



Workforce education and training standards frameworks for dementia

An Evidence Check rapid review brokered by the Sax Institute for Dementia Training Australia—May 2022.

An Evidence Check rapid review brokered by the Sax Institute for Dementia Training Australia. November 2020. This activity was supported by funding from the Australian Government under the Dementia Training Program.

This report was prepared by: Sabrina Pit, Louise Horstmanshof, Anne Moehead, Oliver Hayes, Valerie Schache, and Lynne Parkinson.

May 2022

© Dementia Training Australia 2022

This work is copyright. It may be reproduced in whole or in part subject to the inclusion of an acknowledgement of the source. It may not be reproduced for commercial usage or sale. Reproduction for purposes other than those indicated above requires written permission from the copyright owners.

Enquiries regarding this report may be directed to the:

Manager Evidence Connect Program Sax Institute <u>www.saxinstitute.org.au</u> knowledge.exchange@saxinstitute.org.au Phone: +61 2 9188 9500

Suggested Citation:

Pit S, Horstmanshof L, Moehead A, Hayes O, Schache V, Parkinson L. Workforce Education and Training Standards for Dementia: an Evidence Check rapid review brokered by the Sax Institute (www.saxinstitute.org.au) for Dementia Training Australia, 2022.

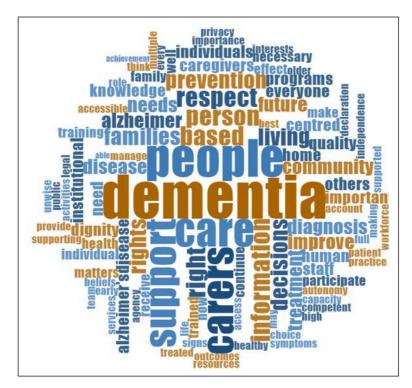
doi:10.57022/rxeu9590

Disclaimer:

This Evidence Check Review was produced using the Evidence Check methodology in response to specific questions from the commissioning agency.

It is not necessarily a comprehensive review of all literature relating to the topic area. It was current at the time of production (but not necessarily at the time of publication). It is reproduced for general information and third parties rely upon it at their own risk.

Workforce education and training standards frameworks for dementia



An Evidence Check rapid review brokered by the Sax Institute for Dementia Training Australia, May 2022.

This report was prepared by Sabrina Pit, Louise Horstmanshof, Anne Moehead, Oliver Hayes, Valerie Schache, Lynne Parkinson.





Contents

Plain English Summary	3
Executive summary	6
Background	6
Review questions	6
Summary of methods	6
Key findings	7
Gaps in the evidence	9
Conclusion	9
Glossary	25
Background	11
Methods	12
Peer review and grey literature	12
Findings	13
Question 1: What standards frameworks have been developed for workforce education and training in dementia?	13
Question 2: What has been learnt from the implementation of the standards frameworks identified in Q1?	18
Question 3: From the frameworks identified in Q1, what is their applicability to the Australian context?	19
Gaps in the evidence	21
Discussion	22
Conclusion	24
References	27
Appendices	29
Appendix 1 — PRISMA flowchart	29
Appendix 2 — Search strategy	30
Appendix 3 — Analyses training level	34
Appendix 4 — List of frameworks	36
Appendix 5 — Data extraction tables and figures	37
Appendix 6 — Excluded Articles	69

Plain English Summary

Why do a review?

The increasing incidence of dementia requires an effective highly skilled dementia care workforce.

Dementia education that meets quality and safety standards is essential to ensure high quality care.

Dementia Training Australia (DTA) commissioned a review of existing education and training frameworks that may be able to be used, modified or adapted for use in Australia to meet that goal.

Which standards frameworks would be useful in Australia?

The top three recommended Standards Frameworks to support an Australian standards framework are:

Dementia Training Standards Framework 2018, UK

The Dementia Learning and Development Framework. 2016, Northern Ireland

Promoting Excellence Knowledge and Skills. 2018, Scotland

How was the review done?

The peer reviewed and grey literature were searched (2010 to 2020). Key search domains were education, workforce, frameworks, and dementia. Thirteen frameworks were found.

After careful analysis, the three frameworks best able to support Australian standards development were selected.

What have these standards frameworks done well?

Dementia Training Standards Framework. 2018, UK (F5)

- Good evidence base
- Clear guide to using the framework
- Tiers or levels of training mapped against thematic subjects
- Links to relevant legislation and guidelines
- Standard wording of agreed definitions and principles
- Recommendations for further research
- Consistent taxonomy of agreed definitions and principles

The Dementia Learning and Development Framework. 2016, Northern Ireland (F6)

- Good evidence base
- Foreword by person living with dementia
- Clear diagram of the dementia journey
- Purpose and principles underpinning the framework
- Tiers or levels of training mapped against thematic subjects
- Learning outcomes by tier -knowledge
- Learning outcomes by tier-skills
- Self-assessment tool

Promoting Excellence Knowledge and

Skills. 2018, Scotland (F8)

- Good evidence base
- Clear explanation of the dementia journey
- Tiers or levels of training mapped against thematic subjects and stage in dementia journey
- Statements by people living with dementia
- Learning outcomes by tier -knowledge
- Learning outcomes by tier-skills
- Outcome measures

What are the lessons from implementing these standards frameworks?

Dementia Training Standards Framework. 2018, UK

Enablers:

- Strong implementation plan
- Secure funding for development and implementation
- Strong stakeholder partnerships
- Endorsement of professional and consumer bodies, government, education and health care providers

Barriers:

- Unsupportive regulatory context
- Lack of management support
- Staff unable to access programs
- Low staff literacy
- Lack of funding

The Dementia Learning and Development Framework. 2016, Northern Ireland

Enablers:

 Engagement with consumers and stakeholders

Promoting Excellence Knowledge and Skills. 2018, Scotland

Enablers:

- Strong implementation plan
- Strong stakeholder partnerships
- Strong evidence base

Barriers:

- Unsupportive regulatory context
- Lack of management support

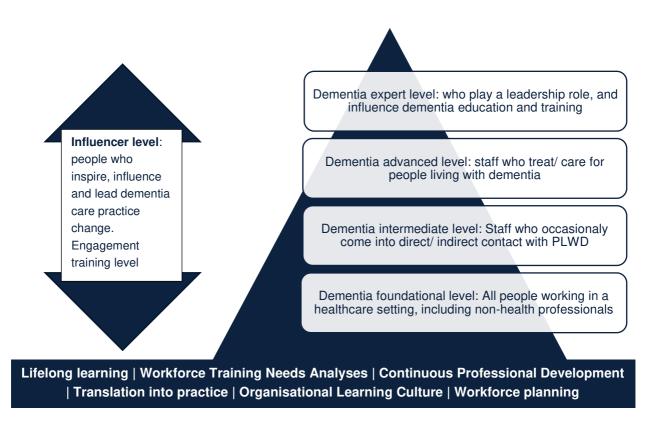
What else do we need to know?

How should Australian dementia training frameworks consider and include:

- The Australian multicultural workforce?
- The Australian rural and remote workforce?
- Self-care in this workforce?
- Digital technologies and digital literacy for this workforce?
- The wider community in developing standards for this workforce.

Training level example for Australia

Drawing on the best elements of the various frameworks, a tiered approach to learning consisting of a four-dimensional structure for the frameworks could fit the Australian context: 1) training topics 2) training level/ tier 3) knowledge outcomes, and 4) and skills outcomes.



Executive summary

Background

The increasing incidence of dementia requires an effective highly skilled dementia care workforce. Dementia education that meets quality and safety standards is essential to ensure high quality care. Dementia Training Australia (DTA) commissioned this review of existing education and training frameworks that may be able to be used, modified, or adapted for use in Australia to meet that goal.

Review questions

This review aimed to address the following specific questions:

Question 1: What standards frameworks have been developed for workforce education and training in dementia?

Question 2: What has been learnt from the implementation of the standards frameworks identified in Q1?

Question 3: From the frameworks identified in Q1, what is their applicability to the Australian context?

Summary of methods

The peer reviewed and the grey literature were searched (2010 to 2020). The key search domains were education, workforce, frameworks, and dementia. From the twenty-seven papers included in the review, 13 frameworks were identified (16 papers), and 11 supporting documents.

Key findings

Question 1: What standards frameworks have been developed for workforce education and training in dementia?

The 13 frameworks included information on 'Principles/ values, levels of training or practice, training topics, indicative outcomes, and training resources were provided in most frameworks with varying levels of complexity and mapping between the elements.

Country and target audience

Frameworks originated from Australia (n=3), United Kingdom (n=5) the United States (n=4) and Ireland (n=1) with a mix of national, state or regional settings. Most frameworks focussed only on training health care professionals with a few extending to people in customer-centric settings, people living with dementia (PLWD), informal carers or general community.

Principles and values

Principles and values identified in the frameworks were: Accessible, Choice, Communication, Community, Dementia prevention, Early diagnosis, Evaluation, Future planning, Human rights and respect, Innovation, Knowledge, Person-centred, Provide information, Quality of care, Quality of life, Support, Training components and Workforce and Services.

Levels of training or practice

Eight frameworks identified various training levels based on frequency of contact with a PLWD and level of expertise required. Training levels can be broadly divided as follows: 1) General public; 2) All health and social care staff, including reception staff etc.; 3) staff who come into direct/ indirect contact with people living with dementia incidentally, for example a physiotherapist who occasionally treats a PLWD; 4) staff who treat and care for people living with dementia, including health workers within specialist dementia settings or who come into contact with a high proportion of people living with a dementia. 5) expert level staff who play a leadership role, and influence dementia education and training.

Training topics

Fifty-six training topics were identified and clustered by care setting, basic skills, advanced skills, health promotion, ethics and values, and staff support. The most common topics were for people in regular close contact with people with dementia (n=13), followed by community care (n=12), basic dementia awareness (n=12), communication (n=12), delirium (n=12) and understanding legal issues (n=12), then hospital/ acute care (n=11), dementia risk reduction/ prevention (n=11), diagnosis (n=11), end-of-life care (n=11), and ethics and potential risks and safeguards (n=11).

