal Australian College of General Practitioners (RACGP)** and **Australian College of Rural and Remote Medicine** to support rural and regional doctors through the Clinical Advisory Hub as well as through direct training opportunities at the NCDC Hub.

Overview of the NCDC Education and Training Workforce Mix:

With regard to strengthening clinical dementia education and training, the NCDC workforce mix addresses this at both the national and state levels.

At the national level the following is proposed:

- 0.4 FTE Director, Clinical Services and Education to lead the strategic direction and engagement for clinical services and training across the network.
- 1.6 FTE Clinical Education Leads to lead the implementation of the professional training program for current primary health practitioners and registrars as well as clinical placements for university students.
- 2 FTE Dementia Care Clinician Training and Education Leads to lead the training program and priorities of the Dementia Care Clinician workforce.
- 4 FTE Strategic Policy Officers to support the consolidation, dissemination and promotion of research findings and clinical advances across the network and the broader dementia community.
- An advisory committee comprised of consumers including people with dementia and family carers, clinicians, educators and researchers to inform the education and training priorities for the network.

At the state level there are 2 FTE Education Support positions to support the administration of the clinical placements and training for university students and current primary health practitioners.

For further detail refer to NCDC Research & Education Strategic Priorities at **Section 5.10**.



Figure 11. Education & Training Opportunities from the NCDC

5.9 RESEARCH FACILITATION AND COLLABORATION

Research is vital to finding effective diagnostic tools, treatments and therapies for dementia. It is also essential if we want to prevent dementia and find a cure. The aim of the NCDC is to provide the national infrastructure to better support:

- research collaboration and interdisciplinary innovation.
- harmonisation of research processes for national clinical trials and diagnostic assessments.
- consumer engagement in co-design of high-quality research including the involvement of vulnerable and diverse populations such as Indigenous Australians, YOD, CALD communities, LGBTIQ+ communities, people living with another disability as well as regional and remote Australians.
- ongoing awareness and access to research opportunities and clinical trials for people impacted by dementia or a prodromal dementia syndrome.
- an important boost in data to Commonwealth-funded initiatives such as the **ADNeT Clinical Quality Registry** and provide a platform for research programs which are leveraging from such registries of common and reliable clinical data.

¹¹⁰ Dementia data gaps and opportunities <https://www.aihw.gov.au/reports/dementia/dementia-data-gaps-and-opportunities/summary>

- the rapid dissemination and translation of high-quality competitive grant funded research and promoting its adoption into clinical and care practice i.e., closing the loop between discovery and implementation.
- the next generation of researchers and the development of investigator-led research capability and leadership.

The aim is to deliver a national network-wide research strategy that is more coordinated, efficient, cost-effective, and effective i.e., focused on outcomes which have real impact as well as being more flexible, responsive, accessible, and equitable. The longer the time to deliver health outcomes to the community due to a lack of research capacity the greater the social and economic burden of chronic illness such as dementia. It is critical that dementia and dementia-related research is accelerated as a matter of priority to ensure we have the treatments, technologies and systems are in place to support Australia's rapidly ageing population. For example, emerging results from monoclonal antibodies that clear the brain of the toxic protein beta-amyloid, a possible cause of Alzheimer's disease, and the transformational advances in genetic manipulation that are occurring daily such as those used to develop the mRNA covid vaccines, are now being applied and may radically change the therapeutics for dementia.

By investing in the NCDC we can bring together the best minds in research, clinical care, policy and innovation. The NCDC will be best placed to coordinate, facilitate and champion research across the broad spectrum of dementia disciplines as well as translate, and indeed embed, such findings into clinical practice at the NCDC and beyond. The NCDC will play a major national role in reducing the knowledge gap and accelerating better outcomes and improvements for people impacted by dementia.

The world-class research taking place on site across the NCDC, with the expertise of the eleven founding partners, will help transform the treatment of people with dementia, support independent living and quality of life, and pursue the medical breakthroughs that will one day lead to prevention or cure.

Australia is among the best in the world when it comes to dementia research. Dementia researchers across the founding partners are recognised as world leaders in the field, with many ranking in the top 1% of highly cited researchers, acknowledging their calibre and research impact:

The research expertise of the founding partners spans:

- The causes of dementia – from the genetic risk factors to the molecular and cellular changes that underlie the disease
- Better ways of diagnosing dementia – including the development of better and more accurate methods of diagnosis through neuroimaging, neuropsychological testing and biomarkers

- Dementia care – including the development of better care options to support and improve the quality of life of people with dementia, their families and carers
- Dementia treatments – including the development of new medications that modifies or slows the progression of disease, reduces symptoms and improve the quality of life in people.
- Dementia risk reduction and prevention – including lifestyle prevention strategies in order to delay dementia onset.

The NCDC's national "knowledge network" together with the physical co-location of Dementia Australia experts, researchers, clinicians & other health practitioners at each NCDC Hub will improve the potential for collaborations across a wide range of disciplines and sectors (e.g., including engineering and technology) together with people impacted by dementia. The NCDC aims to provide the infrastructure and resources to support research collaboration, clinical trials and the rapid translation of knowledge into policy and practice.

Furthermore, the NCDC will create a national vehicle by which to attract, retain and develop the most talented staff and emerging leaders to dementia and dementia-related research and care. The intention is to co-locate clinical care, 'hands on' clinical training and research work at the same site to improve opportunities for interactions and collaborations between clinicians, researchers, educators, innovators, trainees, students, industry and people impacted by dementia.

For further detail refer to NCDC Research and Education Strategic Priorities as set out in the representation at **Section 5.10**.

Overview of the NCDC Research Workforce Mix and Infrastructure:

The following positions will support the realisation of the NCDC research ambition:

At the national level:

- 0.4 FTE Director – Research Coordination to lead the engagement, development and implementation of the strategic research priorities across the NCDC.
- 1.6 FTE Research Leads to facilitate implementation of the NCDC research priorities and support communication and collaboration across the network (for example, professional development, data linkage and multi-site clinical trial operations).

Each state will support:

- 1 FTE Research Manager to provide high level support to researchers and support the development, coordination and implementation of research projects at the NCDC Hub.

5. RESPONSE OPTION DEVELOPMENT

- 2 FTE Research Support Officers to support the coordination of, and participant access to research opportunities across the network. The Support Officers will also work closely with Care Clinicians to provide advice about research opportunities for their clients.
- Multiple clinical roles with a fractional research component. Each state will support research medical clinicians as well as nurse practitioners, registered nurses and Dementia Care Clinicians to enhance / develop their research capability and undertake research at the NCDC in addition to the clinical role/expertise.

Each NCDC Hub will also ensure the co-location of Clinician Academic Fellowships and PhD candidates with the clinical services and educational support staff.

The NCDC Hubs will invest in clinical trial infrastructure to better support the accessibility and coordination of clinical trials across Australia – for both participants as well as NCDC researchers and external organisations. Each NCDC Hub will include collaborative research space, a trial coordination office, interview, consulting and cognitive testing rooms as well as infusion / day treatment rooms. The co-location of the NCDC in leading health precincts will also support access to additional medical and research procedures including PET imaging and lumbar punctures as well as long term bio-fluid storage capabilities.



5.10 NCDC EDUCATION AND RESEARCH STRATEGIC PRIORITIES

DEFINING CARE. PURSUING PREVENTION. TOGETHER.

VISION

- Driven by research and education we will work towards a world where we can prevent and ultimately cure dementia.
- We will improve outcomes for people impacted by dementia and their families, by optimising high-quality clinical care, and accelerating research into dementia prevention, treatments and interventions to live well.¹¹¹

MISSION

It is our mission to transform the environment in which health professionals and researchers learn and discover more about dementia.

Through national collaboration and partnerships, we will advance clinical excellence in dementia diagnosis & care and harness the next generation of research and innovation in:

- the prevention, detection and treatment of dementia; and
- the delivery of care for people living with or at risk of dementia and their care partners.

PRINCIPLES

Working Better Together | Driving Research with Impact | Promoting Excellence in Care

PRIORITIES



Building connectivity & accessibility to optimise outcomes for people impacted by dementia



Finding better ways to prevent/cure dementia & provide diagnosis and care through research translation



Advancing Clinical and Research Leadership & Capability

OBJECTIVES

- Create a national network of comprehensive dementia centres dedicated to improving outcomes for people living with, or at risk of dementia through:
 - high quality clinical diagnosis & care, clinical education and research excellence; and
 - integration with existing medical, health & community services and supports.
- Foster local, national and international collaboration and connections between people impacted by dementia, clinicians, researchers, policymakers, industry and innovators.
- Invest in partnerships which advance understanding and action for the needs and preferences of priority populations.
- Grow a sustainable network that works with existing structures, networks and expertise to advance dementia knowledge and transform the delivery of assessment, treatment and care across Australia.
- Support high quality on-site dementia research in:
 - Prevention & disease causes
 - Assessment & diagnostics
 - Post-diagnostic treatment, therapies and interventions
 - Value-based health care, models of care & health systems
- NCDC clinics to support and contribute to the national research initiatives (e.g. ADNeT, ACCGTR)
- Support access to dementia clinical trials and research opportunities for people living with dementia and their carers through disease journey
- Support evidence-based approaches to optimisation of brain health and dementia risk reduction
- Support research translation and accessibility of research findings & knowledge
- Develop a highly skilled and trusted clinical dementia workforce through:
 - high-quality training, mentoring and professional placements - medical | nursing | allied health
 - telehealth peer-to-peer advisory and consultation service
- Establish dedicated expert clinical care workforce to support ongoing post-diagnostic dementia needs & care preferences
- Support interdisciplinary learning opportunities & the development of clinician-led research capability
- Foster and support contemporary dementia education in health professional courses in universities affiliated with the NCDC.

ACTIVITIES

- Develop clinical, educational and research partnerships to support the needs of vulnerable and diverse populations including Indigenous Australians, culturally and linguistically diverse communities, regional and remote populations, LGBTQ+ community, people living with another disability and people living with younger onset dementia.
- Ensure a contemporary and integrated approach to memory clinic plans and operations across NCDC sites.
- Support placements | internships with researchers & policy makers to be co-located at NCDC clinics.
- Provide access to clinical trial space and support rollout of disease modifying therapies (when available).
- Establish formal governance arrangements for consumer, clinical and research input to NCDC strategic direction.
- Provide mechanisms for timely feedback on NCDC services.
- Conduct gap-analysis on Australia's dementia research needs to identify NCDC priorities.
- Provide support for high-quality research based at the NCDC Clinic.
- Co-locate researchers and PhD candidates together with clinicians and policy / knowledge translation team in NCDC Hubs.
- Support the Clinical Quality Register
- Provide ongoing opportunities for people impacted by dementia to engage in clinical trials and research opportunities (including ADNeT Registry) - this may be at the time of diagnosis or through information provided by the NCDC Care Clinician.
- Provide access to clinical trial site / space for research / industry and new treatment / therapies (pharma and non-pharma).
- Champion the translation, dissemination and implementation of research findings.
- Provide high-quality training placements for medical, nursing and allied health students at NCDC Clinics.
- Provide post-graduate training for medical, nursing and allied health trainees and professionals (either face to face at NCDC Clinic or via telehealth) to improve dementia knowledge with a focus on primary health care professionals (e.g., GP and nurses).¹¹²
- Establish clinical advisory hub to support community-based primary care professionals.
- Support development of research capability and clinician-led research projects.
- Facilitate state-wide (or nationwide) educational sessions to discuss specific issues or example cases.
- Develop training and partnership opportunities with Aboriginal Health Practitioners to enhance Aboriginal health equity and access, diagnosis and care for Aboriginal people
- Provide advice to tertiary institutions on dementia modules and curriculum updates of relevance to health professional degrees in collaboration with Dementia Training Australia (DTA).

¹¹¹ The use of the term dementia is inclusive of the those with mild cognitive impairment (MCI) or a prodromal dementia syndrome.

¹¹² While also providing appropriate financial reimbursement (e.g., optimising the GP+ model which supports GP to be reimbursed for their time with the specialist).

6. OPTIONS

The Project Director together with representatives from the partner organisations modelled four options for the national NCDC.

OPTION	DESCRIPTION	FEASIBILITY
Option 1: No action / delay decision	Status Quo. Clinicians, researchers, care and support providers and policy advocates continue to collaborate in an ad hoc manner in the absence of a comprehensive national dementia model of care or research & education framework. Diagnostic services continue to be delivered across Australia in a heterogenous manner without a national comprehensive model of care.	In light of Australia's ageing population and the predicted increase in dementia prevalence, maintaining the status quo in the delivery of direct patient services, clinical education or research opportunities, will result in a health and aged system that is: • ill-prepared to improve the health outcomes of people at risk of dementia; and • unable to adequately address the increased health and social needs of Australians impacted by dementia.
Option 2: Virtual NCDC with national governance	Create the NCDC in a virtual capacity and establish the clinical workforce together with the necessary governance arrangements without physical state-based hubs to collocate the clinic and clinical advisory hub, post-diagnostic care, researchers and clinical trial rooms	A well-articulated and supported comprehensive dementia care pathway will improve the assessment, diagnostic and post-diagnostic support for people living with, or at risk of dementia. However, it is unlikely to have a significant systemic impact on the upskilling and capability of primary care professionals or increased research participation. The heterogeneity of dementia care is unlikely change without national leadership and structural investment. The opportunity to co-locate researchers and clinicians will not be realised and collaboration / translation opportunities hindered.
Option 3: Implementation of elements of the Model of Care and Research & Education Strategy – e.g., • Establish the Virtual Advisory Hub in each state • Establish Dementia Care Clinician workforce • Provide training for students at teaching hospital dementia clinics • Incentivise dementia clinics to train / mentor GPs or other primary care health professionals with an interest in dementia.	Establish individual elements of the NCDC proposal in each state.	This is likely to result in improvements across discrete areas of dementia care and education. However, it will not be a comprehensive 'one stop shop' and may result in dissatisfaction and frustration for consumers in other areas of need (upstream or downstream) in the care pathway and create add to further system fragmentation. Partial implementation of the NCDC proposal will be beneficial in discrete areas; however, will not provide a national comprehensive, cost-efficient and value-based approach to dementia care, education and research collaboration.

OPTION	DESCRIPTION	FEASIBILITY
Option 4: Virtual network established with national team and staged construction of NCDC Hubs and national rollout to support co-location of all NCDC components: • Diagnosis & Support • Clinical Advisory Hub • Clinical Education & Training • Research Collaboration	Establish the NCDC with the necessary governance arrangements and the staged rollout of state-based NCDC Hubs across Australia. The NCDC Hubs will be established in or near state of the art biomedical / health precincts for increased visibility and proximity to related / required services. In time, the Hubs will connect with and support regional 'spokes' sites.	Bringing together clinical and post-diagnostic care, clinical education and research support through a collaborative alliance as well as physical network will provide a platform and framework to influence and deliver improved medical and clinical care as well as social support and care to people living with dementia, their families and carers, enhance the education of primary health care professionals and support a nationally coordinated research agenda. The physical infrastructure is important to further increase dementia awareness, accessibility and connectivity. The Hubs will provide a clear point of access for members of the public (either physically or virtually) and bring together the care teams, educators and students as well as researchers to improve collaboration and research translation.

6.1 PREFERRED OPTION

The preferred option is Option 4 which incorporates Option 2 and Option 3.