Framework structure and complexity by training topic

Each framework had varying levels of complexity for training topics. Training topics were mapped against levels of training in eight frameworks, and with suggested outcomes in eight frameworks. Some frameworks only had suggested outcomes by training topics (e.g. Ireland), whereas Northern Ireland, Scotland and Wales used a complex, but useful, four-dimensional structure including: training topics, outcomes for each training topic separated by knowledge and skills and training level. Seven

frameworks included strategies/ actions or recommendations. Only four frameworks provided clear links with relevant guidelines and legislations by training topic and five provided links to relevant training resources.

Other framework elements

Other framework elements included: Glossary, Frequently Asked Questions, Implementation plan of the framework, framework evaluation plan, research recommendations, self-assessment tool to identify training needs, six step workforce planning tool to match training needs and training with current practice, database to track all education and training activities to ensure coordinated approach, funding schedule for service delivery reimbursements, and indicative mapping to national occupational standards, skills frameworks and regulated qualifications components or care standards.

Inclusion of PLWD in the framework development

Framework elements demonstrating PLWD inclusiveness included: the use of patient journeys, a foreword by a PLWD, case studies and quotes from PLWD by learning topic. Good coverage of consumer input from PLWD and their carers was canvassed in five frameworks.

Question 2: What has been learnt from the implementation of the standards frameworks identified in Q1?

The mentioned barriers for key stakeholders were unsupportive regulations, lack of organisational support for the organisations implementing the standards and aged care providers, lack of access to relevant training, low staff literacy, lack of funding for all stakeholders, high staff turnover, and lack of evaluation to improve framework implementations. Enablers included a strong implementation plan, funding, strength of partnerships, building on previous work, peak body endorsement of key stakeholders such as Colleges and linkages to mandatory training.

Question 3: From the frameworks identified in Q1, what is their applicability to the Australian context?

- All 18 principles identified above apply to Australia.
- Tiered professional training levels, based on the Australian health care system, can be implemented similar to other frameworks:
 - o foundational level: all clinical and non-clinical health and social care workers
 - o intermediate level: workers who come into direct/ indirect contact with PLWD incidentally
 - advanced level: workers who treat and care for PLWD, including workers within specialist dementia settings or who come into contact with a high proportion of PLWD
 - *expert level:* workers who play a leadership role, and influence dementia education and training.
- Fifty-six training topics clustered by care setting, basic skills, advanced skills, health promotion, ethics and values, and staff support fit the Australian healthcare and education system.
- The more complex four-dimensional frameworks fit the Australian context as it will provide better guidance for Australian users:
 - 1) training topics
 - 2) training level/ tier
 - 3) knowledge outcomes
 - 4) skills outcomes.

- Framework elements demonstrating PLWD inclusiveness can easily be adapted to the Australian context such as: the use of patient journeys, a foreword by a PLWD, case studies and quotes from PLWD by learning topic
- Most frameworks provide some guidance for developing an Australian framework. However, the
 multicultural background of the Australian dementia workforce, the rural and remote workforce,
 and the needs of First Nations require addressing. The US frameworks have a section on First
 Nations Peoples, as do the Queensland Health Dementia Framework 2010-2014 and the 2020
 Queensland Health, Care at end of life: Education and training framework, which could inform
 Australia.
- Self-care is a recognised element of healthcare provider training in Australia to ensure a sustainable workforce yet was only listed in the Northern Ireland Framework.
- Digital literacy, telehealth and health literacy are important skills in providing dementia care in Australia (e.g. electronic health records, My Aged Care Website and e-prescribing) yet were only covered in 6, 1 and 2 frameworks respectively. This may be partially explained by the rapid technological developments due to COVID-19.

Gaps in the evidence

Trauma informed care and first aid were not listed in the frameworks yet are recommended topics for training by the current Royal Commission into Quality and Safety in Aged Care. Whilst cultural safety is addressed in many frameworks, little attention is paid to the multicultural background of the dementia care workforce and the PLWD, as well the rural and remote workforce, such as is the case in Australia. Self-care of healthcare staff, digital technology, adult education learning and life-long learning principles, and bringing the community on board, was not a strong focus in the frameworks.

Conclusion

The UK Dementia Skills and Core Training Framework (F5), the Irish Department of Health Dementia Together (F6), and the National Health Services Scotland Framework (F8) are the recommended starting points for an Australian Framework. However, other frameworks also had elements that can be useful in Australia. Our recommendations are:

- Underpin dementia education plans with legislative frameworks and aged care industry and government workforce training needs assessments to ensure systems change and alignment with workforce needs, such as alignment with the Aged Care Safety & Quality Standards
- Underpin framework development with the principles: 'Every aspect makes a difference to the person living with dementia, carers, the clinician, the environment and the system'; and 'The Voice of the PLWD and carers is central to the framework', to meet the needs of the end-users
- Develop a tiered dementia care education framework moving from foundation, intermediate, advanced to expert level leading to improved knowledge, skills and attitudes, behaviour and practice change
- Consider adding to the framework engagement training for 'influencers' (see also Training level example for Australia in Plain English Summary) as per the Wales framework

- Consider using the tiered dementia care education framework with the purpose to guide implementing a dementia care career ladder or use for general career progression
- Include a nationally agreed, cross-state consistent terminology of dementia education and training related concepts and definitions
- Include recommendations that organisations need to put mechanisms in place that support a learning culture, cultural change and workforce planning, to allow for translation of learning into practice.

Background

The increasing incidence of dementia requires an effective highly skilled dementia care workforce (1). It is projected that employment of Australian aged and disability carers will increase by 39% between 2018 and 2023 (2). Dementia education that meets quality and safety standards is essential to ensure high quality care.

To bring rigour and consistency to training, with a quality benchmark that models appropriate education levels in dementia, Dementia Training Australia (DTA) commissioned this review of existing education and training for dementia frameworks that may be able to be used, modified or adapted for use in Australia. DTA aims to develop a national standards framework for dementia education and training, with application and relevance to all sectors, and especially to support workforce knowledge and skills development in aged care. The review supports that work by identifying standards frameworks internationally that have been developed for workforce education and training about dementia.

Methods

Peer review and grey literature

Appendix 1 shows the PRISMA flowchart and Appendix 2 provides the search strategy. Inclusion criteria were:

- 1) Documents describing education/training standards framework development
- 2) All countries, focusing first on Australia, New Zealand, Canada, USA, Europe (UK, Netherlands, Germany) and Scandinavia (Denmark, Sweden)
- 3) Education/training settings for those providing care and services for people with dementia in the community, primary health care, emergency departments, inpatient care, and aged care facilities
- 4) Populations focussing on education/training for people who are part of a paid workforce such as nurses, doctors, social workers, and care workers who deliver care or services for people with dementia. Key word domains were standards/framework, workforce, education/training, dementia. NHMRC levels of evidence (see Appendices, Table 5) were applied to the Frameworks discovered.

Medline, EMBASE, CINAHL, ERIC, PsycINFO, Cochrane Library, Johanna Briggs Institute library were searched between January 2010 and December 2020. The grey literature was searched through Google, Open Grey, Bookshelf, Health Sciences Online, Analysis Policy Observatory, mednar, OlAster,OpenDOAR, Open Grey, Science.gov, and WorldWideScience. Government websites and relevant dementia and ageing peak body websites were searched. Documents such as National Dementia Strategies with a substantive component on education and training were included.

Titles and abstracts (n=2887) were screened by at least two reviewers (LH, LP, OH, SP). Following initial screening and removal of duplicates, 236 items were further screened, and 132 full texts were assessed for eligibility. Of these,105 were excluded but flagged as being of interest to DTA including Competencies (n=15), Framework Evaluations (n=9), Implementation (n=10), Policy and comment (n=35) and Training programs/needs (n=36). A list of citations for the excluded articles has been provided in Appendix 6. Summary tables of the included studies are available as Appendix 5.

Twenty-seven papers met the criteria for inclusion in the review. Of these, 13 frameworks were identified (16 papers), and 11 supporting documents.

Findings

Question 1: What standards frameworks have been developed for workforce education and training in dementia?

Overview of evidence base: Thirteen frameworks were identified from: Australia (n=3; 1 national, 2 state level (Queensland)); United Kingdom (n=5; 4 national level: UK, Northern Ireland, Scotland, Wales and 1 regional Scotland); United States (n=4; 2 national and 2 state level Georgia and West Virginia); and Ireland (n=1; national level). Included frameworks were given a code from F1 – F13 and are listed in Appendix 4. Details are provided in Appendix 5:

- Table A5.1 Overview high level extraction: country, level, workforce population and purpose.
- Table A5.2 Principles and values common themes and occurrence in framework.
- Table A5.3 Training levels and key elements framework.
- Table A5.4 Training topics common themes and occurrence in frameworks.
- Table A5.5 NHMRC Levels of Evidence.
- Table A5.6 Consumer and stakeholder participation, barriers and enablers to development, implementation, and evaluation.
- Table A5.7 Applicability to Australia and recommendations.

Workforce populations: All five UK-based frameworks focussed on health and social care staff. Australian frameworks focussed on primary healthcare nursing (F1), QLD government health staff (F2), and QLD based end-of-life care workforce (F3). Two frameworks in the US focussed on national public health staff and health care staff (F10, F11), the Georgia-state framework (F12) only included personal care workers, whereas West-Virginia (F13) included health professionals, personal care workers and informal caregivers. Four frameworks included customer-focussed work-settings including banks, shops and faith-based groups (F3, F5, F9, F10). Six frameworks included training for PLWD and their carers (F3, F4, F8, F9, F11, F13) and four listed that training providers (F3, F6, F8, F10) would benefit from the framework. (Appendix 5: Table A5.1)

Purpose: Figure 1 details a thematic analysis of the frameworks' purpose structured around: 1) strategic elements: vision, content, scope and methods; 2) potential audiences: workforce, learners, PLWD, informal carers, and community; and 3) outcomes per target audience such as retention, dementia career pathways and changing practice.