6.2 IMPACT OF NO ACTION

- Maintaining the status quo is unlikely to lead to a coordinated or systemic improvement in dementia diagnosis, education or research collaboration. Collaboration can still occur without the NCDC; however, this may occur at an organisational and conceptual level but not at an organic, operational level. Strategic multidisciplinary collaborations drive successful translation processes and improve community impact; however, if clinicians and support providers, educators, researchers, engineers and policy makers continue with limited deliberate intersection and collaboration it is reasonable to expect that we will not see quantum leaps - as we have with cancer - in the realisation of improved dementia prevention, care and treatments or indeed, a cure.
- The overall standard of dementia care will remain the same, with ad hoc improvements, but with continued delays in diagnosis, limited harmonisation of the care pathway and limited coordination of post-diagnostic support. The

pathway to a timely and accurate diagnosis will remain unclear, fragmented and confusing. Access to ongoing post-diagnostic coordination and support will remain uncertain, limited and fragile.¹¹³

6.3 IMPACT OF DELAY 5 – 10 YEARS

- The social and economic burden of dementia will continue to increase without immediate investment in the coordinated delivery of dementia care as well as research and development opportunities. Delays in the project will have a significant impact on the quality of life for people living with dementia and their families as well as the Australian health, disability and age care systems.
- Translating research into clinical practice or public health policy takes an average of 17 years¹¹⁴ - referenced as the 'valley of death' in Prime Minister, the Hon. Scott Morrison's National Press Club address on 1 February 2022. This process itself needs to change. Translation is complex and requires strategic collaboration between scientific and non-scientific stakeholders that provide required resources, networks and capability – we need to streamline and support the complex challenge of timely incorporation of evidence into policy, practice, service provision and healthcare education.

¹¹³ Low, L., Laver, K., Lawler, K., Swaffer, K., Bahar-Fuchs, A., Bennett, S., Blair, A., Burton, J., Callisaya, M., Cations, M., Wesson, J., et al (2021). We need a model of health and aged care services that adequately supports Australians with dementia. Medical Journal of Australia, 214(2), 66-6.80E+02. [More Information]

¹¹⁴ From evidence to practice: Exploring translation pathways for clinical medical science and public health research, National Foundation for Medical Research and Innovation – July 2020 at <https://nfmri.org.au/wp-content/uploads/NFMRI-exploring-Translation-Pathways-for-website.pdf>

6. OPTIONS

6.4 WHAT DOES THE PREFERRED OPTION LOOK LIKE?

The vision is to see a flagship centre located in each capital city. In order to reach as many Australians as possible, each NCDC Hub will be networked with existing metropolitan, regional and rural health, and community service organisations, currently providing dementia treatment, care and services. Clear pathways and strong relationships supported by technology will help the NCDC better support patients and health practitioners Australia-wide – urban, regional, rural and remote.

The bold physical presence of each NCDC Hub will be a beacon bringing together the diagnostic expertise and post-diagnostic care to best support people receiving a dementia diagnosis as well as a learning precinct for the next generation of dementia and aged care clinicians, health professionals and researchers. The NCDC Hubs will work closely with community organisations and services as well as maintain strong links across the national network. A strong investment in telehealth will be central to the success of the reach of the NCDC – for both patient care and clinical training.

Each NCDC Hub will host:

- An assessment and diagnostic clinic for people at risk of dementia – services provided in person or via telehealth with support of local health professional.
- A Clinical Advisory Hub supporting NCDC dementia experts to provide clinical advice to community based health practitioners to support the diagnosis and management of dementia in a primary care setting.
- A team from Dementia Australia to connect with their education, counselling and other services and programs.
- A team of Dementia Care Clinicians (nurses and allied health professionals) to provide personalised post-diagnostic clinical support and care coordination throughout the course of the disease. This support will be delivered in a hybrid manner – in person at the Hub (or community spokes) and virtually.
- A hands-on learning environment for the next generation of medical and health professionals to learn about dementia and ageing – prevention, detection and care.
- Peer-led training opportunities for community-based primary health practitioners to team up with NCDC clinical experts to increase their dementia knowledge and confidence in delivering dementia care.
- A collaborative research environment to support a national research program and invest in the development of clinician researchers, researchers and PhD candidates. The national research program and infrastructure will optimise participation in clinical trials and other research opportunities. This will be advantageous for researchers as well as people wanting to participate in research and clinical trials. Locating the NCDC Hubs in biomedical / health precinct will also improve access to other medical and health services and leverage access to existing world class technologies including PET imaging.

Additional detail regarding Education and Research strategic priorities is summarised above at **Section 5.10**.

Clinical & Care Hub

- Assessment & Diagnostic Dementia Clinic
- Virtual Clinical Advisory Hub
- Post Diagnostic Care Clinicians
- Experts from Dementia Australia

Research Facilitation & Support

- Provide collaborative clinical & research environment
- Improve research engagement & participation
- Support clinical trial opportunities

Direct Learning & Education

- Hands on training for tertiary students
- Peer-led education for community-based health professionals

7. PROPOSED NCDC GOVERNANCE STRUCTURE

A clear coordinated national vision is paramount to the success of achieving the objectives of the NCDC model. An indicative governance structure includes:

A national consortium accountable to the funding body

The national consortium should include membership from the Commonwealth Government, the partner organisations responsible for the key deliverables (state health services, universities, Dementia Australia) and community representatives. This body is responsible for setting the national strategic direction for the coordinated NCDC care pathway as well as its research and education priorities.

State councils accountable to the national consortium

A council comprised of state-based members of the national consortium will be established. These members are charged with developing a state-based plan to deliver the national agenda and service goals for the NCDC. The work plan for each state should be responsive to the local context, provide flexibility and consider value-creation opportunities. Each council will report to the national consortium.

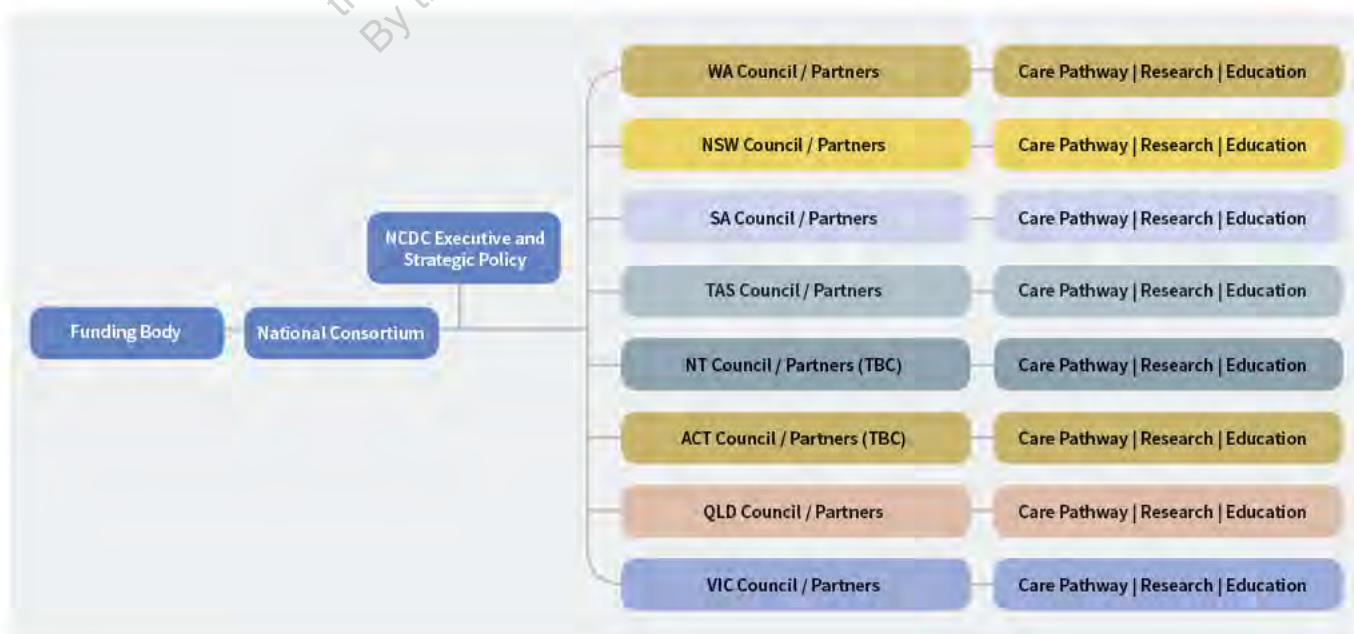
NCDC National Executive, Policy & Coordination Workforce

The NCDC executive and strategic team will work with the state and territory-based network partners to inform and support the implementation and evaluation of the collaborative national strategy. The national team will report to the national consortium. The legal and administrative structure for the NCDC executive and national workforce requires consideration and is yet to be finalised.

The **National Executive, Policy & Coordination Workforce** will include:

- 1 FTE Executive Director responsible for the operation of the NCDC national / executive body and the execution of the national strategy.
- 1 FTE Director, Corporate responsible for the national corporate, finance, media and engagement, people and culture and ICT responsibilities.
- 0.4 FTE Director, Research Collaboration
- 0.4 FTE Director, Clinical Services & Education
- 4 FTE Professional Officers and 2 FTE Administrative support officers to support the corporate, finance, media and engagement, people and culture, and ICT requirements for national operations.
- 4 FTE Strategic Policy Officers to support the Hubs and support the development, dissemination and implementation of networkwide clinical, education and research practice, policy and findings.
- 1 x National Consumer, Education and Research Advisory Committee comprised of 10 representatives to provide strategic advice on the priorities of the NCDC.

We look forward to the opportunity to future the develop the governance structure with the Federal and State Governments.



8. PROPOSED NCDC HUB LOCATIONS

Learning from leading centres around the world, such as the UK Dementia Research Institute¹¹⁵, Alzheimer center of the VU University Medical Center and Ageing and Disability Resource Centers¹¹⁶ in the USA, comprehensive centres must be in or near a precinct that can offer:

- access to the very best dementia research activity
- availability of investigative genomic and imaging technology
- comprehensive medical care
- ease of access to individuals and families.

On consideration of the factors above, we have identified possible sites at Brisbane, Sydney, Melbourne, Adelaide, Tasmania and Perth's biomedical / health precincts, which would be ideal locations to establish the flagship centres to act as exemplars for the national network. The aim is to collocate medical and health professionals, researchers and dementia care experts from the

partner organisations (in their respective states) to bring together their expertise to deliver the NCDC vision, while also leveraging existing partnerships and access to the facilities in the broader health precincts. The founding NCDC partners will work together in their respective states as well as nationally in the case of Dementia Australia and ADNeT to deliver the strategic priorities of the NCDC model.

Existing local partnerships will strengthen the impact and reach of NCDC opportunity in each jurisdiction, for example, the Mindgardens Neuroscience Network in NSW of which the University of New South Wales and the South Eastern Sydney Local Health District are founding members (together with The Black Dog Institute and NeuRA) and new partnerships will be explored as a result of the implementation of the NCDC model, for example, with the development of the Neurosciences Research Institute in QLD at the Royal Brisbane and Women's Hospital which will host the QLD NCDC Hub.



¹¹⁵ <https://ukdri.ac.uk/>

¹¹⁶ ADRCs support consumer-friendly entry points into long-term care at the community level. The ADRC vision grew out of best practice innovations known as “No Wrong Door” (NWD) and “Single Points of Entry” programs, where people of all ages could turn for objective information and one-on-one assistance on their options. This effort helps states make better use of taxpayer dollars by streamlining access to community services and supports (both publicly and privately funded) and diverting individuals from more costly forms of care, including institutional care and unnecessary hospital re-admissions.

The NCDC partner organisations are leaders in their fields – working together at physical hubs as well as part of a national network will be a game changer:

DEMENTIA AUSTRALIA:

Dementia Australia ties together the collaboration with strong advocacy and community support services. It is the national peak body and charity for people, of all ages, living with all forms of dementia, their families and carers. It is the source of trusted information, education and services for the estimated half a million Australians living with dementia, and the almost 1.6 million people involved in their care. Dementia Australia advocates for positive change and supports vital research and provides programs and services to support people impacted by dementia, and to enable them to live as well as possible, as well as their families and carers.



THE AUSTRALIAN DEMENTIA NETWORK (ADNET):

is an integrated network of the country's top dementia researchers to create a sustainable, translational research infrastructure to drive ongoing, high quality research and clinical care for Australians living with, or at risk of, cognitive impairment and dementia. Led by Professor Chris Rowe, ADNeT is comprised of 25 investigators, 12 institutions and a broad spectrum of government, clinicians and consumer advisors. Such research networks are rare in Australia and this unique and valuable resource is ideally placed to co-ordinate research in the NCDC and beyond.



THE UNIVERSITY OF NEW SOUTH WALES (UNSW):

is home to one of the world's top 50 medical faculties, UNSW Medicine and Health Faculty. The faculty is home to the Centre for Healthy Brain Ageing (CHeBA) an international centre of excellence in multidisciplinary research into the ageing brain, which undertakes innovative research and provide the empirical basis to prevent and treat dementia and achieve healthy brain ageing for all Australians, the Ageing Futures Institute, the Tyree Foundation Institute of Health Engineering (pioneering adaptive technologies), the UNSW Centre for Big Data Research in Health, and which provides training for medical students, neuropsychology students and other allied health personnel.



THE SOUTH EASTERN SYDNEY LOCAL HEALTH DISTRICT (SESLHD):

is one of the largest LHDs within NSW, serving a population of nearly 1 million, with a track record in establishing clinical services for both local community and outreach services including to aboriginal communities (through Prince of Wales Hospital), and in innovative programmes for post-diagnostic dementia support (through War Memorial Hospital).

SESLHD together with UNSW, is a foundation partner of the Randwick Health & Innovation Precinct, where the Prince of Wales Hospital has been caring for the community for more than 160 years. The Precinct brings together world-class education, research and healthcare organisations to address real-world problems across the lifespan, from newborns to centenarians. As noted above, UNSW and SESLHD are also founding members of the Mindgardens Neuroscience Network which has been established to improve the lives of people who experience mental health, drug and alcohol and neurological disorders and brings together people with lived experience, clinicians, researchers, health service managers and students in a dynamic community focused on better outcomes through original discoveries, new models of care and system change.



THE UNIVERSITY OF MELBOURNE:

is the top ranked university in Australia and recognised world-wide for expertise in neuroscience. Dementia researchers at the University of Melbourne are recognised as pioneers in multidisciplinary approaches and ranked in the top 1% of highly cited researchers for their calibre and influence on the field.



8. PROPOSED NCDC HUB LOCATIONS

THE ROYAL MELBOURNE HOSPITAL:

has been providing outstanding care and treatment to the sickest in our community since 1848. A world-renowned institution, the RMH plays a key role in the Victorian health sector as a major Victorian referral service for specialist and complex care being a designated state-wide provider for services. The Royal Melbourne Hospital and the University of Melbourne have had an enduring partnership in place for nearly 150 years, collaborating on the clinical teaching and training of healthcare and research leaders of the future.



THE UNIVERSITY OF QUEENSLAND:

is a research-intensive university in the top 50 universities world-wide. The University is home to the Queensland Brain Institute and Clem Jones Centre for Ageing Dementia Research (CJCADR), Australia's first dedicated dementia research centre – home to more than 90 exceptional researchers working to understand what causes dementia and how it can be treated.



THE ROYAL BRISBANE AND WOMEN'S HOSPITAL (RBWH):

is Queensland's largest hospital and provides outstanding care across an extensive range of clinical areas and is known for its preeminent cancer care, maternity, trauma and burns care. The RBWH has proud partnerships with more than 14 Queensland and national universities. With more than 150 years of caring for Queensland, the modern-day RBWH supports and produces world-leading research and education and is a prominent innovator in the pursuit of ever-improving patient outcomes. As mentioned above the QLD NCDC Hub will be collocated at the proposed Neurosciences QLD Research Institute which will be focused on innovation, translation and provide the best care as effectively and efficiently as possible to address Australia's predicted population growth and ageing population.



THE UNIVERSITY OF TASMANIA | THE WICKING DEMENTIA RESEARCH AND EDUCATION:

is at the forefront of translational research and support for issues confronting people with dementia and their carers. Projects are being carried out in Tasmania and nationally, across research fields such as neuroscience, medicine, nursing, psychology and sociology, health, economics and policy. The Wicking Centre, a flagship of the University's College of Health and Medicine, was established in 2008. The Tasmania NCDC Hub will build on the strength of The Island Clinic, which is a bulk billed diagnostic interdisciplinary clinic, underpinned by research, that is available to all Tasmanian adults with suspected cognitive impairment. The clinic has been developed by the Wicking Dementia Research and Education Centre at the University of Tasmania.



AUSTRALIAN ALZHEIMER'S RESEARCH FOUNDATION (AARF):

is a not-for-profit organisation supporting medical research into Alzheimer's disease. AARF's approach is multi-factorial; conducting research from observational, preventative and treatment perspectives. The Foundation is constantly recruiting participants who have no issues with their memory, have minor memory complaints and those who have been diagnosed with Alzheimer's disease. AARF is located at the Ralph & Patricia Sarich Neuroscience Research Institute which is a new world class facility designed to house five of the state's premier neurological research organisations, and foster collaboration of these major neuroscience research groups in Western Australia. The proposed site for the NCDC Hub in WA is at the Neuroscience Institute.



SOUTH AUSTRALIAN HEALTH AND MEDICAL RESEARCH INSTITUTE (SAHMRI):

is South Australia's flagship independent not-for-profit health and medical research institute which is located in Adelaide's "BioMed City" – the largest health and medical research precinct in the Southern Hemisphere. SAHMRI's founding members are the South Australian Minister for Health and Ageing, the South Australian Treasurer, the South Australian Minister for Science and Information Economy, the University of Adelaide, Flinders University and the University of South Australia. The proposed NCDC Hub for SA will be located within the precinct at the Australian Bragg Centre building which is expected to be completed in 2023.



In light of the above, the following sites are proposed for the state based NCDC Hubs:

JURISDICTION	PROPOSED NCDC HUB LOCATION	CAPITAL WORKS	MAX UFA FLOORSPACE
NSW	Health Translation Hub @ UNSW in Randwick	Fit out	1000 sqm
QLD	The Joyce Tweddle Building Redevelopment	Fit Out	1000 sqm
SA	Australian Bragg Centre (SAHMRI 2)	Fit Out	750 sqm
TAS	Intermediate: UTAS Medical Science Precinct	Renovation	750 sqm
	Longer Term: UTAS CBD Melville St Redevelopment or similar new UTAS CBD site.	Fit Out	
VIC	Intermediate Options : RMH Royal Park Campus (Minor Capital Works) or Commercial Tenancy (Fit Out) or Oak St Parkville (Major Renovation)	Renovation & Fit Out	Existing CDAMS + DA + 323 sqm renovation at Royal Park Campus
	Longer Term Options: A floor in a new build at the proposed Arden Health Precinct in North Melbourne or another appropriate site in central Melbourne.	Fit Out	1000 – 4000 sqm
	<i>Note: Options are still being canvassed for the Victorian NCDC Hub and may include the co-location of all Dementia Australia's Victorian operations. The potential longer-term Arden Health Precinct location has not been confirmed and is subject to state government agreement.</i>		
WA	Ralph & Patricia Sarich Neuroscience Research Institute @ Sir Charles Gardiner Hospital	Renovation & Fit Out	700 sqm



9. COSTS & FINANCIAL ANALYSIS

9.1 IDENTIFIED COSTS

a) Capital Expenditure

The table below sets out the estimated **one-off capital expenditure** for the proposed NCDC Hubs sites identified above:

JURISDICTION	CONSTRUCTION	ESTIMATED FLOORSPACE (SQM)	REFURBISHMENT, FURNITURE, FIT OUT & EQUIPMENT ¹¹⁷
NSW	Nil	1000	N/A ¹¹⁸
QLD	Nil	1000	\$1.2M
SA	Nil	750	\$2.5M ¹¹⁹
TAS	2022 - 2027: Nil	750	\$2.5M
	2028: \$10 - \$15M	750	-
VIC	2022 - 2027: Nil	Existing sites + 323	\$2.5M
	2028: \$10 - \$15M	1000	-
WA	Nil	700	\$2.5M
NCDC EXECUTIVE & NATIONAL ROLES	Nil	250	\$0.3M ¹²⁰
	<i>Note: the national NCDC roles and workspaces will be accommodated within the proposed state locations subject to the nature of the staged rollout.</i>		
TOTAL CAPITAL EXPENDITURE			\$11.5M

In summary, \$11.5M of capital expenditure will be required to establish the founding NCDC Hubs in each state. This involves the renovation and / or fit out of 6 sites – no demolition works are expected for these renovations.

These sites will include:

- Entry / Reception / Concierge for all people attending the NCDC Hub
- Dementia & Memory Clinic – Consultation, Testing and Interview Rooms
- Clinical Administration
- Care Clinicians Client Meeting Rooms and Administration
- Research and Education rooms and collaborative space
- Clinical Trials / Treatment rooms
- Laboratory area for centrifuge and short-term bio-fluid storage
- Multi-Disciplinary Team Areas / Shared and Flexible Space

This expenditure does not include the establishment of the regional community spokes. These sites may be existing clinics or community hubs.

¹¹⁷ Includes 80 freezer, -20 freezer, refrigerator, ambient centrifuge, refrigerated centrifuge

¹¹⁸ Included in \$ net per sqm

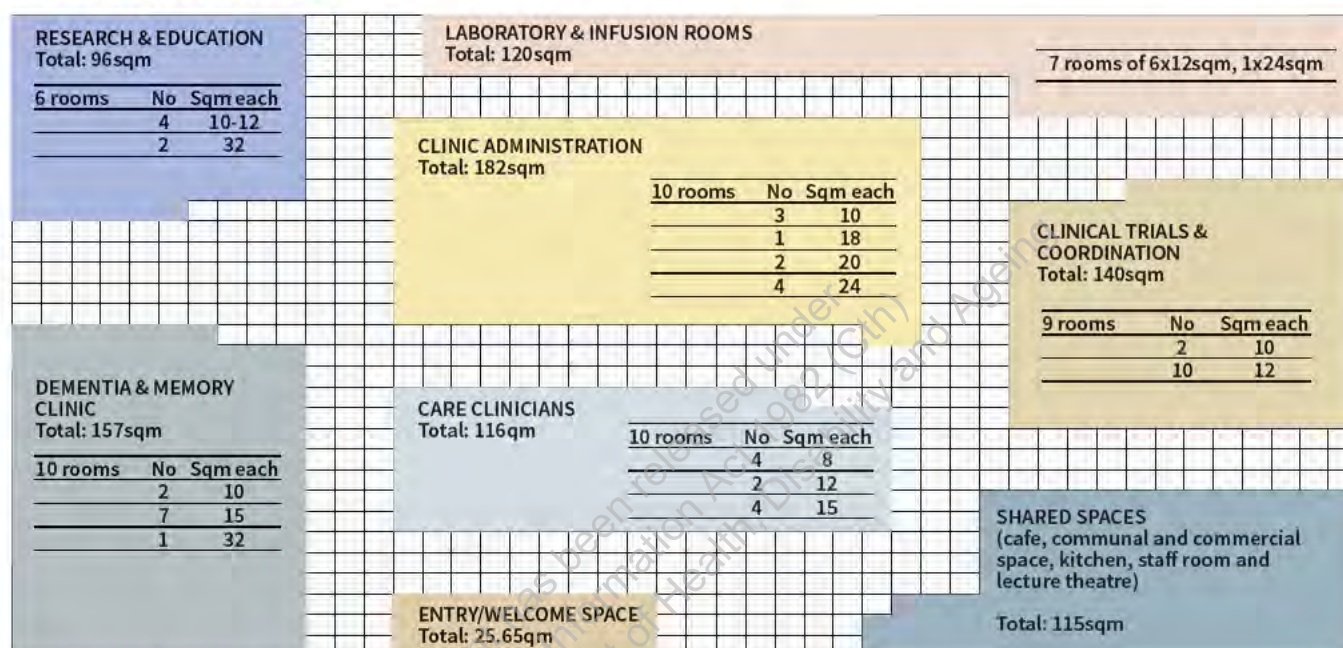
¹¹⁹ In line with WA input

¹²⁰ Includes fit out costs for 250 sqm at QLD estimates.

The image below sets out these area types. **Note:** this is a conceptual map and not indicative of proposed design layout:

NCDC Hub Floor Space Overview Minimum Space Allowance

NSW / QLD / VIC



b) Operating Expenditure

The table below sets out the estimated annual operating expenditure for each NCDC Hub:

	\$ NET PER SQM	\$ NET PER SQM OUTGOINGS (HVAC)	INDIVIDUAL ICT	CONSUMABLES ¹²¹	TOTAL PER YEAR
[(\$ NET PER SQM + \$ NET PER SQM OUTGOINGS) X SQM] + ICT + CONSUMABLES = TOTAL					
NSW	\$650 - \$850 ¹²²	\$180	\$0.2M	\$0.2M	\$1.4M
QLD	\$450 - \$550	N/A ¹²³	\$0.1M	\$0.2M	\$0.85M
SA	\$650	\$150	\$0.2M ¹²⁴	\$0.2M	\$1M
TAS	\$350	N/A ¹²⁵	\$0.1M	\$0.2M	\$0.6M
VIC	\$300	\$185	\$0.2M	\$0.2M	\$0.9M ¹²⁶
WA	\$500	\$0.2M	\$0.2M	\$0.2M	\$0.9M
NATIONAL	N/A	\$0.3M	\$0.03M	\$0.1M	\$0.13M
TOTAL OPERATING EXPENDITURE					\$5.78M p/a

In summary, the annual cost of operating the NCDC is approximately \$6M. This includes the rent and outgoings for each site, individual ICT costs and consumables across the national network.

121 Including: travel, stationary & office supplies, legal expenses, testing equipment and licences. **Note:** This is evenly shared across the NCDC Hubs as some expenses may be coordinated nationally.

122 **Note:** Incentives not applied

123 Included in \$ net per sqm

124 In line with WA input

125 Included in \$ net per sqm

126 **Note** – this is based on 1000 sqm although a location to accommodate site this size has not yet been identified. It is not based on the 323 sqm identified at Royal Park Campus.

9. COSTS & FINANCIAL ANALYSIS

c) Workforce Expenditure

The table below sets out the estimated workforce expenditure (salary + oncosts) for the:

1. National NCDC executive, strategy and corporate services with the national education and research leads.
2. NSW | QLD | VIC – clinical and administrative workforce together with the state based educational and research support functions.
3. SA | TAS | WA – clinical and administrative workforce together with the state based educational and research support functions.

FUNCTION	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Executive National Leadership Strategic Policy Training & Education Leads Research Leads Corporate	\$3.5M (19 FTE)	\$3.5M (19 FTE)	\$3.5M (19 FTE)	\$3.5M (19 FTE)	\$3.8M (19 FTE)
NSW QLD VIC Clinic & Advisory Care Clinicians Research Support Education Support Corporate Support	\$10.5M Per state (67.4 FTE)	\$10.7M Per state (67.4 FTE)	\$10.9M Per state (67.4 FTE)	\$11.2M Per state (67.4 FTE)	\$11.4M Per state (67.4 FTE)
SA TAS WA Clinic & Advisory Care Clinicians Research Support Education Support Corporate Support	\$6.0M Per state (38.8 FTE)	\$6.1M Per state (38.8 FTE)	\$6.2M Per state (38.8 FTE)	\$6.4M Per state (38.8 FTE)	\$6.4M Per state (38.8 FTE)
TOTAL ¹²⁷	\$53M	\$54M	\$55M	\$56.5M	\$57.2M

For a detailed breakdown of the staff workforce refer **Appendix A**. Note: it is not expected that Year 1 will operate at 100% of the modelled workforce capacity as it will take time to recruit, onboard and build up the professional, clinical and support workforces.

In summary, the workforce expenditure for the NCDC is estimated to be \$53M in Year 1 increasing to \$57.2M in Year 5. The workforce is as per Table below.

LOCATION	ROLE	NATIONAL FTE	NSW QLD VIC	SA TAS WA	BAND (QLD GOVT)
National					
	Executive	2.8	Note: 10 members		Executive
	Policy	4			AO7
	Corporate	4			AO7
	Administrative	2			AO3
	Advisory Committee	1			Consumer, Community, Research, Clinical Advisory Committee
	Research Lead(s)	1.6			HP5
	Training & Education Lead(s)	1.6			HP5
	Care Clinician Training & Education Lead	2			NRG8 or Equiv.

¹²⁷ This is the sum of the National Staff + 3 x Large State + 3 x Small State. The pay scales of QLD Government have been used to model that workforce salary + oncosts.

LOCATION	ROLE	NATIONAL FTE	NSW QLD VIC	SA TAS WA	BAND (QLD GOVT)
Research (Per State)					
	Research Manager		1	1	HP4
	Clinician Academic Fellowship		N/A	N/A	External Funding
	Research Positions (incl. Coordinators & RAs)		2	2	AO4
	PhD Student		N/A	N/A	External Funding
Education (Per State)					
	Education Officer (incl. Placement Coordinators / Training / Engagement)		2	2	AO5
Clinic & Care Clinicians					
	Clinical Intake (Dx) & Care Clinician (PDx) Coordinator		3	1.5	HP5 / CNC
	Senior Administrative Support		1	1	AO5
	Admin. Support (Whole of Service - Intake & Concierge)		3	2	AO3 / AO4
	Administrative Support (Clinic specific)		2	1	AO3
	Administrative Support (Advisory / Tele specific)		2	1	AO3
	Administrative Support (Care Clinicians)		2	1	AO3
	ICT Support		1	0.5	AO5
	Medical Clinician		1	1	Specialist
	Research Clinician (e.g., Cognitive Neurologist, Geriatrician, Psychiatrist (OAP Neuro) (0.4 Clinical + 0.6 Research)		5	2	Specialist + Research
	Neuroradiologist		0.2	0.2	Specialist
	Specialist Registrar		0.9	0.5	RMO 13
	GP or GP Registrar		1	0.5	RMO 13
	Nurse Practitioner (Clinical)		1.8	0.9	NRG8
	Nurse Practitioner (Research)		1.2	0.6	NRG8
	Registered Nurse (Clinical)		1.8	0.9	NRG5
	Registered Nurse (Research)		1.2	0.6	NRG5
	Neuropsychologist		2	1	HP5 / HP4
	Clinical Psychologist		1	0.5	HP4
	Occupational Therapist		2	1	HP4
	Social Worker		2	1	HP4 / HP3
	Speech Pathologist		1	0.5	HP4
	Pharmacist		0.3	0.3	HP4
	Community Liaison Allied Health Professional		1	0.3	HP3
	Interpreter (Outsourced)				
	Care Clinician Team Leader		2	1	HP5 or Equiv.
	Care Clinician (Clinical)		16	8	NRG6 / HP4 / HP3
	Care Clinician (Research)		4	2	NRG6 / HP4 / HP3
Corporate (Per State)					
	HR Pay Roll Accounting Banking		3	3	AO7
Total		19	67.4	38.8	

9. COSTS & FINANCIAL ANALYSIS

Note: the workforce mix does not include roles which are already funded through other initiatives which are included in the NCDC model – for example, staff included in the expansion of the National Dementia Support Program delivered by Dementia Australia or research fellows and PhD candidate scholarships.