Principles and Values: The principles related to the overarching content of the frameworks and was applicable to any setting, with 18 themes identified: Accessible, Choice, Communication, Community, Dementia prevention, Early diagnosis, Evaluation, Future planning, Human rights and respect, Innovation, Knowledge, Person-centred, Provide information, Quality of care, Quality of life, Support, Training components and Workforce and Services. The most common were community, meaning considering stakeholders in education (n=13), and workforce and services (n=13), followed by support (n=12), then early diagnosis, information provision, quality of care, and choice (n=10). The Wales (F9) framework included all 18 themes identified, followed by the UK with 17 (F5). (Appendix 5: Table A5.1)

STRATEGY ELEMENTS FOR PURPOSE

		STRATEGY ELEMEN	IS FOR PURPOSE		
Vision		Content		Scope	How
Blueprint		Strategies	Build on nation	al dementia strategies	Government
Vision		Recommendations		s in line with dementia	Employers
Aspirational		Actions	st	tandards	Partner organisations
Future focussed			Meeting policy.	, legislation, guidance	Large systems
				uirements	Integrate dementia into the health system
					Use evidence
					Inform commissioning of training
		ELEMENTS RELATED TO POTEN		OR PURPOSE	
PLWD/care	Informal carers	Staff/workforce		Learners/Education	Community
Care	Care	Workforce developm	nont	Education needs to be:	Broader community
All stages of care	Meet needs	Enabling work enviror		High quality	Working together
Timely diagnosis	Workforce	Support areas of prac		Accessible	Build partnerships
Accessible (F1 F2)		Identify current exper		Available	Bulla partiferships
	Meet needs <i>Education</i>	Build	lise and needs	Consistent	
Quality of care					
Seamless pathway	Meet needs	Knowledge		Resourced	
Managing		Skills		Standardised	
Promote cognitive health		Confidence		Effective	
Risk identification and reduction		Capacity		Activities	
Empowerment		Dementia specific		Developing & delivering	
Rights		Interaction sensitively	with PLWD and	education	
Maximise rights, choices and health		carers Respond to needs of		Provide opportunities	
and wellbeing			PLWD and carers	Plan training	
Dementia journey		Dementia-capable Culturally competent		Localised training needs	
				Core themes for training	
		Career development			
		Continuing profession	iai development		
		Career progression			
		Implement career mo			
�		OUTCOMES LISTE		<u>₽</u>	$\overline{\mathbf{c}}$
PLWD/care Informal car	ers	Staff/ workforce		ers/Education	Community
Improved outcomes		Changing frontline practice		ngful learning	Societal attitude change
Positive difference		Work effectively		ing outcomes	Change actions
Quality of life		New ways of working		raining needs	Nation Free of dementia
Improved care		Build capacity		to different services	
Supported PLWD		Retention	Applicable to	o different services	
Improved PLWD and carers experiences		Recruitment			
Optimised health and wellbeir	ig De	ementia career-pathways/ladders			
Improved continuity of care					
Figure 1. Thematic analyses of pu	rpose provided i	n Frameworks 1 to 13.			
• • • • • • • • •					

14

Sax Institute | Workforce education and training standards frameworks for dementia

Training/ practice levels: Eight frameworks identified various training levels based on frequency of contact with a PLWD and level of expertise required. Figure 2 provides an aggregate of the different models. Based on the frameworks training levels can be broadly divided as follows: 1) foundation level: all health and social care staff, including reception staff etc.; 2) intermediate level: staff who come into direct/ indirect contact with people living with dementia incidentally, for example a physiotherapist who occasionally treats a PLWD; 3) advanced level: staff who treat and care for people living with dementia, including health workers within specialist dementia settings or who come into contact with a high proportion of people living with a dementia. 4) expert level who play a leadership role, and influence dementia education and training. The general public was included in many frameworks as a separate training level. The frameworks included the following elements: continuous professional development, life-long learning, translation into practice, and workforce planning which can form the cornerstone of a training level model (See Figure 2. Training level example for Australia).

Furthermore, the Wales Framework (F9) presented a training module on Engagement, for 'influencers' who are not necessarily health care professionals but may inspire or influence others. For example, engagement training in the Welsh framework includes a section on 'Drivers, policies and research': *Influencers need to be aware of key initiatives, policies, research and other information that informs others how services could or should develop.* They use their training to shape systems of support to meet the needs of PLWD. An example of an outcome measure for engagement training is that influencers ensure that dementia education plans and strategies are informed by the latest legislation, guidelines and research. This training module could cut through all levels of training.

Terminology was confusing as some used the same term for different levels of expertise. For example, Northern Ireland (F6) has a 'Tier 3 Informed Practice' signalling an experienced dementia expert, whereas for Scotland (F7, F8) 'Tier 1 Dementia Informed Practice Level' reflects the basic KSW required and Wales also uses 'Informed people' as their 1st level of training. Regardless of terms, most frameworks recommended the 1st level of training as a minimum requirement level (e.g., F6) and then building onto the next training level. (Appendix 4: Table 3)

Training topics: Fifty-six topics were identified clustered by care setting, basic skills, advanced skills, health promotion, ethics and values, and staff support. Northern Ireland (F6), Scotland (F8) and Wales (F9) covered the most topics. The most common topics were people in regular close contact with people with dementia (n=13), followed by community care (n=12), basic dementia awareness (n=12), communication (n=12), delirium (n=12) and understanding legal issues (n=12), then hospital/ acute care (n=11), dementia risk reduction/ prevention (n=11), diagnosis (n=11), end-of-life care (n=11), ethics, potential risks and safeguards (n=11), and home care (n=10), evidence based decisions/ practice (n=10), palliative care (n=10), behaviour management (non-pharmacological) (n=10), maintaining PLWD wellbeing (n=10) and leadership in dementia care (n=10). (Appendix 4: Table 4)

Framework structure and complexity by training topic: Each framework had varying levels of complexity for training topics. Training topics were mapped against levels of training in eight frameworks, and with suggested outcomes in eight frameworks. Some frameworks only had suggested outcomes by training topics (e.g. Ireland), whereas Northern Ireland, Scotland and Wales used a complex, but useful, four dimensional structure including: training topics, outcomes for each training topic separated by knowledge and skills and training level. Seven frameworks included

strategies/ actions or recommendations. Only four frameworks provided clear links with relevant guidelines and legislations by training topic and five provided links to relevant training resources.

Key contents: Table 1 below provides the main elements of the key content:

- Evidence underpinning the framework, target audience, principles/ values and purposes and training topics were identified in all frameworks
- How to use the framework, framework structure overview, levels of training or practice, indicator/ outcome measures/ success factors/skills statement, strategies/ actions/ recommendations and some form of implementation plan were provided in majority of the frameworks with varying levels of complexity and mapping between the elements
- Consumer participation was included in the Irish framework through a rigorous training needs analyses of PLWD and people involved in their care. Patient journeys, foreword by a PLWD, case studies and quotes from PLWD were provided in several frameworks by topic
- Elements of interest are: Compelling evidence (F10), a workforce planning tool which includes ongoing assessment of education and training needs in line with the Scottish National Dementia Strategy (F7), a web-based database to track all education and training activities (F13) and funding schedule for reimbursements for clinicians (F1)
- Terminology varied per framework but only three frameworks provided a clear terminology section
- The use of different colours per topic area or training level was helpful in signposting and framework clarity.

Order	Content	Frameworks with this content	Preferred framework
1	Foreword by experienced expert	F6	F6
2	Frequently asked questions	F12	F12
3	How to use the Framework	F5 , F7, F8 , F9, F10, F12	F5, F10
4	Structure of Framework	F1, F2, F3, F4, F5, F6, F8	F1, F3
5	Evidence underpinning the Framework (e.g. policy, previous work, data)	All	F10, F1
6	Purpose and principles underpinning the Framework	All	F12, F6
7	The Dementia Journey	F6, F8	F6

Table 1. Key content of frameworks

theme	Mapped training needs against population needs and workforce capability atic subjects or Key Priority Areas - each with the following structure can be ed against:	F3 All	F3 F6, F5, F8
theme mappe	e with the following structure can be	All	F6, F5, F8
9.1			
	Tiers or level of practice or training	F3, F4, F5, F6, F7, F8, F9, F13	F6, F5, F8
9.2	Context Statement	F6, F9, F10	F9
9.3	Compelling evidence	F10	F10
9.4	Statements by People Living with Dementia	F6, F8	F8
9.5	Case studies demonstrating the application of the standards	F10	F10
9.6	Target Audience	All	-
9.7	Strategies, actions or recommendations	F1, F2, F4, F5, F7, F10, F11	F10
9.8	Learning Outcomes by Tier- knowledge	F6, F8, F9	F6, F8, F9
9.9	Learning Outcomes by Tier – skills	F6, F8, F9	F6, F8, F9
9.10	Indicator, Outcome measures, Success factors or Skills statement	F1, F2, F3, F5, F8, F10, F12, F13	F8, F12
9.11	Links to relevant guidance and/or legislation	F5, F5, F6, F7, F8	F5
9.12	Links to relevant training resources (e.g., online modules)	F3, F5, F7, F9, F12, F13	F3
	Implementation plan for the standards	F1, F2, F3, F4, F5, F7, F8	F3
	9.2 9.3 9.4 9.5 9.6 9.7 9.8 9.9 9.9 9.10 9.11	9.2Context Statement9.3Compelling evidence9.4Statements by People Living with Dementia9.5Case studies demonstrating the application of the standards9.6Target Audience9.7Strategies, actions or recommendations9.8Learning Outcomes by Tier- knowledge9.9Learning Outcomes by Tier – skills9.10Indicator, Outcome measures, Success factors or Skills statement9.11Links to relevant guidance and/or legislation9.12Links to relevant training resources (e.g., online modules)	F9, F139.2Context StatementF6, F9, F109.3Compelling evidenceF109.4Statements by People Living with DementiaF6, F89.5Case studies demonstrating the application of the standardsF109.6Target AudienceAll9.7Strategies, actions or recommendationsF1, F2, F4, F5, F7, F10, F119.8Learning Outcomes by Tier - knowledgeF6, F8, F99.9Learning Outcomes by Tier - skillsF6, F8, F99.10Indicator, Outcome measures, Success factors or Skills statementF1, F2, F3, F5, F8, F10, F12, F139.11Links to relevant guidance and/or legislationF5, F5, F6, F7, F89.12Links to relevant training resources (e.g., online modules)F1, F2, F3, F4, F5, F7,Implementation plan for the standardsF1, F2, F3, F4, F5, F7,

11	Evaluation plan	F2, F3, F4, F5, F8, F9, F10, F11	F10
12	Consistent taxonomy of agreed definitions and principles	F3, F5, F10	F5
13	Recommendations for research	F5	F5
14	Self-assessment tool	F6	F6
15	Six Step Workforce Planning Tool	F7	F7
16	Web-based database to track all education and training activities	F13	F13
17	Funding schedule for reimbursements	F1	F1
18	Indicative mapping to national occupational standards, skills, frameworks & regulated qualifications components or care standards	F3, F5, F9	F3, F9

Level of evidence: Frameworks were built on previous work, existing policies, and reviews of existing resources and literature. Consumer input from PLWD and their carers was canvassed in many cases (F1, F5, F6, F8, F9, F10). Stakeholders included Alzheimer's Societies, government agencies, university academics, and non-profit organisations involved with care of PLWD and their carers/ families. The body of evidence for F5 and F8 was highest graded as B; F4, F6, and F7 were graded as C by NHMRC standards. The remaining frameworks relied on recommended best practice. (Appendix 4: Table 5).