MBS Revenue:

The estimated annual MBS revenue from medical assessment, diagnostic and management services is \$1M per large state and \$0.5M per smaller state. This is a total of \$4.5M per year. It is recommended that a health economic analysis is conducted to support the implementation design and evaluation of the model of care and the care pathways, based on principles of value based healthcare for each jurisdiction. Refer to **Appendix A** for modelling.

Total Expenditure – 5 year operating model:

The total capital expenditure to establish the NCDC is \$11.5M. This will support the development of six strategically located NCDC Hubs to set the foundation for the network.

The recurrent operating costs of the NCDC are \$6M per year with workforce expenditure calculated at \$53M in Year 1 and reaching

\$57.2M in Year 5. MBS Revenue is estimated at \$4.5M per year across the network which can be offset against the salary costs.

Total expenditure of \$300M will support the establishment and operation of the NCDC over 5 years.

The NCDC partners seek the support of the Federal and State Governments to deliver on the NCDC model to establish these centres of excellence which bring together people impacted by dementia, clinicians, care experts, educators, researchers and policymakers to make a real change to the narrative for our ageing population and our treatment of dementia.

9.2 ECONOMIC BENEFIT OF THE NCDC MODEL

The economic impact of dementia is a major concern nationally and internationally as the number of individuals with dementia continues to rise. In the absence of a significant medical breakthrough the number of Australians living with dementia is expected to increase to an estimated 1.1 million by 2058.¹²⁸ By 2025, the total cost of dementia is predicted to increase to more than \$18.7 billion in today's dollars, and by 2056, to more than \$36.8 billion.¹²⁹

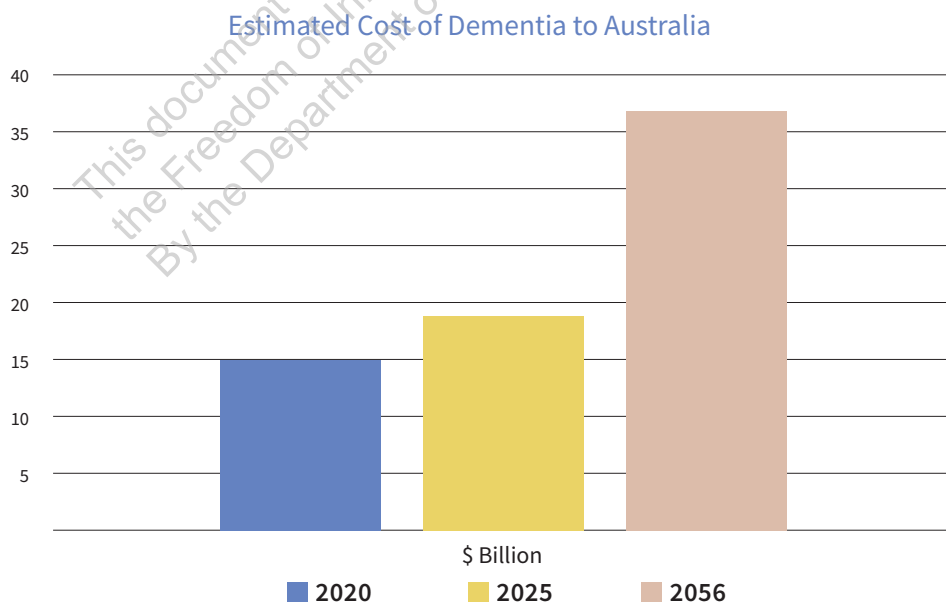


Figure 12. Estimated cost of dementia in Australia (\$B)

¹²⁸ Dementia Australia (2018). Dementia Prevalence Data 2018-2058, commissioned research undertaken by NATSEM, University of Canberra.

¹²⁹ The National Centre for Social and Economic Modelling NATSEM (2016) Economic Cost of Dementia in Australia 2016-2056.

In the absence of a cure, improving access to a timely diagnosis, treatment and care according to evidence-based guidelines and health-related quality of life currently represents the best solution to delay the progression of the disease and satisfy the needs of people with dementia and caregivers.¹³⁰ As such, effective interventions that enable people to remain in their own home as they age are of significant interest.¹³¹ There is a large body of evidence which demonstrates that quality clinical care and comprehensive management of individuals with dementia or a prodromal dementia syndrome result in better health, social and economic outcomes for individuals, their families and their carers.

In a recent cluster-randomised controlled trial Michalowsky et al., evaluated a community based collaborative dementia care model aiming to support people with dementia and their caregivers through coordination and management of optimal treatment and care. The program was delivered in the participants homes by nurses with dementia specific qualifications and focused on:

- management of treatment and care
- medication management
- caregiver support and education

Each participant had an individual intervention plan with respect to their needs and the recommendation of evidence-based guidelines and was discussed with the GP and various health care and social service professionals. The study revealed that compared with usual care, community-based collaborative dementia care management increased quality-adjusted life years (QALYs), decreased costs due to lower hospitalisation and a delayed institutionalisation by an average of 7 months. The study demonstrated that collaborative dementia care management was especially beneficial for people living alone.

Furthermore, Jennings et al., showed that comprehensive dementia care reduces the number of admissions to long-term residential aged care, and depending on program costs, may be cost neutral or cost saving.¹³² This program implemented a co-management model based at an academic health care system partnering with community-based organisations to provide comprehensive, coordinated, patient centred dementia care. A dementia care manager – a nurse practitioner - focused on the comprehensive care of dementia while allowing the primary care physician to retain responsibility for the clinical treatment of dementia and other conditions.

In 2018/19 residential aged care facilities accounted for over 55% of Australia's direct health and aged care system expenditure directly attributable to dementia – at a cost of \$1.7B. This suggests that investing in a collaborative community-based dementia care management approach, like the NCDC model, is likely to be a cost-effective strategy in treating dementia. This is beneficial for both people living with dementia, their family and carers as well as Australian taxpayers.

The NCDC model involves a comprehensive community-based dementia care management blueprint to be implemented in each state which shares several key elements of the models evaluated above:

- supporting a timely diagnosis
- an individualised care plan incorporating patient preference, needs and specialist recommendations
- a clinical dementia expert responsible for the coordination, implementation and management of the care plan in collaboration with the patient, care partners, GP and other health and social care professionals
- care giver support and education (directly, with the Dementia Care Clinicians and with referral to Dementia Australia and other appropriate services).

Supporting Early Diagnosis and Preventative Interventions

The NCDC will become Australia's largest dementia diagnostic network. The NCDC model estimates the provision of over 6,000 assessment & diagnostic sessions each year. Based on information collected from the ADNeT Clinical Quality Register it is estimated that 30% of patients will not be diagnosed with dementia rather a prodromal dementia syndrome such as mild cognitive impairment (MCI). The NCDC model will ensure that a person with MCI is scheduled for a review and provided with the latest treatment and advice to delay the progression of the disease, supported to connect with the appropriate services such as Dementia Australia, and informed about research opportunities and clinical trials.

As modelled in *The Economic Cost of Dementia in Australia 2016 – 2056* preventing or delaying the progression of dementia will help reduce the economic cost and disease burden of dementia. In the hypothetical intervention scenario a 5% reduction in annual incidence of dementia would lead to a 13% reduction in the number of persons with dementia in the population by 2036 and a 24%

130 Michalowsky B, Xie F, Eichler T, Hertel J, Kaczynski A, Kilimann I, Teipel S, Wucherer D, Zwingmann I, Thyrian JR, Hoffmann W. Cost-effectiveness of a collaborative dementia care management-Results of a cluster-randomized controlled trial. *Alzheimers Dement*. 2019 Oct;15(10):1296-1308. doi: 10.1016/j.jalz.2019.05.008. Epub 2019 Aug 10. PMID: 31409541.

131 Luker JA, Worley A, Stanley M, Uy J, Watt AM, Hillier SL. The evidence for services to avoid or delay residential aged care admission: a systematic review. *BMC Geriatr*. 2019 Aug 8;19(1):217. doi: 10.1186/s12877-019-1210-3. PMID: 31395018; PMCID: PMC6686247.

132 Jennings LA, Laffan AM, Schlissel AC, et al. Health Care Utilization and Cost Outcomes of a Comprehensive Dementia Care Program for Medicare Beneficiaries. *JAMA Intern Med*. 2019;179(2):161–166. doi:10.1001/jamainternmed.2018.5579

9. COSTS & FINANCIAL ANALYSIS

reduction by 2056. Such an intervention would result in a total savings of \$26.8 billion in the costs of dementia over the next twenty years (comprising savings in direct costs of \$17.6 billion and indirect costs of \$7.2 billion) and a massive \$120.4 billion by 2056 (savings in direct costs of \$76.6 billion and indirect costs of \$43.8 billion).¹³³

Preventing dementia and slowing the progression of dementia are key in reducing the social, health and economic burden of dementia. The NCDC will play a critical role in the clinical assessment and treatment of people with MCI as well as making timely connections with clinical trials and interventions. The NCDC – as both a clinical service and advisory hub for community-based clinicians – will have an influential role in supporting the early diagnosis and early intervention for people with MCI or mild dementia and contribute to the National Dementia Strategy to achieve a 5% reduction in the number of people with dementia over the age of 65. This will be an important contribution to reducing the economic burden of dementia in Australia.

Reducing Health Service Utilisation and Hospitalisation

Connecting with support early is important. An evaluation of McGrath Breast Care Nurse program showed a reduction in health service utilisation and costs savings when a cancer patient is connected early with a BCN.¹³⁴ Michalowsky et al has also demonstrated that timely diagnosis and early initiation of collaborative dementia care management is likely to be cost-effective by improving quality life adjusted years (QALYs) at lower costs compared with usual care, especially for people with dementia who live alone.¹³⁵

In 2016 – 17 there were 94,800 dementia hospitalisations. The Australian Institute of Health and Welfare data shows that most dementia hospitalisations are for acute care (72%) followed by geriatric evaluation and management (8%), maintenance care (7%) and rehabilitation care (6%)—and commonly began with a new admission from the community (70%) and ended with the patient going home to their usual place of residence (48%).¹³⁶ Most new admissions (70%) were admitted from the community (approx. 66,000 admissions). Almost 1 in 2 hospitalisations ended with the patient going home; about 1 in 3 ended with the patient continuing

care in hospital (for example, the patient was transferred to another hospital, or the type of hospital care changed); almost 1 in 5 ended in a new admission to residential aged care; and 6% ended with the patient dying in hospital. We also know that the average cost of hospitalisation is greater among people with dementia than people without dementia for most of the other common principal diagnoses - \$19,300 on average per hospitalisation for people with dementia compared with just over \$15,00 on average, per hospitalisation for people without dementia.

Comprehensive community-based dementia management has been shown to decrease costs due to reduced hospitalisations.¹³⁷ In 2018/19 the direct cost of dementia hospitalisations in Australia was \$383M. As indicated above, nearly 20% of the dementia hospitalisations led to a new admission to a residential aged care facility.

These unplanned transitions are not only expensive, but they can be lifechanging and stressful, leading to increased risk of poor health outcomes, including complications, morbidity, and mortality.¹³⁸ Reducing the number of community admissions for people living with dementia (based on 2016-17 data) by 5% this would result in annual savings of \$64M (66,000 x 0.05 x \$19,300) – which could support over 400 community-based Dementia Care Clinicians. By investing in comprehensive dementia care early we can better support people's needs, improve quality of life and reduce the likelihood of adverse events which lead to acute care hospitalisations. Reducing hospitalisation also reduces the likelihood a person living with dementia will be admitted to residential care. Residential care is costly, and we know that Australians want to age in their homes. The evidence demonstrates that investing in comprehensive community-based care is a cost-effective and beneficial strategy to support people living with dementia, their families and carers.

Delaying Admission to Residential Aged Care Facilities

It is estimated that 1/3 of people living with dementia reside in residential aged care facilities – approximately 132,000 people. In 2018 Gnanamanickam et al. estimated that the annual whole-of-system cost for people living with dementia in residential care was

133 [The National Centre for Social and Economic Modelling NATSEM \(2016\) Economic Cost of Dementia in Australia 2016-2056.](#)

134 Mahony, J., Masters, H., Townsend, J., Hagerty, F., Fodero, L., Scuteri, J., & Doromal, D. (2019). The Impact of Breast Care Nurses: An Evaluation of the McGrath Foundation's Breast Care Nurse Initiative. *Asia-Pacific journal of oncology nursing*, 6(1), 28–34. https://doi.org/10.4103/apjon.apjon_61_18

135 Michalowsky B, Xie F, Eichler T, Hertel J, Kaczynski A, Kilimann I, Teipel S, Wucherer D, Zwingmann I, Thyrian JR, Hoffmann W. Cost-effectiveness of a collaborative dementia care management-Results of a cluster-randomized controlled trial. *Alzheimers Dement*. 2019 Oct;15(10):1296-1308. doi: 10.1016/j.jalz.2019.05.008. Epub 2019 Aug 10. PMID: 31409541.

136 [Australian Institute of Health and Welfare 2019. Hospital care for people with dementia 2016–17. Cat. no. AGE 94. Canberra: AIHW.](#)

137 Michalowsky B, Xie F, Eichler T, Hertel J, Kaczynski A, Kilimann I, Teipel S, Wucherer D, Zwingmann I, Thyrian JR, Hoffmann W. Cost-effectiveness of a collaborative dementia care management-Results of a cluster-randomized controlled trial. *Alzheimers Dement*. 2019 Oct;15(10):1296-1308. doi: 10.1016/j.jalz.2019.05.008. Epub 2019 Aug 10. PMID: 31409541.

138 Hirschman KB, Hodgson NA. Evidence-Based Interventions for Transitions in Care for Individuals Living With Dementia. *Gerontologist*. 2018 Jan 18;58(suppl_1):S129-S140. doi: 10.1093/geront/gnx152. PMID: 29361067.

approximately AU\$88,000.¹³⁹ The cost of residential care constituted 93% of the total costs (approx. **\$82,000**).

With comprehensive dementia care we know that we can delay admissions to residential care facilities. If we could reduce the number of people with dementia currently living in residential aged care by just 1% this would account for approximately 1320 people continuing to reside in the community. Hypothetically, the annual cost of \$108M (**\$82,000** x 1320) to provide residential care (excluding health care costs) to these people could be invested in comprehensive community-based care and management to improve the quality of life for people living with dementia and their families at home.

There is no question that residential aged care facilities provide an important and necessary service for our community; however, the goal of the NCDC is to connect early with people living with dementia to provide ongoing coordinated care management that optimises quality of life and support people to live well in their home for longer. At 100% capacity the proposed NCDC workforce model will support 11,000 people living with dementia and their families to be partnered with a Dementia Care Clinician to support comprehensive care management and coordination each year at a cost of \$17M per year.

Hypothetically, if engagement with the Dementia Care Clinicians results in a 1-year admission delay to a residential aged care facility for 2% of these clients, this would see 220 people (2% of 11,000) in Year 2 remain living at home who would have otherwise entered a residential aged care facility. This would result in an overall program cost saving of \$1M ($\$82,000 \times 220 = \18M minus \$17M). If this impact is increased to 10%, we would estimate a program saving of nearly \$73M in Year 2 ($\$82,000 \times 1100 = \90M minus \$17M). **Note:** in the absence of a medical breakthrough, it is reasonable to expect that the demand for Dementia Care Clinicians will increase to better address the need for comprehensive care coordination.

This conservative illustration demonstrates that with Australia's ageing population and the increasing rate of dementia it is time for us to pivot our focus to comprehensive community-based dementia care – preventive interventions, timely assessment and diagnosis, comprehensive coordinated post-diagnostic management care and support – to ensure that people have a high-quality evidence-based care pathway to better support them to age at home which is also cost-effective and beneficial for all Australians.



¹³⁹ Gnanamanickam, E. S., Dyer, S. M., Milte, R., Harrison, S. L., Liu, E., Easton, T., Bradley, C., Bilton, R., Shulver, W., Ratcliffe, J., Whitehead, C., & Crotty, M. (2018). Direct health and residential care costs of people living with dementia in Australian residential aged care. *International journal of geriatric psychiatry*, 33(7), 859–866. <https://doi.org/10.1002/gps.4842>

10. PROJECT RISKS

The NCDC is an ambitious proposal. We seek to change the way we think about and deliver dementia care in Australia. At this stage, the greatest risks to the project relate to stakeholder support and securing funding. The major cost risks are highlighted below.

Risk	Risk Possibility	Comment / Treatment
Stakeholder commitment to support the initiative - the inability to raise sufficient funding	Possible	The NCDC partnership will work closely with the Commonwealth and State Governments representatives as well as the private sector and philanthropic donors to secure the ongoing support for the national initiative before commencing the roll out in each jurisdiction.
Renovation / Fit out cost estimates are too low	Possible	A detailed design will be completed and costed for each Hub. Estimates have been provided based on the proposed location, floorspace requirements, workforce mix and the proposed activity for each space. However, detailed plans have not been developed at this stage. Demolition costs are not expected as part of the proposed renovations and fit outs.
Recurrent cost estimates are too low - Increase in scope / demand	Possible	The NCDC model of care together with the research and education streams has been developed with extensive national engagement. The partners at each NCDC Hub will adopt the NCDC model to best address the local need and strengthen local networks. The NCDC proposal is based on strong partnerships and each state partner will be involved in developing the agreed national vision and strategy. In the absence of a cure and with advancements in diagnostic capabilities, it is expected that the demand for dementia services will increase, and each partner organisation will need to review their service in light of the increased demand as well as any scientific breakthroughs and other innovations that may impact on service delivery.
Costs are not included	Possible	A detailed costing will be prepared during the detailed design process for each NCDC Hub site. A detailed staffing model has been prepared; however, it will need to be reviewed to accommodate the timing required to onboard and scale to 100% of operating capacity. Project management and planning costs for the NCDC project roll out, establishing governance structures and associated recruitment has not been included in the costs in this Business Case.
Project delay	Possible	It is expected that the NCDC will be a staged roll out in negotiation with the NCDC partners and the Federal and State Governments. It is not expected that each state NCDC Hub will commence operations simultaneously.

11. OUTCOMES & BENEFITS

The plight of people living with dementia and their families is largely hidden, taking place in the shadows of more high-profile areas of health with disease modifying treatments. The NCDC partnership will bring dementia diagnosis and care forward into the light, delivering the same world-class standard of care that is currently afforded to breast cancer, prostate cancer and stroke patients in Australia.

There is overwhelming evidence that comprehensive dementia management results in improved health and social outcomes for people living with dementia, their families and carers as well as cost savings in the health and aged care service utilisation.^{140,141,142}

The NCDC will:

- Establish a comprehensive dementia care pathway for all Australians – improved access to timely diagnosis, better planning and coordination of care, and carer support.
- Grow a primary health care workforce with greater capability and confidence in dementia prevention as well as the assessment, diagnosis, referral pathways and ongoing management.
- Integrate dementia research with clinical care to advance dementia prevention, diagnostics, treatment and care.

The long-term vision is to strengthen the relationships between the partner organisations at the NCDC Hubs, community-based memory and dementia clinics, community-based care and support services and government portals to improve the delivery of care for people impacted by dementia and improve their quality of life. The quality of care will continue to improve as we continue to invest in research and its translation. Our research community is critical to evaluating better ways to care, improve diagnostic tools and assessment processes – and indeed, finding the cause and finding a cure.

11.1 EVIDENCE OF BENEFIT DELIVERY

This new, integrated approach to dementia diagnosis, support and management will give a sense of hope and peace of mind that is missing in the currently fragmented dementia care system – to everyone — people impacted by dementia, health and care professionals and researchers alike. The NCDC Hubs and the NCDC partnership will radically improve the accessibility, consistency and quality of care for people with dementia and their families and will dramatically accelerate research capability and translation. The benefits of the NCDC will be demonstrated by the following:

1. Enhanced quality of life for people living with dementia and their carers

- Access to a timely diagnosis and a clearly articulated care pathway
- Consistent referrals to Dementia Australia for information, education programs and social supports
- Connection with a Dementia Care Clinician to provide continuity of care and coordination consistent with the goals and preferences of the person living with dementia and their care partners / family
- Access to most up to date advice and information from NCDC interdisciplinary dementia experts and partners.
- An increased confidence in dementia diagnosis and care services in Australia

2. Improved Health Practitioner Experience and Expertise

- Clear local dementia care and referral pathway for GPs and other primary health professionals
- Improved willingness in primary care to make referrals or contact state Clinical Advisory Hub
- Training opportunities for medical, nursing and allied health tertiary students
- Training and mentoring opportunities for primary care trainees and professionals

3. Improved Research Collaboration and Translation

- The development and implementation of a coordinated national dementia research agenda
- A greater number of clinical trials conducted in a broader range of dementia fields, with growth in the number of patients involved with and participating in clinical trials and dementia research
- Development of new collaborative programs and partnerships in rapidly advancing areas of dementia research, such as fundamental biological research and biomarkers (e.g., disease mechanisms, diagnostics & treatment), targeted therapies (e.g., anti-amyloid therapies), lifestyle modification for prevention and technology in home care, and vulnerable and diverse communities (incl. Indigenous Australians, LGBTIQ+ and culturally diverse communities)
- Increased capacity and capability of the dementia research and scientific community as well as medical, nursing and allied health workforce

140 Social Care Institute for Excellence, Why early diagnosis of dementia is important; 2015. (UK study).

141 Prince M, Bryce R, Ferr C. (2011). Alzheimer's Disease International World Alzheimer Report 2011: The benefits of early diagnosis and intervention. Institute of Psychiatry King's College London Alzheimer's Disease International.

142 Rasmussen, J., & Langerman, H. (2019). Alzheimer's disease—why we need early diagnosis. Degenerative Neurological and Neuromuscular Disease, 9, 123.

11. OUTCOMES & BENEFITS

- Accelerated translation of research advances into standard care for people living with dementia, their families and carers

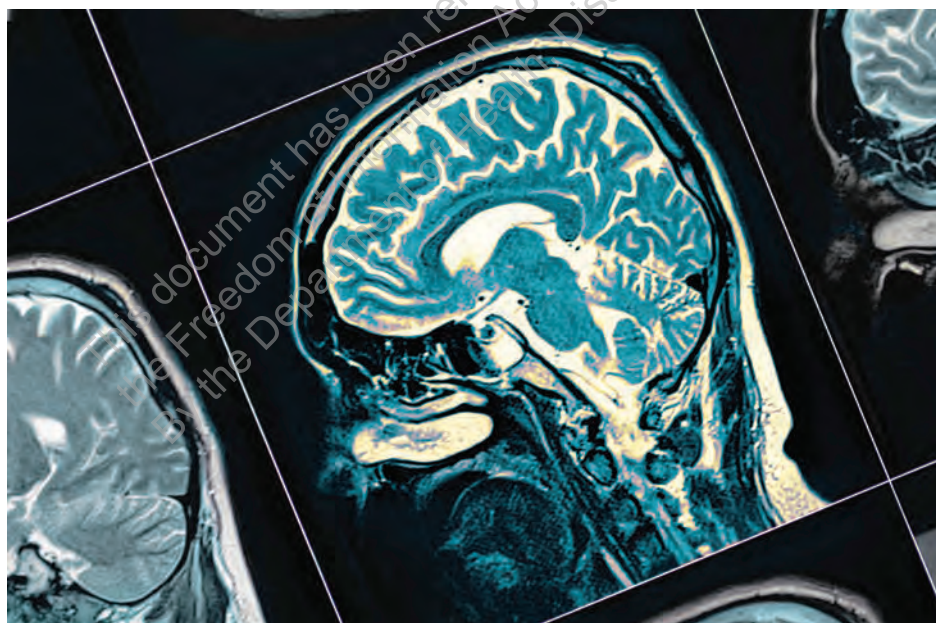
4. Enhanced Healthcare Value

- Greater identification and modification of risk factors to reduce overall prevalence and disease burden
- People living with dementia remain at home for longer and delay admission to residential aged care facility (if preferred and in the best interest)
- Reduction in unexpected hospitalisations and crisis incidents
- Reduced duplication and better streamlining and integration of dementia care with existing service providers
- Increased institutional collaboration and greater investment in dementia research and care
- Improved clinical workforce education, capacity and capability
- Improved information and data collection, coordination and utilisation - a learning health system that values learning cycles and continuous improvement



12. IMPLEMENTATION TIMELINES

Milestone:	Indicative Timeframe - Subject to Funding
1. Submit Business Case to Federal and State Governments	April 2022
2. Establish the NCDC National Governance Arrangements	July – Sept 2022
3. Develop a National Staged Roll Out Plan for the NCDC and each NCDC Hub	October 2022 – March 2023
4. Commence Renovation and Fit Out Phase	March 2023 onwards
5. State-based planning to commence staged rollout of Year 1 of NCDC Operations	March 2023 onwards



13. MONITORING & EVALUATION

The NCDC will be an Australian first. The model of care will be adapted for each jurisdiction and implemented by the partner organisations. A monitoring framework will be developed in collaboration with NCDC partners as well as other key stakeholders including the Department of Health, Australian Institute of Health and Welfare and the Aged Care Centre for Growth and Translational Research.

Evaluating the NCDC and its model of care is one of the priorities identified by the **NCDC National Research and Education Advisory Committee**. The NCDC model of care and infrastructure has the capacity to support Australia address its knowledge and data gap in monitoring and reporting on dementia.¹⁴³

It is recommended that a health economic analysis is included in the evaluation of the model of care, based on principles of value-based healthcare. It is anticipated that the NCDC model of care and service delivery will attract significant interest – it proposes a new way to deliver integrated value-based health care for people impacted by dementia across Australia.



143 Australian Institute of Health and Welfare 2020. Dementia data gaps and opportunities. Cat. no. AGE 105. Canberra: AIHW.

14. BUSINESS CASE PROJECT GOVERNANCE

The members of the NCDC partnership driving the development of the NCDC proposal are:

- Dementia Australia (National)
- University of Melbourne (Vic)
- University of New South Wales (NSW)
- University of Queensland (QLD)
- Royal Melbourne Hospital (Vic)
- South Eastern Sydney Local Health District (NSW)
- Royal Brisbane and Women's Hospital (QLD)
- Australian Dementia Network (ADNeT) (National)
- Australian Alzheimer's Research Foundation (WA)
- South Australian Health and Medical Research Institute (SAHMRI) (SA)
- University of Tasmania – Wicking Dementia Research and Education Centre (Tas)

14.1 STEERING COMMITTEE

The members of the NCDC Steering Committee are:

Member Name	Position
Professor Graeme Samuel AC (Co-Chair)	Chairperson, Dementia Australia
Professor Vlado Perkovic (Co-Chair)	Dean, Faculty of Medicine & Health, University of New South Wales
Professor Geoff McColl	Executive Dean, Faculty of Medicine University of Queensland
Professor Jane Gunn	Dean, Faculty of Medicine, Dentistry & Health Sciences University of Melbourne
Dr David Rosengren	Executive Director, Royal Brisbane & Women's Hospital
Professor Christine Kilpatrick AO	CEO, Royal Melbourne Hospital
Mr Tobi Wilson	CEO, South Eastern Sydney LHD
Professor Christopher Rowe	Director, Australian Dementia Network (ADNeT)
Ms Maree McCabe AM	CEO, Dementia Australia
Professor James Vickers	Co-Director, Wicking Dementia Research & Education Centre
Mr Graeme Prior	Chairperson, Australian Alzheimer's Research Foundation
Professor Steve Wesselingh	Executive Director, South Australian Health and Medical Research Institute

The Steering Committee met 8 times between July 2021 and March 2022.

14.2 STAKEHOLDER CONSULTATION

The NCDC Model of Care has been developed in response to an extensive national consultation process¹⁴⁴ with people impacted by dementia and dementia advocates, health care professionals and researchers. Below is an overview of the stakeholder governance and the individuals who provided input to the NCDC deliberations and model. In total, there were in excess of 50 consultation sessions with the following groups:

- Six **state-based advisory committees** and individual experts to provide advice on the development of a comprehensive model of care and on the optimal care pathways for people living with dementia (or a prodromal dementia syndrome). These committees have provided advice on opportunities to
- systemically improve clinical outcomes and quality of life for people affected by dementia and the role of the NCDC as:
 - physical hubs bringing together care (medical and psychosocial), clinician education and research excellence
 - a national network.
- A **national research and education advisory committee** to provide advice on the strategic opportunities for the NCDC to nationally accelerate research translation and enhance applied training opportunities for medical, nursing and allied health students, general practitioners and other primary care

¹⁴⁴ Together with preliminary work and consultation that was undertaken by Aspex Consulting in 2020 to prepare the National Comprehensive Dementia Centre Feasibility Report.

14. BUSINESS CASE PROJECT GOVERNANCE

clinicians. This committee includes experts in ageing and aged care research invited to the roundtable facilitated by the National Ageing Research Institute (NARI) in October 2021 to inform the Federal Government's national research priorities for ageing and aged care.

- c) **Consumer consultation** with the Dementia Australia Advisory Committee as well as a Community Conversation, facilitated by the WA Health Translation Network Consumers and Community Involvement Program which provided opportunities for people with a lived experience to be able to learn about and inform the proposal at the earliest opportunity.

Government support for the NCDC Business Case will provide further opportunities for consultation and engagement to further develop and co-design specific elements of the NCDC model including governance. This would include engaging people impacted by dementia, clinicians and health services, researchers and academic institutions as well as government stakeholders to ensure the delivery of a high-quality dementia service which aims to improve the outcomes and experiences of people living with dementia, their families and carers.