Question 2: What has been learnt from the implementation of the standards frameworks identified in Q1?

Engagement with consumers and stakeholders: The Australian Commission on Safety and Quality in Health Care (ACSQHC) advocates a consumer centred approach to care (3). Considered engagement with consumers and other stakeholders is an important enabler of program implementation. Only three frameworks did not mention consumer input to development (F3, F10, F13); only F3 did not mention other stakeholder input but listed their partners. Four frameworks reported good coverage of both consumers and other stakeholders (F4, F6, F8, F12). (Appendix 4: Table 6)

Barriers to implementation: The most common barriers to framework implementation were unsupportive regulations (F5, F8), lack of organisational support (F5, F8), lack of access to appropriate and relevant training (F4, F5), low staff literacy levels (F5, F13) and lack of evaluation (F4,F10). Lack of funding (F5) and high staff turnover (F13) were also mentioned as barriers to standards frameworks implementation. Other frameworks did not report barriers.

Enablers to implementation: The most common enabler reported was a strong implementation plan (F1, F2, F3, F4, F5, F7, F8). Funding (F2, F4, F5, F9, F10, F11), strength of partnerships (F4, F5, F8, F9, F10, F11), and building on past work (F2, F3, F4, F9, F10, F11) were also important enablers. Other enablers were strength of research (F4, F8), Peak Body endorsement (F2, F5), and linkage to mandatory accreditation (F3).

Evaluation: Four of the frameworks had been evaluated (F4, F5, F10, F11), and four had evaluation plans (F2, F3, F8, F9) although it was unclear if they had been evaluated.

Question 3: From the frameworks identified in Q1, what is their applicability to the Australian context?

Table 7 (Appendix 4) provides an overview of what may be useful in the Australian context.

Values: The Wales framework (F9) included all 18 *key principles* identified that may serve as a basis for developing the Australian principles and values. Wales has a level of training 'Compassionate Practice' which reflects the high level of values identified.

Purpose:

- The stated purpose of an Australian Framework could be structured similarly to other frameworks including: 1) the strategic elements: vision, content, scope and methods; 2) potential audiences: workforce, learners, PLWD, informal carers, and community; 3) outcomes per target audience. Figure 1 has suggestions to shape the Australian purpose.
- The inclusion of the development of compassionate and non-technical communication skills as part of the purpose similar to the Wales framework (F9) would be beneficial to demonstrate the importance of these. Given the current investigation around staff wellbeing during the Royal Aged Care Commission, Australia could consider extending their purpose to 'Maximise rights, choices and health and wellbeing' as in the Scottish national framework (F8), by adding this for both PWLD *and* staff.
- We particularly recommend the use of dementia specific terms that were derived from the purpose in other frameworks: Deliver services in line with dementia standards (F7); Dementia journey (F8); Dementia-capable (F12); dementia career progression pathways (F6).

Training levels: for Australia can be mapped against a combination of frameworks (Figure 2). Intermediate level includes for example a podiatrist who treats a PLWD but it is not their core business. Dementia advanced level includes for example a nurse working in a dementia respite care.

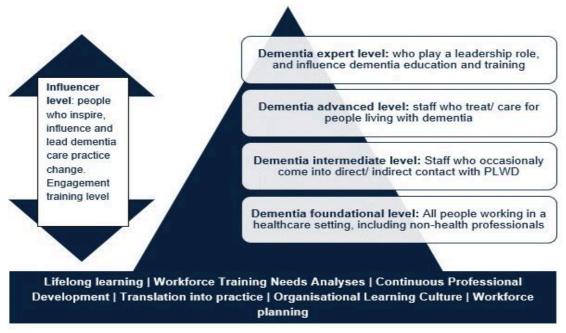


Figure 2. Training level example for Australia.

Training topics: Fifty-six training topics clustered by care setting, basic skills, advanced skills, health promotion, ethics and values, and staff support fit the Australian healthcare and education system. (Table 4, Appendix 4).

Framework structure and complexity by training topic: In line with Northern Ireland (F6), Scotland (F8) and Wales (F9), a more complex four-dimensional frameworks fits the Australian context as it will provide better guidance for users of the Australian framework: 1) training topics 2) training level/ tier 3) outcomes separated by 4) knowledge and skills.

Key content: All the key content listed is applicable to Australia including both the common and less common content. The less common content of compelling evidence per topic, workforce planning tool mapped against education needs, clear funding schedules for clinicians, terminology and Australian consumer focussed elements such as PLWD journeys, a Foreword by a PLWD, case studies and quotes from PLWD are highly recommended to round out the documents.

Engagement, implementation and evaluation: Similar barriers and enablers to implementation apply to Australia. Barriers such as lack of dedicated funding, high staff turnover and low education, poor digital literacy levels among aged care staff resonate. Australia can capitalise on their existing partnerships in the aged care sector and other sectors, for example, existing dementia representative groups can assist with presenting the views of PLWD. It is also important to include a statement in the framework that strategies need to be developed to enable trained staff to put their learning into practice. A NSW state-wide dementia training program (4) evaluation found that barriers to learner implementation were lack of time, personal empowerment, workplace resources, management and collegial support and also competing workplace demands. Cultural change and workforce planning, through educating the right people, is required to ensure knowledge translation into dementia care practice, as part of an Australian framework. An Australian Framework can support this through providing guidance to 1) to ensure dementia education includes elements that allow for knowledge translation into practice; and 2) that education providers teach learners to lead-by-example in creating workplace change.

Gaps in the evidence

Whilst cultural safety is addressed in many frameworks, little attention is paid to the multicultural background of the dementia care workforce, nor the rural and remote workforce, such as is the case in Australia. Rural healthcare workers often have different needs to their city counterparts and will require to understand the landscape of supportive services such as how can a PLWD access transport, or telehealth services. Rural and remote health care providers and educators will need to be closely involved with the development of an Australian framework. There appears a gap in dementia frameworks specifying that educational requirements need to be tailored to the needs of the worker as much as possible to allow for deep learning. Special consideration of First Nations people is not adequately addressed in most frameworks. Some US documents have a section on First Nations Peoples that could inform Australia (F10). Self-care of healthcare staff, use of digital technology, adult education learning and life-long learning principles, and bringing other stakeholders on board in dementia care, was not a strong focus in the frameworks. Most topics have been covered in the international frameworks with the exception of trauma-informed care and first aid.

Discussion

This review identified 13 frameworks from Australia, Ireland, the UK and the US with a wide variety of evidence, values, learning topics, training levels, structure complexity of key content, consumer and stakeholder input methodologies and different development methodologies. The Wales (F9) and the UK (F5) included most of the key principles such as community care, support, and workforce and services. Training topics were most extensively covered by Northern Ireland (F6), Scotland (F8) and Wales (F9), which were broadly supported by the international literature (5), the Australian National Framework for Action on Dementia 2015 - 2019 (6) and Australian state-wide dementia education and training programs (4, 7). The UK (F5) and Scotland (F8) provided the best evidence by NHMRC standards, rated as 'good', followed by Ireland (F4), Wales (F6), and Greater Glasgow and Clyde (F7) rated as 'satisfactory'. It is clear that the UK has a long history of recognising the need to improve dementia care, evidenced by their national dementia strategy dating back to 2009.

For an Australian framework to be effective and deliver the guiding principles to make a difference, it needs to have the following key elements:

- Underpinned by a legislative framework, e.g. laws around guardianship, and privacy, and appropriate national/ state/ local area dementia plans, which may be derived from the government, age care or higher education sector
- PLWD as central and actively participating in the development, implementation and evaluation of the Dementia Training and Education Framework
- A whole of systems approach from policy makers to senior managers and from clinical and nonclinical champions in the workforce to the PLWD
- Commitment of resources or access to funding or sponsorship for development and implementation
- Good leadership and managerial sponsorship of development and implementation
- Underpinning by standards of care such as but not limited to the Aged Care Quality Standards
- A tiered approach to learning consisting of a four-dimensional structure for the frameworks fits the Australian context as it will provide better guidance for users of the Australian framework: 1) training topics 2) training level/ tier 3) outcomes separated by 4) knowledge and skills. Transferable framework across all settings: primary health care/GP/ Acute/ community/ residential care/ inclusive of first nations people, culturally relevant and special needs groups, to end-of-life
- A commitment to evaluation and research and an assurance to maintain currency of best practice.

None of the frameworks meet all these criteria. Whilst some are more robust than others, all frameworks have useful elements for Australia. However, we recommend the following top three frameworks: Northern Ireland (F6) (8), U.K. (F5) (9) and Scotland (F8) (10), as a starting point. These are supported by evidence and could be adapted to Australia. They all include the important principles of choice, communication, community, planning for future PLWD needs, human rights and respect, and person-centeredness. They also have clear signposting for the complex structures used

for practice levels, topics and learning outcomes. The recently established International Organization for Standardization Technical Committee Ageing Societies 314 has developed international standards on Dementia Inclusive Communities and Age Inclusive Workforce. The results from this review provides an opportunity for Australia to contribute to the development of dementia education or related international standards (https://committee.iso.org/sites/tc314/home/projects.html).

Gaps: Trauma informed care and first aid were not listed in the frameworks yet are recommended topics for training by the Royal Aged Care Commission. Little attention is paid to the multicultural background and the rural and remote areas of the dementia care workforce that is present in Australia. It is essential that education frameworks tailor education requirements to the needs of the worker. Furthermore, Aboriginal and Torres Strait Islander Peoples dementia education can be informed by US documents that have a roadmap for First Nations Peoples (F10). Although self-care was not prominent in the frameworks, a systematic review of the literature as early as 2011 points to the importance of personal development and self-care for care staff (11).