STATE-BASED ADVISORY COMMITTEES (MODEL OF CARE)

New South Wales Advisory Committee Membership	
Professor Sean Emery	Senior Vice Dean (Research & Operations) Faculty of Medicine & Health UNSW
Dr Stephanie Ward	Geriatrician and Senior Research Fellow, Mindgardens / UNSW / Prince of Wales Hospital
Mr John Grill AO	Chairperson, Mindgardens
Professor Henry Brodaty AO	Scientia Professor, UNSW
Professor Sharon Naismith	Professor, Sydney Brain and Mind Institute, The University of Sydney
A/ Professor Peter Gonski	Aged Care Stream Clinical Director SESLHD, Associate Professor, UNSW
Professor Perminder Sachdev AM	Scientia Professor, UNSW
Professor Mark Parsons	Professor, UNSW
A/ Professor Jackie Curtis	Director, Mindgardens
Professor Kaarin Anstey	Professor, NeuRA / UNSW, Director: UNSW Ageing Futures Institute

Victorian Advisory Committee Membership	
Professor Nicola Lautenschlager	Professor, The University of Melbourne & The Royal Melbourne Hospital
Professor Kwang Lim	Clinical Director for Medicine and Aged Care, The Royal Melbourne Hospital
Professor Amy Brodtmann	Professor, The Florey Institute
A/Professor Nawaf Yassi	Associate Professor, WEHI
A/Professor Rosie Watson	Associate Professor, WEHI
Prof Briony Dow	CEO, NARI
Dr Anita Goh	Neuropsychologist, NARI
Dr Jo van der Velden	Project Manager, Faculty of Medicine, Dentistry and Health Science, University of Melbourne
Dr Malcolm Clarke	General Practitioner, University of Melbourne

Victorian Stakeholder - Individual Session or Feedback	
Prof David Ames AO	Professor, St Vincent's Aged Psychiatry Service
Professor Colin Masters AO	Professor, The Florey Institute
Professor Christopher Rowe	Director, ADNeT
Ms Cherry Santos	Operations Manager, ADNeT
Mr Anthony Boffa	Chief Operating Officer, Dementia Australia
Ms Kaele Stokes	Executive Director, Dementia Australia
Ms Leanne Emerson	Executive Director, Dementia Australia
Ms Heather St John	Director, MRFF, The University of Melbourne
Ms Rowan Maclean	Executive Director Fisherman Bend Precinct, The University of Melbourne
Dr Kate Fetterplace	Project Officer, Arden Urban Renewal & RMH Redevelopment, The Royal Melbourne Hospital
Dr Jag Dhaliwal	Aged Care General Practitioner, RACGP
Ms Laine Bradley	Occupational Therapist, Eastern Cognitive Disorders Clinic
Ms Kate Furlanetto	Mental Health Clinical Nurse Educator, GV Health
A/Professor Michael Woodward	Head of Memory Clinic, Austin Health
A/Professor Christina Bryant	Clinician Psychologist, The University of Melbourne
Dr Margaret Pozzebon	Speech Pathologist, The Royal Melbourne Hospital
A/Professor Dina LoGiudice	Geriatrician, The University of Melbourne

14. BUSINESS CASE PROJECT GOVERNANCE

Queensland Advisory Committee Membership	
A/Professor Paul Varghese	Director of Geriatric Medicine, Metro South HHS
Professor Edward Strivens	Clinical Director of Older Persons Sub-Acute and Rehabilitation Adjunct Professor and Lead, Healthy Ageing Research Team (HART), James Cook University A/Director of Research and Chair Far North Queensland Human Research Ethics Committee (FNQ HREC, EC00157)
Professor Geoff Mc Coll	Executive Dean of the Faculty of Medicine, University of Queensland
Dr Lisa Kelly	Senior Staff Geriatrician at PAH, Metro South HHS Co-Chair of the State-wide Older Person's Health Clinical Network
Ms Amy Gilbert	CNC of the Cognitive Assessment and Management Unit, The Prince Charles Hospital, Metro North HHS
Ms Alison Argo	Advanced Psychologist – Geriatrics Nambour Hospital, Sunshine Coast HHS
Dr Eamon Eels	Geriatrician, The Prince Charles Hospital Metro North HHS
Professor Robert Adams	Neurologist, Metro North HHS Conjoint Appointment with UQ
Professor Peter Nestor	Cognitive neurologist, Mater Health Service Clinical Program Leader of the Neurosciences and Cognitive Health Program at Mater Research. Conjoint appointment with QBI and UQ
Dr Kana Appaduri	Director of Geriatric and Rehabilitation Services, RBWH and STARS, Metro North HHS
Dr Benjamin Chen	Medical Director of Rehabilitation Stream, Gold Coast University Hospital, Gold Coast HHS
Dr Kannan Natarajan	Geriatrician, The Prince Charles Hospital, Metro North HHS
Dr Chrys Pulle	Geriatrician, The Prince Charles Hospital, Metro North HHS
Dr Shirlony Morgan	Senior Staff Specialist with Addiction and Mental Health Services, Metro South HHS Chair of the Statewide Older Persons Mental Health Alcohol and Other Drugs Clinical Group Director of Advanced Training – Psychiatry of Old Age (Queensland)
Professor Michael O' Sullivan	Neurologist, RBWH, Metro North HHS Director of Research and Implementation
Dawn Soltau	Dementia Nurse Practitioner, Robina Hospital, Gold Coast HHS
Dr Penny King	Consultant Psychiatrist/Director of Older Person's Mental Health, Robina Private Hospital
Dr Suba Kumar	Geriatrician, Gold Coast University Hospital, Gold Coast HHS
Dr Helen Brown	Metro North HHS Co-Chair of State-wide Stroke Clinical Network
Dr Anthony Tampiyappa	Geriatrician, Sunshine Coast University Hospital, Sunshine Coast HHS
Dr Nisal Gange	Geriatrician, Toowoomba Hospital (public and private), Darling Downs HHS
Dr Catherine Yelland	Geriatrician, Redcliffe Hospital, Metro North HHS
Dr David Lie	Clinical Director of the Older Adult Mental Health Service, Metro South HHS Chair, Neurostimulation Committee, and Clinical Associate, Centre for Health Service Research (UQ)
Dr Keren Hervey	Director Medical Services, North Lakes Health Precinct, Metro North HHS Co-chair of State-wide Dementia Clinical Network

South Australia Advisory Committee Membership	
Professor Steve Wesselingh	Executive Director, SAHMRI
Dr Sally Johns	Geriatrician, Geriatric Medicine and Memory Clinics, SA Health
Mr Ron Sinclair	Dementia Advocate
A/Professor Craig Whitehead	Regional Clinical Director of Rehabilitation, Aged and Palliative care Southern Adelaide Local Health Network
Ms Judy Deimel	Nurse Practitioner, Central Adelaide Local Health Network
Dr Cathy Short	Neurologist, Woodville South
Dr Stephanie Daly	Geriatrician, Sensus Cognition GP Educator, Dementia Training Australia
Dr John Maddison	Division Director, Geriatric Medicine and Memory Clinics, SA Health

Western Australia Advisory Committee Membership	
Professor Moira Clay	Moira Clay Consulting
A/Professor Roger Clarnette	Fremantle Hospital; UWA; AARF
Professor Leon Flicker	Royal Perth Hospital; UWA Centre for Healthy Ageing
Dr Andrew Ford	Royal Perth Hospital; UWA Centre for Healthy Ageing
Ms Debra Langridge	Head Consumer and Community Involvement Program (WAHTN)
Ms Jennifer Grieve	GM Health and Aged Care, Hall and Prior
Professor Anne-Marie Hill	Curtin University
Professor Beverley O'Connell	Edith Cowan University
Professor Bronwyn Myers-Franchi	Director, Curtin University enAble Institute
Ms Ellie Newman	Dementia Training Australia
Ms Jane Gale	Senior Social Worker SCGH
Dr Sean Maher	SCGH
Dr Scott Blackwell	Collaboration Healthcare
Dr Bhaskar Mandal	Fiona Stanley Hospital
Professor Osvaldo Almeida	Royal Perth Hospital; UWA Centre for Healthy Ageing
Dr Jane Courtney	Hollywood Private Hospital, Notre Dame University
Mr Graeme Prior	Chair, Australian Alzheimer's Research Foundation (AARF)
Ms Liza Dunne	CEO, Australian Alzheimer's Research Foundation (AARF)

14. BUSINESS CASE PROJECT GOVERNANCE

Tasmanian Advisory Committee Membership	
Prof. James Vickers	Co-Director of Wicking Dementia Research and Education Centre, University of Tasmania
Ms Helga Merl	Lecturer Dementia and Endorsed Nurse Practitioner Aged/Dementia Care at the Wicking Dementia Research and Education Centre
Dr Kathleen Doherty	Research Lead Massive Open Online Courses Wicking Dementia Research & Education Centre, University of Tasmania
Mr Vincent Poisson	State Manager, Client Services, Dementia Australia
Dr Matthew Fasnacht	Old Age Psychiatrist and the Clinical Director of the Older Persons Mental Health Service
Dr Andrea Lees	Geriatrician (Aged Care Specialist), The Royal Hobart Hospital
Dr Katharine Salmon	General Practitioner, The Island Clinic
Dr Jane Alty	Neurology Consultant and Senior Lecturer in Neurology, UTAS
Ms Katherine Lawler	Lecturer, Wicking Dementia Research & Education Centre, University of Tasmania.
Dr David Dunbabin	Geriatrician (Aged Care Specialist) and Rehabilitation Specialist, Cavalry Hospital Campus Lenah Valley
Ms Caroline Gray	Business Manager Wicking Dementia Research and Education Centre
Ms Susan Powell	General Manager, Population Health Planning, Systems and Provider Support (Vice President) at Primary Health Tasmania (Tasmania PHN)

National Research and Education Advisory Committee	
Professor Henry Brodaty AO (Co-Chair) (UNSW)	
Professor James Vickers (Co-Chair) (UTAS)	
Professor Ralph Martins AO (Curtin University & Macquarie University)	
Professor Nicola Lautenschlager (University of Melbourne)	
Dr Helen Brown (QLD Metro North)	
Dr David Sykes (Dementia Australia & Dementia Training Australia)	
Dr Tim Sargeant (SAHMRI)	
Dr Kate Smith (UWA)	
Professor Chris Rowe (Austin & ADNeT)	
Observers: Ms Cherry Santos, Ms Liza Dunne, Ms Alida Apostoloudas	

Dementia Australia Advisory Committee - The committee is made up of people living with dementia who are active advocates in their communities. The aim is to inform Dementia Australia about the priorities of people living with dementia in regard to advocacy, policy, service delivery and program development. The Project Director met with the full committee once to introduce the NCDC proposal and a follow up meeting with 2 members to discuss in further detail.

WA Health Translation Network Community Conversation

- Ms Debra Langridge, Consumer and Community Involvement Program | WA Health Translation Network

Consultation with other dementia or health experts:

- Sir John Savill, Executive Director, MACH
- Professor Grant McArthur, Executive Director, Victorian Comprehensive Cancer Centre
- Professor Belinda Goodenough, Executive Director, Dementia Training Australia
- Dr Mary-Ann Kulh, Geriatrician, Calvary Health Care
- Dr Kylie Radford, Neura



APPENDIX A1

OVERVIEW OF NCDC NATIONAL AND STATE STAFFING MODEL																		
AREA	ROLE	FUNCTION	Grade - QLD Govt	National or State Specific	Existing CDAMS FTE	FTE	No. of Positions	Effective FTE (NSW, QLD VIC)	Effective FTE (SA TAS WA)	QLD Consultant	Unit FTE Cost (plus oncosts)	Total Cost (NAT NSW QLD VIC)	Total Cost (NAT NSW QLD VIC)	Total Cost (NAT NSW QLD VIC)	Total Cost (SA TAS WA)	Total Cost (SA TAS WA)	Total Cost (SA TAS WA)	Notes / Assumptions
National - Distributed Leadership Team												Year 1	Year 2	Year 3	Year 1	Year 2	Year 3	Year 0 - establishment of the National Executive, the Research, Education and Clinician Streams
Management & Corporate	Executive Director / CEO (National)	Executive	Exec	N		1	1	1.00	1.00		\$ 350,000	\$ 350,000	\$ 350,000	\$ 350,000	\$ 350,000	\$ 350,000	\$ 350,000	Ensure joint governance at the state levels for the sites so that clinic research post dx care education is strategic / holistic / cohesive. Unified decision making.
Policy & Advisory	Director - Clinical Services & Education (National)	Executive	Exec	N		0.4	1	0.40	0.40		\$ 350,000	\$ 140,000	\$ 140,000	\$ 140,000	\$ 140,000	\$ 140,000	\$ 140,000	
Separate entity but may auspice some central services	Director - Research (National)	Executive	Exec	N		0.4	1	0.40	0.40		\$ 350,000	\$ 140,000	\$ 140,000	\$ 140,000	\$ 140,000	\$ 140,000	\$ 140,000	
	Director - Corporate (National)	Executive	Exec	N		1	1	1.00	1.00		\$ 350,000	\$ 350,000	\$ 350,000	\$ 350,000	\$ 350,000	\$ 350,000	\$ 350,000	
	Strategic & Translational Policy Officers	Professional	AO7	N		1	4	4.00	4.00		\$ 164,000	\$ 656,000	\$ 665,105	\$ 681,401	\$ 656,000	\$ 665,105	\$ 681,401	Role description: Policy and Research Translation - analysis & consultation / delivery / dissemination / electronic / advisory / curriculum / position papers
	Corporate: Finance Media & Engage HR ICT	Professional	AO7	N		1	4	4.00	4.00		\$ 164,000	\$ 656,000	\$ 665,105	\$ 681,401	\$ 656,000	\$ 665,105	\$ 681,401	Inc. Finance ICT People & Culture Media & Communications - some roles may not be full time positions
	Administrative Support	Administrative	AO3	N		1	2	2.00	2.00		\$ 99,451	\$ 198,902	\$ 199,204	\$ 204,018	\$ 198,902	\$ 199,204	\$ 204,018	
	Consumer, Research & Education Advisory Committee	Advisory	AO5	N		0.1	10	1.00	1.00		\$ 130,975	\$ 130,975	\$ 131,914	\$ 135,130	\$ 130,975	\$ 131,914	\$ 135,130	Nominal Support / Stipend for Committee Member
Sub Total												\$2,621,877	\$2,641,328	\$2,681,951	\$2,621,877	\$2,641,328	\$2,681,951	
Research Stream (Note: National and State Roles)																		National roles operate across the NCDC Structure. The state roles are to be replicated for each jurisdiction.
	Director - Research	Executive	Exec	N		N/A	N/A	N/A			N/A	N/A	N/A	N/A	N/A	N/A	N/A	Position included in National Management costs
	Research Lead(s)	Management	HP5	N		0.4	4	1.60	1.60		\$ 172,000	\$ 275,200	\$ 277,931	\$ 284,748	\$ 275,200	277,931	\$ 284,748	Add value: Research and research-enabling infrastructure, education, training (incl. research training), professional development, data linkage, patient accessibility, multi-site clinical trials). Student and Professional Placements Trial Coordination etc.
	Clinician Academic Fellowship	Professional / Research	N/A	S		0.5	2	1.00	1.00		N/A	N/A	N/A	N/A	N/A	N/A	N/A	Funding through university / grants etc.
	Research Manager	Research	HP4	S		1	1	1.00	1.00			\$ 157,000	\$ 158,981	\$ 162,873	\$ 157,000	\$ 158,981	\$ 162,873	
	Research Positions (incl. Coordinators & RAs)	Administrative / Research	AO4	S		1	2	2.00	2.00		\$ 115,050	\$ 230,099	\$ 231,178	\$ 236,797	\$ 230,099	\$ 231,178	\$ 236,797	These support roles are in addition to the research roles identified in the Clinic & Advisory Hub staffing model.
	PhD Student	Research	N/A	S		1	8	8.00	8.00		N/A	N/A	N/A	N/A	N/A	N/A	N/A	PhD to be funded by other means - e.g. RTPS. NCDC to provide office space - note: not all candidates will require office space at NCDC
Sub Total												\$ 662,299	\$ 668,091	\$ 684,418	\$ 662,299	\$ 668,091	\$ 684,418	
Clinical Education Stream (Note: National and State Roles)																		The position description for NCDC Clinicians should include an education / training requirement (e.g. 0.2 FTE).
	Director - Clinical Services & Education (National)	Executive	Exec	N		N/A	N/A	N/A			N/A	N/A						Position included in National Management costs
	Training & Education Lead(s)	Management / Clinical	HP5	N		0.4	4	1.60	1.60		\$ 172,000	\$ 275,200	\$ 277,931	\$ 284,747	\$ 275,200	277,931	\$ 284,747	Placement Coordination Secondments GP+ Training as well as Care Clinician Training etc.
	Education Officer (incl. Placement Coordinators / Training / Engagement)	Administrative / Clinical	AO5	S		1	2	2.00	2.00		\$ 115,050	\$ 230,099	\$ 231,178	\$ 236,797	\$ 230,099	\$ 231,178	\$ 236,797	Supporting training (i.e. care clinicians) and coordinating peer-to-peer placements (GP+) and clinical placements. Analysis of what is already being conducted training / education wise around Australia.
Sub Total												\$ 505,299	\$ 509,109	\$ 521,544	\$ 505,299	\$ 509,109	\$ 521,544	
Dementia & Memory Clinic (Note: National and State Roles)																		Estimate that this base would be able to accommodate 25- 30 new patients and 60 follow up / advisory consultations p/week. Operation on Full Time Operational 5 days for 48 Weeks incl. Clinic and Advisory Hub Staff. Note: Different staffing model for NSW, QLD, VIC and SA, TAS, WA to address different populations.
Reception Concierge Dementia Clinic Advisory Hub	Clinical Lead - Director	Management		S	Y	0.3	1	N/A	N/A		N/A	N/A			N/A			Clinical Lead - This role will be filled by one of the Medical Consultants as part of their FTE.
	Clinical Intake (Dx) & Care Clinician (PDx) Coordinator	Management / Clinical	HP5 / CNC	S	Y	1	3	3.00	1.50		\$ 172,000	\$ 516,000	\$ 521,121	\$ 533,902	\$ 258,000	\$ 260,561	\$ 266,951	Clinical Intake Coordinator - Medical Professional Clinical Nurse Consultant / Allied Health Professional. Intake is centralised at each Hub. CDAMS do not have a standalone position for this role.
	Senior Administrative Support	Administrative	AO5	S		1	1	1.00	1.00		\$ 130,975	\$ 130,975	\$ 131,914	\$ 135,130	\$ 130,975	\$ 131,914	\$ 135,130	
	Admin. Support (Whole of Service - Intake & Concierge)	Administrative	AO3 / AO4	S		1	3	3.00	2.00		\$ 115,050	\$ 345,149	\$ 346,767	\$ 355,195	\$ 230,099	\$ 231,178	\$ 236,797	Note: that there will be 60 follow up / advisory sessions as well to new patients.
	Administrative Support (Clinic specific)	Administrative	AO3	S		1	2	2.00	1.00		\$ 99,451	\$ 198,902	\$ 199,204	\$ 204,018	\$ 99,451	\$ 99,602	\$ 102,009	
	Administrative Support (Advisory / Tele specific)	Administrative	AO3	S		1	2	2.00	1.00		\$ 99,451	\$ 198,902	\$ 199,204	\$ 204,018	\$ 99,451	\$ 99,602	\$ 102,009	