Limitations: The work was limited by a focus on development of documents rather than those that focussed on implementation or curricula which may have had some useful elements. However, this approach was to keep within the scope of the brief. We included some frameworks that were not solely education frameworks but had a large and clear education content.

Recommendations:

- Underpin dementia education plans with legislative frameworks and aged care industry and government workforce needs assessments to ensure system change and alignment with workforce needs, such as alignment with the Aged Care Safety & Quality Standards
- Underpin framework development with the principles: 'Every aspect makes a difference to the person living with dementia, carers, the clinician, the environment and the system across the dementia journey'; and 'The Voice of the PLWD and carers is central to the framework', to meet the needs of the end-users
- Develop a tiered dementia care education framework moving from foundation, intermediate, advanced to expert level leading to improved knowledge, skills and attitudes, behaviour and practice change
- Consider adding to the framework engagement training for 'influencers' as per the Wales framework
- Consider using the tiered dementia care education framework with the purpose to guide implementing a dementia care career ladder or use for general career progression
- Consider a central database for dementia education and training to assist in a coordinated national approach
- Include a nationally agreed cross-state consistent terminology of dementia education and training related concepts and definitions
- Include recommendations that organisations need to put mechanisms in place that support a learning culture, cultural change and workforce planning, to allow for translation of learning into practice.

Conclusion

This review identified 13 dementia education and training frameworks that were published between 2010 and 2020. These frameworks included a wide variety of evidence, values, learning topics, training levels, key content, indicative outcomes, strategies, training resources, consumer and stakeholder input methodologies, and methodologies for development of the framework, with varying levels of complexity and mapping between the elements. In particular, the frameworks developed in Northern Ireland (F6), UK (F5), and Scotland (F8) would be a useful starting point for developing an Australian framework. Enablers such as strong partnerships between professional regulating bodies, education and service providers and PLWD, recurrent funding, organisational support for implementing learning into practice, and strong framework implementation and evaluation plans are essential to successful development and implementation. Training and education frameworks need to align with workforce planning cycles to ensure the right people are being trained to deliver dementia care. The review provides strong support for the development of an Australian framework, built on this international work, to improve dementia education, quality of dementia care, and the quality of life for PLWD, their carers and dementia care staff.

Glossary

ACOVE	Assessing Care of Vulnerable Elders
AHP	Allied Health Professionals
AHPRA	Australian Health Practitioner Regulation Agency
ACSQHC	Australian Commission on Safety and Quality in Health Care
ADRD	Alzheimer's Disease and Related Dementias
BPSC	Behavioural and psychological symptoms of dementia
CINAHL	Cumulative Index of Nursing and Allied Health Literature
CLC	Community Living Centre
DAG	Dementia Advisory Group
DeTDAT	Dementia Training Design and delivery Audit Tool
DTA	Dementia Training Australia
DCW	Direct Care Workers
EMBASE	Excerpta Medica Database - Biomedical and Pharmacological database
ERIC	Education Resources Information Center
GGC	Greater Glasgow and Clyde
GP	General Practitioner
HCBS	Home and Community Based Services
HNC	Higher National Certificate
HSCP	Health and Social Care Practitioners
HEDN	Higher Education Dementia Network
HHE	Health Education England
HHS	Hospital and Health Services
HIS	Hospital Information System
HP	Health Provider
HR	Human Resources
IADL	Instrumental Activity of Daily Living
IDD	Intellectual and Developmental Disabilities
ISCED	International Standard Classification of Education
IT	Information Technology
KPA	Key Priority Areas
KSA	Knowledge, Skills and Attitude
MD	Medical doctor

Medline	Database of biomedical and life sciences journal citations
MeSH	Medical Subject Headings
NICE	National Institute for Health and Care Excellence
NHMRC	National Health and Medical Research Council
NHS	National Health Service
NOS	National Occupational Standards
NWC	National Workforce Competence
OlAster	Open Archives Initiative Protocol for Metadata Harvesting (OAI-PMH) open access collections worldwide
OpenDOAR	Global Directory of Open Access Repositories
OpenGrey	System for information on Grey Literature in Europe
PADL	Personal Activities of Daily Living
PDS	Post-diagnostic Support
PLoS	Public Library of Science
PLWD	Person living with Dementia
PRISMA	An evidence based minimum set of items for reporting in systematic reviews and meta-analysis
PsychINFO	Abstracts database that provides systematic coverage of the psychological literature from the 1800s to the present
QCF	Qualification and Credit Framework
QLD	Queensland
RACC	Royal Aged Care Commission
UK	United Kingdom
UoW	University of Wollongong
VIPS Framework	V = Value Base; I for Individualised approach, P for understanding world from Perspective of the person with dementia and providing care and support that is in tune with this; and S providing a Social environment that supports psychological needs.
WVGEC	West Virginia Geriatric Education Center

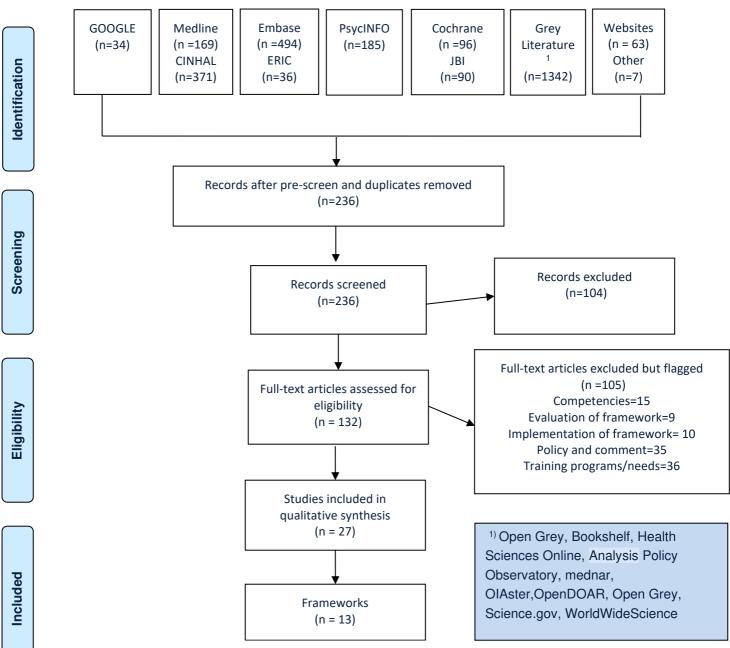
References

- Surr CA, Gates C, Irving D, Oyebode J, Smith SJ, Parveen S, et al. Effective Dementia Education and Training for the Health and Social Care Workforce: A Systematic Review of the Literature. Review of Educational Research. 2017;87(5):966-1002. doi: 10.3102/0034654317723305
- 2. Department of Jobs and Small Business Occupation Employment Projections, five years to May 2023. Canberra: Australian Government,, 2018.
- 3. Australian Commission on Safety and Quality in Health Care. Review of the key attributes of high-performing person-centred healthcare organisations. Sydney: ACSQHC, 2018.
- 4. DeSouza K, Pit SW, Moehead A. Translating facilitated multimodal online learning into effective person-centred practice for the person living with dementia among health care staff in Australia: An observational study. BMC geriatrics. 2020;20(1):33. doi: 10.1186/s12877-020-1417-3
- 5. Traynor V, Inoue, K. Crookes, P. A. . Literature review: understanding nursing competence in dementia care. Journal of Clinical Nursing. 2011;20:1948-60
- 6. Australian Health Ministers Advisory Council (AHMAC). National Framework for Action on Dementia 2015 2019. Canberra: Australian Government 2014.
- 7. Dementia Australia's Centre for Dementia Learning. Dementia Learning Guide 2021. Dementia Australia,, 2020.
- 8. Dementia Together Northern Ireland. The Dementia Learning and Development Framework. Northern Ireland: Northern Ireland Executive,, 2016.
- 9. Skills for Health and Health Education England and Skills for Care. Dementia Training Standards Framework. London, UK: Department of Health UK,, 2018.
- 10. The Scottish Government. Promoting Excellence Knowledge and Skills Framework Edinburgh, Scotland: The Scottish Government. 2011. Available from: <u>http://www.knowledge.scot.nhs.uk/home/portals-and-topics/dementia-promoting-excellence/framework/about-the-framework.aspx</u>.
- Tsaroucha A, Benbow, S.M., Kingston, P., Le Mesurier, N. Dementia skills for all: A core competency framework for the workforce in the United Kingdom. Dementia. 2011;12:29-44. doi: 10.1177/1471301211416302
- 12. Irving K, Piasek, P., Kilcullen, S., Coen, A., Manning, M. National Educational Needs Analysis Report. Dublin, Ireland: Dublin City University, 2014.
- 13. UNESCO. International Standard Classification of Education (ISCED). UNESCO, 2011.
- 14. Australian Primary Health Care Nurses Association. Four steps to Building Dementia Practice in Primary Care Victoria, Australia: Alzheimer's Australia, 2015.
- 15. Queensland Health. Dementia Framework 2010-2014. Brisbane, Queensland: Queensland Health,.
- 16. Queensland Health. Care at end of life: Education and training framework. Brisbane: State of Queensland (Queensland Health), 2020.
- 17. Department of Health Ireland. The Irish National Dementia Strategy Dublin, Ireland: Department of Health Ireland, 2014.

- 18. Skills for Care and Skills for Health. Common Core Principles for Supporting People with Dementia: A guide to training the social care and health workforce. Leeds, UK: Skills for Care and Skills for Health,, 2011.
- 19. Skills for Health and Health Education England and Skills for Care. Dementia Core Skills Education and Training Framework London, UK: Department of Health UK,, 2015.
- 20. UK National Institute for Health Care Excellence. Dementia: Assessment, management and support for people living with dementia and their carers. National Institute for Health and Care Excellence: Clinical Guidelines. London, UK: National Institute for Health and Care Excellence (UK) NICE,; 2018.
- NHS Greater Glasgow & Clyde Dementia Services Workforce Development Group (DWDG). Workforce Development Plan 2013-2018. Glasgow: NHS-Greater Glasgow and Clyde, Dementia Services,, 2012.
- 22. Care Council for Wales. Good Work: A Dementia Learning and Development Framework for Wales. Cardiff, UK: Care Council for Wales, , 2016.
- 23. Alzheimer's Association and Centers for Disease Control and Prevention. Healthy Brain Initiative, State and Local Public Health Partnerships to Address Dementia: The 2018-2023 Road Map. Chicago, IL: Alzheimer's Association USA,, 2018.
- 24. US Department of Health and Human Services. National Plan to Address Alzheimer's Disease: 2019 Update. Washington DC: US Department of Health and Human Services,, 2019.
- Georgia Alzheimer's and Related Dementias Collaborative Workforce Development Committee. Competency Guide for Dementia Care- Direct Care Worker Workforce Development. Georgia, USA: Georgia Alzheimer's and Related Dementias Collaborative Workforce Development Committee,, 2016.
- 26. Newbrough MA, Boone, L. "Training" a workforce to care for people in West Virginia with Alzheimer's disease and related dementias. West Virginia Medical Journal. 2011;107:40+
- 27. National Health and Medical Research Council. NHMRC levels of evidence and grades for recommendations for guideline developers. Canberra: NHMRC,, 2009.

Appendices

Appendix 1 — PRISMA flowchart



Adapted from: Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group (2009). *P*referred *R*eporting *I*tems for Systematic Reviews and *M*eta-Analyses: The PRISMA Statement. PLoS Med 6(7): e1000097.

Appendix 2 — Search strategy

Domains for generating key words: standards/framework, workforce, education/training, dementia

Grey Literature searches: standards/framework/guide for workforce/worker/carer education/training in dementia/Alzheimer's/cognitive impairment, by country, 2010-2020

Database searches:

Standards/frameworks:

MeSH: Guidelines

Other: standard*, framework, guide, schema, model, benchmark, structure

Workforce

MeSH: Workforce; Health Workforce; Health Personnel; Allied Health Personnel; paramedics; Healthcare Assistants; Healthcare Support Workers; physicians; Physicians, Primary Care; Nurses; nursing staff; Registered Nurses; Nursing Staff, Hospital; Nurses, Community Health; Geriatric Nursing;

Other: Staff, health workers, social workers, psychologists, psychiatrists, nursing staff, placement nurse*, registered nurse*, nurse*, aged care worker, residential support worker, community support worker, assistant in nursing, personal care assistant/associate

Education /Training

MeSH: Vocational Education; Staff Development; Education; Teaching

Other: educating, instruction, learning, training,

Dementia

MeSH: Dementia; Frontotemporal Dementia; Dementia, Multi-Infarct; Alzheimer Disease; Lewy Body Disease; Dementia, Vascular; Neurocognitive Disorders

Other: Alzheimer's disease, Cognitive impairment, Memory loss, Alcohol related dementia

Countries of interest

MeSH: Australia, New South Wales, Queensland, Victoria, Western Australia, South Australia, Tasmania, Norther Territory, Australian Capital Territory

New Zealand, Canada

United States (New England, Southeastern United States, Southwestern United States, Northwestern United States)

United Kingdom, Scotland, Ireland, Wales

Europe, Netherlands, Germany, Sweden

Scandinavian and Nordic Countries (NORWAY; SWEDEN; DENMARK; ICELAND; FINLAND)

Other: Scandinavia

Website searches

Australia, United States, United Kingdom, Scotland, Ireland, Wales, Europe, Germany, Sweden, Netherlands, Norway, Denmark, Iceland, Canada, Singapore, and New Zealand.

https://dementialearning.org.au/covid-

<u>19/?gclid=Cj0KCQiAoab_BRCxARIsANMx4S6KIOtbedX5M5qbCC68bbQusIPxq3djPrfGZf2LwZWunk</u> <u>7MywnmqvgaAgZ2EALw_wcB</u>

https://www.dementiacentre.com/education/dementia-capability-compass

https://www.advancecareplanning.org.au/docs/default-source/acpa-resource-library/acpalearning/education-framework/dementia-case-study.pdf?sfvrsn=3bb1f43c_4

https://www.advancecareplanning.org.au/docs/default-source/acpa-resource-library/acpalearning/education-framework/palliative-care-case-study.pdf?sfvrsn=33b1f43c_4

https://www.advancecareplanning.org.au/docs/default-source/acpa-resource-library/acpa-learning/education-framework/acpa-education-capability-framework-guide.pdf

https://www.apna.asn.au/Search/Page Primary Health care nurses.

file:///C:/Users/lynne/Downloads/DemOLInstruct.pdf training

file:///C:/Users/lynne/Downloads/DementiaPracticeGuidelines.pdf details of training

https://clinicalexcellence.qld.gov.au/sites/default/files/docs/improvement/end-lifecare/Education and training framework.pdf

https://www.aag.asn.au/documents/item/20 gerontology courses

https://www.aag.asn.au/documents/item/20 gerontology courses AAG

https://files.eric.ed.gov/fulltext/EJ1034373.pdf King 2014

https://dta.com.au/app/uploads/downloads/occupational-therapy-guide-people-living-with-dementia-inthe-community.pdf

https://dta.com.au/tailored-training-programs/

https://www.utas.edu.au/wicking/understanding-dementia

https://www.utas.edu.au/wicking/research/services/c/learning-organisations

https://files.eric.ed.gov/fulltext/EJ1034373.pdf

https://www.health.nsw.gov.au/agedcare/Publications/dementia-implementation-report.pdf

file:///C:/Users/lynne/Downloads/Government%20response%20(1).pdf

https://palliativecarensw.org.au/site/wp-content/uploads/2015/01/ACI-Framework-for-Statewide-Model-of-PEoLC-Service-Provision1.pdf

https://cognitivecare.gov.au/resources/online-learning/

https://www.dementia.org.au/sites/default/files/VIC/documents/Dementia_Learning_Guide_DisabilityS ervices.pdf https://www.dementia.org.au/sites/default/files/VIC/documents/Dementia learning guide Healthcare Services.pdf

https://www.acn.edu.au/education nothing on Australian College of Nursing

https://anzsgm.org/dementia-in-older-people/ nothing on ANZSGM

https://aag.slls.online/Home/SearchResults AAG Grey literature Library nothing

https://lasa.asn.au/affiliates-directory/dementia-australia/ nothing in LASA

https://www.psychology.org.au/ nothing in APS

https://otaus.com.au/ OT Australia nothing

https://australian.physio/aboutus APA nothing

https://www.acnp.org.au/ Oz college of Nurse practitioners nothing

https://www.arna.com.au/ARNA/About_Us/Related_Sites/Nursing/ARNA/About_Us/Related_Sites/Nur sing.aspx?hkey=423c1e6f-112b-4535-a83c-d813dde0f433 Australian Rehabilitation Nurses Association nothing

https://www.icn.ch/ The International Council of Nurses nothing

www.ipa-online.org

https://www.zonmw.nl/

https://www.dementienetwerknederland.nl/

https://www.rijksoverheid.nl/documenten/publicaties/2020/11/30/nationale-dementiestrategie-2021-2030

https://www.rijksoverheid.nl/

https://www.moh.gov.sg/

https://alz.org.sg/

www.alzint.org

https://www.alzint.org/what-we-do/policy/dementia-plans/

https://www.alzint.org/what-we-do/accreditation/

https://www.sci.se/

https://www.demenscentrum.se/

https://www.government.se/articles/2018/07/dementia-strategy-focusing-on-care/

http://alz.org.sg/wp-content/uploads/2018/02/Brochure-Pro20180213DL.pdf

https://aspe.hhs.gov/system/files/pdf/262601/NatlPlan2019.pdf

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6971847/pdf/rpsp-44-e2.pdf

https://www.regjeringen.no/contentassets/e10e5d5e2198426788ae4f1ecbbbbc20/en-gb/pdfs/stm201420150007000engpdfs.pdf

https://www.regjeringen.no/contentassets/3bbec72c19a04af88fa78ffb02a203da/dementia - plan 2020 long.pdf

https://apps.who.int/iris/rest/bitstreams/1137944/retrieve

http://dementiapathways.ie/permacache/fdd/cf3/dc8/b1cf86e6a4f0a0292c0db43182dfc48a.pdf

https://www.scielosp.org/pdf/aiss/2015.v51n4/261-264/en

https://www.tandfonline.com/doi/pdf/10.1080/13607863.2018.1544213

https://www.scielo.br/pdf/dn/v10n2/1980-5764-dn-10-02-00074.pdf

https://www.researchgate.net/profile/Manolis Tsiknakis/publication/330330794 Dementia Care Fra meworks and Assistive Technologies for Their Implementation A Review/links/5d83a48ea6fdcc8f d6f59577/Dementia-Care-Frameworks-and-Assistive-Technologies-for-Their-Implementation-A-Review.pdf

https://eprints.kingston.ac.uk/id/eprint/31649/1/Alushi-L-31649.pdf

https://www.jabfm.org/content/jabfp/25/3/367.full.pdf

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4112072/pdf/nihms591345.pdf

https://www.canada.ca/content/dam/phac-aspc/images/services/publications/diseasesconditions/dementia-strategy/National%20Dementia%20Strategy_ENG.pdf

https://socialcare.wales/cms_assets/file-uploads/Good-Work-Dementia-Learning-And-Development-Framework.pdf

https://gov.wales/sites/default/files/publications/2019-04/dementia-action-plan-for-wales.pdf

http://www.knowledge.scot.nhs.uk/media/6147333/guidelines for trainers and educators%20final.pd f

https://assets.gov.ie/10870/3276adf5273f4a9aa67e7f3a970d9cb1.pdf

https://www.gov.scot/binaries/content/documents/govscot/publications/strategyplan/2017/06/scotlands-national-dementia-strategy-2017-2020/documents/00521773-pdf/00521773pdf/govscot%3Adocument/00521773.pdf?forceDownload=true

http://www.knowledge.scot.nhs.uk/media/6147333/guidelines for trainers and educators%20final.pd f

http://www.knowledge.scot.nhs.uk/media/CLT/ResourceUploads/4003314/KSF%20Mapped%20to%2 0Framework%20%2817%20Jun%2011%29.pdf

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/50 7981/PM_Dementia-main_acc.pdf

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/50 7982/PM_Dementia_Annex_2_acc.pdf