APPENDIX A1

AREA	ROLE	FUNCTION	Grade - QLD Govt	National or State Specific	Existing CDAMS FTE	FTE	No. of Positions	Effective FTE (NSW, QLD VIC)	Effective FTE (SA TAS WA)	QLD Consultant	Unit FTE Cost (plus oncosts)	Total Cost (NAT NSW QLD VIC)	Total Cost (NAT NSW QLD VIC)	Total Cost (NAT NSW QLD VIC)	Total Cost (SA TAS WA)	Total Cost (SA TAS WA)	Total Cost (SA TAS WA)	Notes / Assumptions
												Year 1	Year 2	Year 3	Year 1	Year 2	Year 3	
	Administrative Support (Care Clinicians)	Administrative	AO3	S		1	2	2.00	1.00		\$ 99,451	\$ 198,902	\$ 199,204	\$ 204,018	\$ 99,451	\$ 99,602	\$ 102,009	
	ICT Support	Professional	AO5	S		1	1	1.00	0.50		\$ 130,975	\$ 130,975	\$ 131,914	\$ 135,130	\$ 65,488	\$ 65,957	\$ 67,565	
3 FTE Clinicians - 1 x 1.0 FTE + 5 x (0.4 C + 0.6 R): Senior Lecturer Level C - \$135,500 - \$155,460 A/Prof Level D - \$162,111 - \$178,068 Prof Level E - \$207,336 Dr with additional loading + \$36,381 - Oncosts are 29.4%	Medical Clinician	Clinical / Ax / Dx / PDx	Specialist		Y	0.5	2	1.00	1.00	\$ 480,000	\$ 355,299	\$ 355,299	\$ 355,299	\$ 355,299	\$ 355,299	\$ 355,299	\$ 355,299	
	Research Clinician (e.g. Cognitive Neurologist, Geriatrician, Psychiatrist (OAP Neuro) (0.4 Clinical + 0.6 Research)	Clinical / Ax / Dx / PDx	Spec. + Research	S	Y	1	5	5.00	2.00	\$ 342,000	\$ 262,434	\$ 1,312,170	\$ 1,312,170	\$ 1,312,170	\$ 524,868	\$ 524,868	\$ 524,868	Portion of FTE to include teaching component. Also, one of the Medical Clinicians would be the Local Clinical Lead / Site Manager at 0.3 FTE. It is expected that clinical FTEs would likely be shared across 2 - 3 people. https://www.health.nsw.gov.au/careers/conditions/Awards/staff-specialists-award.pdf
	Neuroradiologist	Clinical / Ax / Dx	Specialist	S		0.2	1	0.20	0.20	\$ 342,000	\$ 292,092	\$ 58,418	\$ 58,418	\$ 58,418	\$ 58,418	\$ 58,418	\$ 58,418	Where the service already exists on site/in precinct (e.g. RMH) it may be this role is removed and replaced with a liaison officer role to coordinate access to the clinician's services
	Specialist Registrar	Clinical / Ax / Dx / PDx	RMO 13	S	Y	0.3	3	0.90	0.50		\$ 233,000	\$ 209,700	\$ 213,356	\$ 219,362	\$ 116,500	\$ 118,531	\$ 121,868	Portion of FTE toward teaching component. Aim to have more than 1 specialist Registrar
	GP or GP Registrar	Clinical / Ax / Dx / PDx	RMO 13	S		1	1	1.00	0.50		\$ 233,000	\$ 233,000	\$ 237,062	\$ 243,736	\$ 116,500	\$ 118,531	\$ 121,868	Portion of FTE toward teaching component.
	Nurse Practitioner (Clinical)	Clinical / Ax / Dx / PDx	NRG8	S		0.6	3	1.80	0.90		\$ 179,000	\$ 322,200	\$ 325,705	\$ 333,700	\$ 161,100	\$ 162,852	\$ 166,850	0.6 FTE Clinical Role 0.4 Research Role - Note: Role of Clinic Intake Coordinator above.
	Nurse Practitioner (Research)	Research	NRG8	S		0.4	3	1.20	0.60		\$ 179,000	\$ 214,800	\$ 217,137	\$ 222,466	\$ 107,400	\$ 108,568	\$ 111,233	0.6 FTE Clinical Role 0.4 Research Role
	Registered Nurse (Clinical)	Clinical / Ax / Dx / PDx	NRG5	S	Y	0.6	3	1.80	0.90		\$ 124,750	\$ 224,550	\$ 225,959	\$ 231,459	\$ 112,275	\$ 112,979	\$ 115,729	0.6 FTE Clinical Role 0.4 Research Role.
	Registered Nurse (Research)	Research	NRG5	S		0.4	3	1.20	0.60		\$ 124,750	\$ 149,700	\$ 150,639	\$ 154,306	\$ 74,850	\$ 75,320	\$ 77,153	0.6 FTE Clinical Role 0.4 Research Role.
8 FTE Allied Health Professionals	Neuropsychologist	Clinical / Ax / Dx	HP5 / HP4	S	Y	1	2	2.00	1.00		\$ 164,500	\$ 329,000	\$ 347,414	\$ 355,935	\$ 164,500	\$ 173,707	\$ 177,967	MBS 723 - Enables referral for 5 rebated allied health services
	Clinical Psychologist	Clinical / PDx	HP4	S	Y	1	1	1.00	0.50		\$ 157,000	\$ 157,000	\$ 158,981	\$ 162,873	\$ 78,500	\$ 79,491	\$ 81,436	
	Occupational Therapist	Clinical / Ax / PDx	HP4	S	Y	1	2	2.00	1.00		\$ 157,000	\$ 314,000	\$ 317,963	\$ 325,746	\$ 157,000	\$ 158,981	\$ 162,873	
	Social Worker	Clinical / PDx	HP4 / HP3		Y	1	2	2.00	1.00		\$ 145,500	\$ 291,000	\$ 317,963	\$ 325,746	\$ 145,500	\$ 158,981	\$ 162,873	
	Speech Pathologist	Clinical / Ax / PDx	HP4	S	Y	1	1	1.00	0.50		\$ 157,000	\$ 157,000	\$ 158,981	\$ 162,873	\$ 78,500	\$ 79,491	\$ 81,436	
	Pharmacist	Clinical / PDx	HP4	S		0.3	1	0.30	0.30		\$ 157,000	\$ 47,100	\$ 47,694	\$ 48,862	\$ 47,100	\$ 47,694	\$ 48,862	
	Community Liaison Allied Health Professional	Professional	HP3	S		1	1	1.00	0.30		\$ 134,000	\$ 134,000	\$ 139,044	\$ 142,436	\$ 40,200	\$ 41,713	\$ 42,731	Connected to APH / ACCHO
	Interpreter (Outsourced)	Professional		S								N/A	N/A	N/A	N/A	N/A	N/A	This could be state (health) based or national.
Corporate Support																		
	HR Pay Roll Accounting Banking	Professional	AO7	S		1	3	3.00	3.00		\$ 164,000	\$ 492,000	\$ 498,829	\$ 511,051	\$ 492,000	\$ 498,829	\$ 511,051	Note: May not be required in each state - part of broader state health service.
Care Clinician Teams																		
Facilitate / connect to services / timely advice / care plan implementation & GP. Connect family to NCDC + DA + Research + Services etc	Care Clinician Training & Education Lead	Management / Clinical	NRG8 or Equiv.	N		1	2	2.00	2.00		\$ 178,000	\$ 356,000	\$ 361,894	\$ 370,777	\$ 356,000	\$ 361,894	\$ 370,777	This would likely by a NP to oversee the Care Clinician Program / Training etc. Part of the State Education roles would be to support this function.
	Care Clinician Team Leader		HP5 or Equiv.	S		1	2	2.00	1.00		\$ 172,000	\$ 344,000	\$ 347,414	\$ 355,935	\$ 172,000	\$ 173,707	\$ 177,967	Care Clinicians - Hybrid and decentralised workforce e.g. Hub and community-based / spoke as well as F2F & Virtual delivery. Care Clinicians are nurses or allied health professionals
	Care Clinician (Clinical)	Clinical / PDx	NRG6 / HP4 / HP3	S		1	16	16.00	8.00		\$ 142,000	\$ 2,272,000	\$ 2,315,233	\$ 2,371,782	\$ 1,136,000	\$ 1,157,617	\$ 1,185,891	For example, Catchment Area of Hub = SESLHD + Suburban Spokes + Regional Spokes
	Care Clinician (Research)	Research	NRG6 / HP4 / HP3	S		0.5	8	4.00	2.00		\$ 142,000	\$ 568,000	\$ 578,808	\$ 592,946	\$ 284,000	\$ 289,404	\$ 296,473	
SUB TOTAL												\$10,260,743	\$10,415,292	\$10,629,290	\$5,761,426	\$5,845,292	\$5,966,096	Note: eligibility for DCC is to end after 3 month transition to RACF.
																		Expect 1/3 Care Clinicians to be based at the Hub - 2/3 to be decentralised across Catchment Area.
																		Creating 8 x 0.5 FTE Care Clinicians with Research. In total - 16 FTE Care Clinicians and 4 FTE Care Clinicians for Research - this 4 FTE is research dedicated time.

APPENDIX A2

NCDC MBS REVENUE MODEL FOR LARGER STATES							
Service Type	Service Element	Revenue Source	MBS Item	85% Rate	Weight	Volume	Revenue
Direct Patient Care	Initial Appointment	MBS Consultation	141	\$ 406.73	70.0%	1008	\$ 409,978.80
Direct Patient Care	Initial Appointment	MBS Consultation	145	\$ 492.70	0.0%	0	\$ -
Direct Patient Care	Initial Appointment	MBS Consultation	296	\$ 233.71	15.0%	216	\$ 50,480.82
Direct Patient Care	Initial Appointment	MBS Consultation	132	\$ 236.94	15.0%	216	\$ 51,178.50
Outsourced	MRI	MBS	63049	\$ 403.20	0.0%	0	\$ -
Outsourced	CT	MBS	56030	\$ 230.40	0.0%	0	\$ -
Outsourced	PET	MBS	61560	\$ 605.05	0.0%	0	\$ -
Direct Patient Care	Neuropsychological Assessment	N/A	N/A	\$ 1,200.00	0.0%	0	\$ -
Direct Patient Care	1st Follow up/ Review	MBS Consultation	143	\$ 254.02	30.0%	864	\$ 219,475.44
Direct Patient Care	1st Follow up/ Review	MBS Consultation	116	\$ 67.79	10.0%	288	\$ 19,522.80
Direct Patient Care	1st Follow up/ Review	MBS Consultation	133	\$ 118.62	10.0%	288	\$ 34,161.84
Direct Patient Care	Follow Up / Community Case Conference	MBS Consultation	820	\$ 67.79	7.5%	216	\$ 14,642.10
Direct Patient Care	Follow Up / Community Case Conference	MBS Consultation	822	\$ 187.38	15.0%	432	\$ 80,949.24
Direct Patient Care	Follow Up / Community Case Conference	MBS Consultation	823	\$ 249.65	2.5%	72	\$ 17,974.44
Direct Patient Care	Follow Up / Community Case Conference	MBS Consultation	825	\$ 89.68	7.5%	216	\$ 19,369.80
Direct Patient Care	Follow Up / Community Case Conference	MBS Consultation	256	\$ 143.01	15.0%	432	\$ 61,781.40
Direct Patient Care	Follow Up / Community Case Conference	MBS Consultation	828	\$ 196.39	2.5%	72	\$ 14,140.26
Advisory Sessions	Clinical Advisory Hub (20% of 700 attract MBS)	MBS Consultation	E.g 825 / 10955	\$ 89.68	20%	140	\$ 12,554.50
Direct Patient Care	Post-Dx Support - Dementia Care Clinician	N/A	E.g. Nurse/OT	N/A	N/A	N/A	N/A
TOTAL							\$ 1,006,209.94