Appendix 3 — Analyses training level

Summary training levels

Australia and US frameworks had no clear structure around dementia training levels, although one Australian framework provided some guidance around end-of-life care (F3). The remainder had a variety of training levels with increasing levels of expertise:

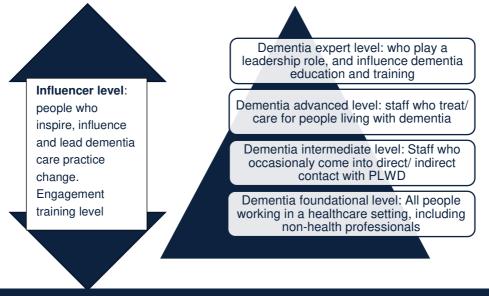
- Ireland has the most detailed levels, derived from the additional National Educational Needs analyses (12): Person with Dementia, Lay carer or Friend, Public facing services, Informed Practice Level, Dementia Skilled Practice Level, Enhanced Dementia Practice Level, Expertise in Dementia.
- Only Australia, Ireland, and Wales had a training level for the general public (F3, F4, F9) and customer-focussed non-health care jobs (F4, F9) to raise awareness and general communication skills. The remainder focussed solely on health and social care staff.
- Some frameworks mentioned awareness levels for all health and social care staff as the starting point (F5), this may include reception staff and security, in the healthcare setting, whereas others started at the 'basic KSA' requirements for health and social care staff (F6, F7, F8).
- Terminology was confusing as some used the same term for different levels of expertise. For example, Northern Ireland (F6) has a '*Tier 3 Informed Practice*' signalling an experienced dementia expert, whereas for Scotland (F7, F8) '*Tier 1 Dementia Informed Practice Level*' reflects the basic KSW required and Wales also uses Informed people' as their 1st level of training.
- Regardless of terms, it is recommended to establish the 1st level of training as a minimum requirement level (e.g., see F6).
- Most frameworks use *frequency of contact* with people living with dementia to further specify more advanced levels of training.
- Wales (F9) had a different approach in training levels: 1) Informed people (e.g., Dementia Friends training programs) 2) Skilled people and 3) Influencers. Influencer learning topics focus on engagement.
- Overall, levels were used to guide further development of the framework (e.g., for competencies or learning outcomes).

The following is worth noting for mapping current dementia education and training activity when developing an education framework and training needs assessment:

- A European cross-country study (Hallberg et al, 2016), used a three- dimensional approach consisting of: 1) International Standard Classification of Education (ISCED)(13): level 7, masters or equivalent, vocational; ISCED level 6, Bachelors or equivalent, vocational; ISCED level 5, short cycle tertiary education, vocational; ISCED level 4 Post-secondary non-tertiary, vocational; ISCED level 3 Upper secondary, vocational; Level 0 Below SCED level 3, no formal health-care 2) Care provider type (e.g. GP, RN) and 3) Level of training: No formal healthcare training; general healthcare training; specialised health care training; specialised training in dementia.
- Ireland (F4) conducted a needs assessment, where they asked the PLWD all the people that they had been involved with for their care. All these people were followed up and interviewed about their needs, that way the PLWD was at the centre of the need's analyses.

Recommendations:

Training level should be based on frequency of contact with PWLD and level of expertise • required:) 1) All health and social care staff, including reception staff, etc.; 2) staff who come into direct/ indirect contact with people living with dementia incidentally; 3) staff who treat and care for people living with dementia such as health workers within specialist dementia settings or who come into contact with a high proportion of people living with a dementia; and 4) expert level who play a leadership role, and influence dementia education and training. Furthermore, a training module on Engagement, as per the Wales Framework (F9), for 'influencers' who may inspire or influence others is recommended. The engagement training module could cut through all levels of training (Figure 1). For example, engagement training in the Welsh framework includes a section on 'Drivers, policies and research': Influencers need to be aware of key initiatives, policies, research and other information that informs others how services could or should develop. They use their training to shape systems of support to meet the needs of PLWD. An example of an outcome measure for engagement training is that influencers ensure that dementia education plans and strategies are informed by the latest legislation, guidelines and research.



Lifelong learning | Workforce Training Needs Analyses | Continuous Professional Development | Translation into practice | Organisational Learning Culture | Workforce planning

Figure 1. Proposed Training level example for Australia.

- To map current dementia training and activity, a three- dimensional approach consisting of: 1)
 International Standard Classification of Education (ISCED)(13): level 7, masters or
 equivalent, vocational; ISCED level 6, Bachelors or equivalent, vocational; ISCED level 5, short
 cycle tertiary education, vocational; ISCED level 4 Post-secondary non-tertiary, vocational;
 ISCED level 3 Upper secondary, vocational; Level 0 Below SCED level 3, no formal health-care
 2) Care provider type and 3) Level of training: No formal healthcare training; general
 healthcare training; specialised health care training; specialised training in dementia can be
 used.
- When conducting a needs assessment, it is suggested to ask PLWD about their dementia journey and all people involved in their care and interview these people to ensure the PLWD remains at the centre of the need's analyses (F9).

Appendix 4 — List of frameworks

- F1 Australian Primary Health Care Nurses Association and Alzheimer's Australia Victoria, Four steps to Building Dementia Practice in Primary Care 2015, Australia.
- F2 Queensland Health, Dementia Framework 2010-2014, Australia.
- F3 Queensland Health, Care at end of life: Education and training framework. 2020, State of Queensland (Queensland Health): Brisbane.
- F4 Department of Health Ireland, *The Irish National Dementia Strategy* 2014, Ireland.
- F5 Skills for Health and Health Education England and Skills for Care, *Dementia Training Standards Framework*. 2018, UK
- F6 Dementia Together Northern Ireland, *The Dementia Learning and Development Framework*. 2016, Northern Ireland.
- F7 NHS Greater Glasgow & Clyde Dementia Services Workforce Development Group (DWDG), *Workforce Development Plan* 2013-2018. 2012: Scotland.
- F8 The Scottish Government. *Promoting Excellence Knowledge and Skills Framework*. 2011
- F9 Care Council for Wales, Good Work: A Dementia Learning and Development Framework for Wales. 2016, Wales.
- F10 Alzheimer's Association and Centers for Disease Control and Prevention, *Healthy Brain Initiative, State and Local Public Health Partnerships to Address Dementia: The 2018-2023 Road Map.* 2018, US.
- F11 US Department of Health and Human Services, *National Plan to Address Alzheimer's Disease: 2019 Update.* 2019, US.
- F12 Georgia Alzheimer's and Related Dementias Collaborative Workforce Development Committee, *Competency Guide for Dementia Care- Direct Care Worker Workforce Development. 2016*, US.
- F13 Newbrough MA, Boone L. *Training a workforce to care for people in West Virginia with Alzheimer's disease and related dementias.*, 2011, US.

Appendix 5 — Data extraction tables and figures

Table A5.1 Overview high level extraction: country, level, workforce population and purpose.

Table A5.2 Principles and values common themes and occurrence in framework.

Table A5.3 Training levels and key elements framework.

Table A5.4 Training topics common themes and occurrence in frameworks.

Table A5.5. NHMRC Levels of Evidence.

Table A5.6 Consumer and stakeholder participation, barriers and enablers to development, implementation and evaluation.

Table A5.7 Applicability to Australia and recommendations.

ID	Citation	Country	Level	Workforce	Purpose
F1	(14)	Australia	National	Primary Healthcare Nursing	To build skills, confidence and capacity to support a timely dementia diagnosis in general practice.
F2	(15)	Australia	State	Health Government employed staff	The Queensland Health Dementia Framework 2010-2014 contains strategies and actions that will deliver improved outcomes for people with dementia in all settings and irrespective of the primary focus of treatment. Objectives: Queenslanders working together to make a positive difference to the lives of people with dementia, their carers and families. The Queensland Government, along with service providers and the broader community, working together to create an accessible, seamless pathway for people with dementia, their carers and families.
F3	(16)	Australia	State	All people dealing with people living with end-of-life care	To support HHSs to develop a localised HHS Care at End-of-Life Education & Training strategy. It underpins the need to increase the knowledge and skills of Queensland's healthcare workforce by ensuring access to educational opportunities and training resources in end-of-life care service delivery for all health professionals, including medical, nursing and allied health. It is one component of a coordinated approach to improving care at the end-of-life for all Queenslanders.
F4	(17)	Ireland	National	All care staff	Improve quality of life for people with dementia and their carers; change in societal attitudes to dementia influencing frontline practice within large systems

Table A5.1. Overview high level extraction table included studies: country, level, workforce population and purpose.

F5	(18); (19); (9); (20)	UK	National	Health and care workforce	To support the development and delivery of appropriate and consistent dementia education and training for the health and care. The Framework supports workforce development, building upon the original objectives of the National Dementia Strategy and specific to implementation of the Prime Minister's Challenge on Dementia and HEE Mandate. This Framework aims to describe core skills and knowledge i.e., that which would be transferable and applicable across different types of service provision. Additional learning outcomes may be locally determined to meet education and training needs in specific settings e.g., according to local context, risk assessment or policy.
F6	(8)	UK: Northern Ireland	National	Health and social care staff	Supporting health and social care staff to deliver better care to people living with a dementia, their families and carers Outlines the core themes in terms of the knowledge and skills that health and social care staff require in order to interact and respond sensitively to the needs of people living with a dementia, their families and carers. It is designed to help identify the relevant expertise and skills of staff who come into contact or work directly with people living with a dementia, their families and carers; facilitate the planning of on-going training and development needs for staff and their employers and managers; and prepare for career progression; and inform the commissioning, development and provision of appropriate continuing education and training programmes. The Framework is applicable to employers and educational organisations who provide training to health and social care staff and students. This should support these organisations to:
					 standardise the content of education in dementia care to ensure consistency in standards and approach; guide the focus and aims of dementia training; encourage continuing professional and vocational development; improve the quality and availability of dementia education; and