APPENDIX A2

NCDC MBS REVENUE MODEL FOR SMALLER STATES							
Service Type	Service Element	Revenue Source	MBS	85% Rate	Weight	Volume	Revenue
Direct Patient Care	Initial Appointment	MBS Consultation	141	\$ 406.73	70.0%	504	\$ 204,989.40
Direct Patient Care	Initial Appointment	MBS Consultation	145	\$ 492.70	0.0%	0	\$ -
Direct Patient Care	Initial Appointment	MBS Consultation	296	\$ 233.71	15.0%	108	\$ 25,240.41
Direct Patient Care	Initial Appointment	MBS Consultation	132	\$ 236.94	15.0%	108	\$ 25,589.25
Outsourced	MRI	MBS	63049	\$ 403.20	0.0%	0	\$ -
Outsourced	CT	MBS	56030	\$ 230.40	0.0%	0	\$ -
Outsourced	PET	MBS	61560	\$ 605.05	0.0%	0	\$ -
Direct Patient Care	Neuropsych	N/A	0	\$ 1,200.00	0.0%	0	\$ -
Direct Patient Care	1st Follow up/ Review	MBS Consultation	143	\$ 254.02	30.0%	432	\$ 109,737.72
Direct Patient Care	1st Follow up/ Review	MBS Consultation	116	\$ 67.79	10.0%	144	\$ 9,761.40
Direct Patient Care	1st Follow up/ Review	MBS Consultation	133	\$ 118.62	10.0%	144	\$ 17,080.92
Direct Patient Care	Follow Up / Community Case Conference	MBS Consultation	820	\$ 67.79	7.5%	108	\$ 7,321.05
Direct Patient Care	Follow Up / Community Case Conference	MBS Consultation	822	\$ 187.38	15.0%	216	\$ 40,474.62
Direct Patient Care	Follow Up / Community Case Conference	MBS Consultation	823	\$ 249.65	2.5%	36	\$ 8,987.22
Direct Patient Care	Follow Up / Community Case Conference	MBS Consultation	825	\$ 89.68	7.5%	108	\$ 9,684.90
Direct Patient Care	Follow Up / Community Case Conference	MBS Consultation	256	\$ 143.01	15.0%	216	\$ 30,890.70
Direct Patient Care	Follow Up / Community Case Conference	MBS Consultation	828	\$ 196.39	2.5%	36	\$ 7,070.13
Advisory Sessions	Clinical Advisory Hub (20% of 700 attract MBS)	MBS Consultation	E.g 825	\$ 89.68	20%	70	\$ 6,277.25
Direct Patient Care	Post-Dx Support - Dementia Care Clinician	N/A	E.g. Nurse/OT	N/A	N/A	N/A	N/A
TOTAL							\$ 503,104.97

PER STATE	NEW PATIENTS	FOLLOW UP	ADVISORY HUB
NSW VIC QLD	1440	2880	700
SA TAS WA	720	1440	350

For further information:
Please contact NCDC Project Director
Ms Jenna Dennison via email at:

s47F [redacted]@dementia.org.au

This document has been released under
the Freedom of Information Act 1982 (Cth)
By the Department of Health, Disability and Ageing



ATTACHMENT A

Phase 2: Funded Pilot and Phased Implementation Options

Below are three options for a fully funded phased pilot implementation.

Option 1: sets out the costs for 1 Large State Hub:

- Includes capital cost for 1 large hub
- Increasing FTE from 25% capacity in Year 1 to 100% capacity by Year 5
- The national staff is set at 50% capacity for Year 1 through to Year 5 and are based in the Hub. This includes the leadership / executive / corporate services and advisory committee.

The estimated total 5 year cost is **\$54.5M.**³

Option 2: sets out the costs for 1 Large State Hub and 1 Small State Hub:

- Includes capital cost for 1 large hub and 1 small hub
- Increasing FTE from 25% capacity in Year 1 to 100% capacity by Year 5.
- The national staff is set at 50% capacity for Year 1 and increases to 100% for Year 2 through to Year 5 and may be distributed across the Hub sites. This includes the leadership / executive / corporate services and advisory committee.

The estimated total 5 year cost is **\$90.5M.**⁴

Option 3: sets out the costs of 3 Large State Hubs and 3 Small State Hubs:

- Includes capital cost for 3 Large hubs and 3 Small hubs
- Increasing FTE from 25% capacity in Year 1 to 100% capacity by Year 5.
- The national staff is set at 100% for Year 1 through to Year 5 and may be distributed across the Hub sites. This includes the leadership / executive / corporate services and advisory committee.

The estimated cost is **\$241.5M.**⁵

Option 4: Rolling Implementation – The option for a rolling implementation would see Hubs come on line over a longer time period, for example, a five year or 10 year period and incrementally increase capacity. For example, in Year 1 Hub 1 comes online at 25% capacity and in Year 2 Hub 1 increases to 50% capacity and Hub 2 comes online at 25% capacity. In Year 3 Hub 1 increases to 100% capacity while Hub 2 increases to 50% and Hub 3 comes online at 25% and so on – gradually establishing all 6 Hubs and operating at 100% capacity.

Refer **Table 1** below:

³ Does not deduct potential MBS revenue from clinical services.

⁴ Does not deduct potential MBS revenue from clinical services.

⁵ Does not deduct potential MBS revenue from clinical services.



Table 1. Rolling Implementation and Hub Service Capacity

NCDC Hub Operating Capacity									
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year X
Hub 1	25%	50%	100%	100%	100%	100%	100%	100%	100%
Hub 2		25%	50%	100%	100%	100%	100%	100%	100%
Hub 3			25%	50%	100%	100%	100%	100%	100%
Hub 4				25%	50%	100%	100%	100%	100%
Hub 5					25%	50%	100%	100%	100%
Hub 6						25%	50%	100%	100%

This document has been released under
the Freedom of Information Act 1982 (Cth)
By the Department of Health, Disability and Ageing



Option 1 – One Large Hub		Pilot Year 1	Pilot Year 2	Pilot Year 3	Pilot Year 4	Pilot Year 5
One Large Hub	1 Large Hub at 25%	\$ 2,500,000.00	1 Large Hub at 50%	1 Large Hub at 100%	1 Large Hub at 100%	1 Large Hub at 100%
Capital - Fit / Refurb	\$ 2,500,000.00	\$ -	\$ -	\$ -	\$ -	\$ -
Sub Total	\$ 2,500,000.00	\$ -	\$ -	\$ -	\$ -	\$ -
Operating Expenses	\$ 250,000.00	\$ 500,000.00	\$ 1,000,000.00	\$ 1,000,000.00	\$ 1,000,000.00	\$ 1,000,000.00
Workforce - State	\$ 2,630,468.50	\$ 5,260,937.00	\$ 10,521,874.00	\$ 10,521,874.00	\$ 10,521,874.00	\$ 10,521,874.00
Workforce - National (50%)	\$ 1,764,138.50	\$ 1,764,138.50	\$ 1,764,138.50	\$ 1,764,138.50	\$ 1,764,138.50	\$ 1,764,138.50
Sub Total	\$ 4,644,607.00	\$ 7,525,075.50	\$ 13,286,012.50	\$ 13,286,012.50	\$ 13,286,012.50	\$ 13,286,012.50
Total	\$ 7,144,607.00	\$ 7,525,075.50	\$ 13,286,012.50	\$ 13,286,012.50	\$ 13,286,012.50	\$ 13,286,012.50

Total 5 Years

\$ 54,522,720.00

Option 2 – One Large + One Small Hub		Pilot Year 1	Pilot Year 2	Pilot Year 3	Pilot Year 4	Pilot Year 5
One Large Hub + One Small Hub	1 Large Hub at 25% 1 Small Hub at 25%	\$ 2,500,000.00 \$ 500,000.00	1 Large Hub at 50% 1 Small Hub at 50%	1 Large Hub at 100% 1 Small Hub at 100%	1 Large Hub at 100% 1 Small Hub at 100%	1 Large Hub at 100% 1 Small Hub at 100%
Capital - Large Fit / Refurb	\$ 2,500,000.00	\$ -	\$ -	\$ -	\$ -	\$ -
Capital - Small Fit / Refurb	\$ 500,000.00	\$ -	\$ -	\$ -	\$ -	\$ -
Sub Total	\$ 3,000,000.00	\$ -	\$ -	\$ -	\$ -	\$ -
Operating Expenses - Large	\$ 250,000.00	\$ 500,000.00	\$ 1,000,000.00	\$ 1,000,000.00	\$ 1,000,000.00	\$ 1,000,000.00
Operating Expenses - Small	\$ 250,000.00	\$ 500,000.00	\$ 1,000,000.00	\$ 1,000,000.00	\$ 1,000,000.00	\$ 1,000,000.00
Workforce - State Large	\$ 2,630,468.50	\$ 5,260,937.00	\$ 10,521,874.00	\$ 10,521,874.00	\$ 10,521,874.00	\$ 10,521,874.00
Workforce - State Small	\$ 1,505,639.00	\$ 3,011,278.00	\$ 6,022,556.00	\$ 6,022,556.00	\$ 6,022,556.00	\$ 6,022,556.00
Workforce - National (100%)	\$ 1,764,138.50	\$ 3,528,277.00	\$ 3,528,277.00	\$ 3,528,277.00	\$ 3,528,277.00	\$ 3,528,277.00
Sub Total	\$ 6,400,246.00	\$ 12,800,492.00	\$ 22,072,707.00	\$ 22,072,707.00	\$ 22,072,707.00	\$ 22,072,707.00
Total	\$ 11,400,246.00	\$ 12,800,492.00	\$ 22,072,707.00	\$ 22,072,707.00	\$ 22,072,707.00	\$ 22,072,707.00

Total 5 Years

\$ 90,418,859.00

Option 3 - 6 Hubs Incremental		Pilot Year 1	Pilot Year 2	Pilot Year 3	Pilot Year 4	Pilot Year 5
3 Large Hub	3 Large Hub at 25%	\$ 11,500,000.00	3 Large Hub at 50%	3 Large Hub at 100%	3 Large Hub at 100%	3 Large Hub at 100%
3 Small Hub	3 Small Hub at 25%	\$ 11,500,000.00	3 Small Hub at 50%	3 Small Hub at 100%	3 Small Hub at 100%	3 Small Hub at 100%
Capital	\$ 11,500,000.00	\$ -	\$ -	\$ -	\$ -	\$ -
Sub Total	\$ 11,500,000.00	\$ -	\$ -	\$ -	\$ -	\$ -
Operating Expenses	\$ 130,000.00	\$ 1,500,000.00	\$ 3,000,000.00	\$ 6,000,000.00	\$ 6,000,000.00	\$ 6,000,000.00
Workforce - 6 States	\$ -	\$ 12,408,322.75	\$ 24,816,645.50	\$ 49,633,291.00	\$ 49,633,291.00	\$ 49,633,291.00
Workforce - National (100%)	\$ 3,528,277.00	\$ 3,528,277.00	\$ 3,528,277.00	\$ 3,528,277.00	\$ 3,528,277.00	\$ 3,528,277.00
Sub Total	\$ 3,658,277.00	\$ 17,436,599.75	\$ 31,344,922.50	\$ 59,161,568.00	\$ 59,161,568.00	\$ 59,161,568.00
Total	\$ 15,158,277.00	\$ 17,436,599.75	\$ 31,344,922.50	\$ 59,161,568.00	\$ 59,161,568.00	\$ 59,161,568.00

Total 5 Years

\$ 241,424,503.25

s47E(c), s47F

From: DAY, Robert
Sent: Friday, 17 February 2023 10:09 AM
To: s47E(c), s47F
Subject: FW: Phased / Incremental Roll Out Options - DRAFT - NOT SC Endorsed
 [SEC=OFFICIAL]
Attachments: NCDC Incremental Phased Roll Out Options_DRAFT.pdf
Follow Up Flag: Follow up
Flag Status: Flagged

Hi all

FYI – the NCDC team have provide the attached version of an alternate roll out schedule (to reduce upfront cost to government).

When we spoke yesterday, Jenna also affirmed that they are working to have some of their partners begin services under the NCDC banner using existing funding. s47C

s47C

Cheers
 Rob

From: Jenna Dennison
Sent: Thursday, 16 February 2023 2:24 PM
To: DAY, Robert
Cc: s47E(c), s47F
Subject: Phased / Incremental Roll Out Options - DRAFT - NOT SC Endorsed

REMINDER: Think before you click! This email originated from outside our organisation. Only click links or open attachments if you recognise the sender and know the content is safe.

Dear Robert

For your consideration (after our meeting).

The attached is a **draft** I have prepared for the NCDC Steering Committee (not yet endorsed) to set out possible phased / incremental NCDC roll out.

Cheers

Jenna

--

Jenna Dennison
 Project Director
 National Network of Comprehensive Dementia Centres
 M: 0409 121 634
 E: s47F @dementia.org.au

NCDC Lead Partner Organisations:



I acknowledge the Kaurna people as the Traditional Owners and Custodians on whose lands I meet and work.

This document has been released under
the Freedom of Information Act 1982 (Cth)
By the Department of Health, Disability and Ageing

s47E(c), s47F

From: s47E(c), s47F
Sent: Monday, 20 February 2023 11:28 AM
To: DementiaPlan
Subject: **Entered in spreadsheet MG** NCDC Business Case - NDAP Submission
Attachments: RE: Confirmation: NCDC Business Case - NDAP Submission [SEC=OFFICIAL]

Another submission for analysis and consideration in development of the National Dementia Action Plan

s47E(c), s47F

From: DAY, Robert
Sent: Thursday, 16 February 2023 6:20 PM
To: s47E(c), s47F
Subject: FW: Confirmation: NCDC Business Case - NDAP Submission [SEC=OFFICIAL]

Hi both

I didn't respond to this email but did indicate to Jenna last year (and again today) that we would consider the NCDC business case in the development of NDAP. Could you make sure it's added to our submission list for the sake of formality, please?

Thanks
 Rob

From: Jenna Dennison s47F <s47F@dementia.org.au>
Sent: Monday, 16 January 2023 9:55 AM
To: DAY, Robert <Robert.Day@health.gov.au>
Cc: s47E(c), s47F <s47F@Health.gov.au>
Subject: Confirmation: NCDC Business Case - NDAP Submission

REMINDER: Think before you click! This email originated from outside our organisation. Only click links or open attachments if you recognise the sender and know the content is safe.

Good morning Robert

Hope you are well – Adelaide is brimming with sun and cyclists for the Tour Down Under. Lucky I am a cyclist!

Just a quick one from me. I just wanted to confirm that we did not need to submit an additional / further submission via the NDAP consultation survey portal specifically for the NCDC.
 On 6 December you indicated that this was not necessary but I just want to double check. I note that NCDC partners may still make separate / different submissions on the NDAP.

As also discussed in that meeting I am recasting the NCDC 5 Year Budget to model options for an incremental roll out for the NCDC Hubs.

Cheers

Jenna

--

Jenna Dennison
Project Director
National Network of Comprehensive Dementia Centres
M: 0409 121 634
E: s47F [REDACTED]@dementia.org.au

NCDC Lead Partner Organisations:



I acknowledge the Kaurna people as the Traditional Owners and Custodians on whose lands I meet and work.

This document has been released under
the Freedom of Information Act 1982 (Cth)
By the Department of Health, Disability and Ageing