					• enhance the experiences of people living with a dementia, their families and carers.
F7	(10)	UK: Scotland	Regional: NHS Greater Glasgow & Clyde Dementia Services	Health and social care staff	All NHS staff will be expected to have the required knowledge and skills relevant to their work role and which will allow them to work effectively with people with dementia. To enable NHSGG&C and partner organisations to deliver services to people with dementia, their families and carers in line with their rights as described within the Dementia Standards. (p 9)
F8	(21)	UK: Scotland	National	Health and social care staff	This framework is aspirational and future focussed - meaning it is not a just a description of what we do now - it is what we aspire to do in the future to support delivery of the aspirations and change actions outlined in Scotland's National Dementia Strategy. It details the knowledge and skills that will inform new ways of working for all health and social services staff to ensure we enable people with dementia, and their families and carers, to maximise their rights, choices and health and wellbeing at all stages of their unique dementia journey.
F9	(22)	UK: Wales	National	Health and social care staff	This Framework is intended to support what matters most to the people of Wales as well as the spirit and requirements of Welsh policy, legislation and guidance regarding the care, support and empowerment of people with dementia, carers and the health and social care workforce. The Framework for Wales will support NHS services with developing and delivering an appropriate and consistent approach to dementia education and personal development for all employees.
F10	(23)	US	National	Public Health staff	• To outline how state and local public health agencies and their partners can continue to promote cognitive health, address cognitive impairment for people living in the community, and help meet the needs of caregivers.
40					Sax Institute Workforce education and training standards frameworks for dementia

					 To address the critical issues of risk identification and risk reduction, diagnosis, education and training, caregivers, and evidence on impact of disease and to reduce risk for cognitive decline, optimise health, well-being and functioning of people living with dementia and their caregivers. The vision is for state and local public health agencies to continue strengthening their capacity, building strong state and local partnerships, and integrating cognitive health into ongoing public health efforts.
F11	(24)	US	National	Health care staff across the care continuum.	National Plan represents the blueprint for achieving the vision of a nation free of AD/ADRD.
F12	(25)	US: Georgia	State: Georgia	Direct care workers	Its purpose is to develop a dementia-capable, culturally competent workforce and implementing a career and training model for Georgia's direct care workforce. The purpose of the guide is to help employers and educators provide education for DCWs and identify strategies to improve the work environment in ways that support effective and meaningful learning, as well as providing quality of care and quality of life for individuals living with dementia. To improve retention, recruitment strategies and career-ladder development as well as continuity of care for long-term care services recipients.
F13	(26)	US: West Virginia	State: West Virginia	Health professionals, direct care workers, informal caregivers	To describe what is known about the current healthcare workforce in West Virginia and makes recommendations for preparing a healthcare workforce competent to meet the future needs of people with ADRD and their families.

Theme	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13
Accessible	х	Х		Х	Х		Х		х	Х			
Choice	х	х	х	Х	х	х		х	х	Х		Х	
Communication	Х		Х	Х	Х	Х			х			Х	Х
Community	х	Х	Х	Х	х	х	х	х	Х	Х	Х	Х	х
Dementia prevention	х	х		Х	Х			Х	х	Х	Х		Х
Early diagnosis	Х	Х		Х	Х	Х		Х	Х	Х	Х		Х
Evaluation	Х	Х	Х	Х	х		Х		х	Х			
Future planning		Х		Х	х	Х	Х	Х	х				Х
Human rights and respect		х	Х	Х	х	Х	Х	Х	х		х		
Innovation			Х						х		Х		
Knowledge	х	х	х		х	х			х	Х		Х	
Person-centred		Х	Х	Х	х	Х	Х	Х	х			Х	

 Table A5.2. Principles and values, common themes and occurrence in framework.

Provide information	Х	х	Х		Х	х	х	X	X	Х			Х
Quality of care	Х		Х		х	х	Х		х	Х	Х	Х	х
Quality of life	Х	х	Х		Х		Х	Х	х	Х		Х	
Support	Х	Х	Х	Х	Х	х	Х	х	Х	Х	Х	Х	
Training components	Х			Х	Х	х	Х		х	Х		Х	Х
Workforce and Services	Х	Х	Х	Х	Х	х	х	х	х	Х	Х	Х	х

• Most common themes marked in **purple**; Frameworks with highest occurrence across themes marked in **yellow**.

Table A5.3. Train	ing levels and ke	y elements for eac	ch framework.
	ing ioroio ana no	y 01011101110 101 000	

ID	Levels of training	Key elements of the framework
F1	Not specified	 Evidence based approach to dementia detection, diagnosis and support in primary care settings. The four steps have matched indicators and self-assessments for each indicator for staff: not in current practice/ working towards/ in current practice: Step 1 Building dementia knowledge in primary care Step 2 Building a process towards dementia diagnosis Step 3 Building an approach to dementia support Step 4 Building sustainable dementia practice. Dementia screening, assessment and support pathway. Resources. Dementia diagnostic screen. Funding schedule dementia practice
F2	Not specified	 Vision, objective, principles Key Priority Areas (KPA): care and support; access and equity; information and education; research; workforce and training. KPAs have outcomes and/or success factors with associated strategies and actions and by whom. KPA 3 Information and education: Outcomes: People with dementia, their carers/families and health professionals to have access to meaningful information and education:

ID	Levels of training	Key elements of the framework
		 Outcomes: People with dementia and their carers/families to be able to access a knowledgeable, skilled and professional workforce in all settings. Strategies/ actions: 1) Statewide Dementia Clinical Network 2) Aged Care Assessment Team training 3) Training in assessment tools (including indigenous ones) 4) Geriatrician training, 5) Priority participation in dementia specific education packages, programs and in-service training for all staff levels, disciplines and sectors. Success factors: Improved recruitment and retention of a more skilled workforce. Strategies/ actions: Supporting GP organisations, promotion of dementia in health professional training on all levels, increase clinical placements in dementia nursing, promote dementia trained GP Practice Nurses and their involvement in assessment and management, education and training to maximise telehealth use for access to geriatric expertise and support, maximise use of QLD Health infrastructure to access dementia training opportunities in rural/ remote QLD, quality volunteer workforce.
F3	 Community Level A: General Public Community Level B: Support Care Providers Level 1-3: Specialist palliative care, increasing in complexity, persistence and unpredictability 	 Using common terminology, principles, linkages and structures to assist with consistent and less confusing state-wide approach to providing integrated information, education and training on care at end-of-life The Hospital and Health Services (HHS) Care at End-of-Life Education & Training Strategy Framework is based on Project Management Framework, a 4 phase approach to change management and quality improvement: Initiate: Establish the concept and prepare the environment. Seek Local endorsement of strategy Plan: Strategy; Conduct an analysis of care at end-of-life clinician and community education and training needs, gaps and opportunities; Identify target; Develop an evaluation methodology Deliver: Implement the Strategy using a range of evidence-based resources and delivery methods

ID	Levels of training	Key elements of the framework
		 Sustain: Evaluate the outcomes against strategic objectives and impact; Report progress to key stakeholders; Embed into organisational education and training processes. Map needs analyses by training level; population needs, capability and workforce/ community profile Reporting framework with suggested reportable indicators are provided. Suggested Terminology HHS Education and Training Strategy template Education and training resource catalogue
F4	 Not specified. Note 1: the additional National Educational Needs analyses (Irving, Piasek, Kilcullen, Coen & Manning, 2014) reported the following levels: Person with Dementia Lay carer or Friend Public facing services Informed Practice Level Dementia Skilled Practice Level Enhanced Dementia Note 2: Specified for Palliative care only: L1 – Palliative Care Approach: Palliative care principles should be appropriately, applied by all health care professionals. L2 - General Palliative Care professionals who, although not 	 As part of National Dementia Strategy Plan, training and education is listed as Key Priority Area (Section 7 p.24), consisting of: Objectives: On-going training to ensure that staff have the necessary skills (including communication skills) and competencies to provide high quality, person-centred care and support. Educational material development for health and social care professionals informed by the experiences of PLWD and their carers. Training specific to individual professional groups supported by relevant professional bodies. Informal carers confident and competent to care for their family member at home. Evaluation of training and educational programs to ensure that training leads to a change in practice, attitudes and quality of life. Primary care/ GPs should receive support to be educated in dementia. Curriculum content: broad agreement that the areas for attention need to be Improved awareness of the benefits that pro-active care can have for people with dementia and their carer;

ID	Levels of training	Key elements of the framework
	engaged full time in palliative care, have had some additional training and experience in palliative care. Level 3 – Specialist Palliative Care: Specialist palliative care services are those services whose core activity is limited to the provision of palliative care.	 Diagnosis and disclosure of dementia; Dementia-specific communication skills; Ethical and legal knowledge and skills; Treatment and ongoing care including pharmacological and non-pharmacological interventions Information Centre and List of Irish Education programs Link back to other priority actions in other sections. Specifically, Priority actions (Section 3, p15) The Health Service Executive will engage with relevant professional and academic organisations to encourage and facilitate the provision of dementia-specific training, including continuous professional development, to relevant occupational and professional groups, including peer-led support and education for GPs, and to staff of nursing homes. Better awareness and understanding of dementia' refer to: Support and educate informal and paid carers; Improve dementia training of primary healthcare physicians (section 4, p17) 'Integrated Services' refers to an objective: Staff in all care settings should have the necessary training for treating and supporting a person with dementia, including training in palliative approaches 'Research and Information Systems' refers to a training-related objective: Impact of training on quality of care and quality of life; Reference made to the National Educational Needs Analysis completed by the Health Service Executive in 2009 and the Dementia Skills Elevator 2014.
F5 a,b,c	 Tier 1- awareness, in terms of knowledge, skills and attitudes for all those working in health and care settings. Group 1: i.e. reception staff Tier 2 - Basic knowledge, skills and attitudes which are relevant to all staff in settings where people with dementia are likely to appear 	 The Framework is presented in 14 subjects - each subject with the following structure: An introduction Suggested target audience mapped by 3 tiers and 4 social care workforce groups Key learning outcomes Links to relevant guidance and/or legislation

ID Le	evels of training	Key elements of the framework
3.	 Group 2: i.e. staff directly providing care and support which would include care assistants working in residential or home care and also personal assistants. Tier 3 - enhancing the knowledge, skills and attitudes for key staff (experts) working with people living with dementia designed to support them to play leadership roles, including decision making and good practice dissemination. Group 3: Registered Managers/ social care leaders who manage care and support services Group 4: social care practice leaders and managers who are managing care and support services and interventions, including social workers etc in social care. Staff in this group will use the framework in conjunction with their relevant professional standards. 	 Indicative mapping to relevant national occupational standards, skills frameworks and regulated qualifications components. Subjects: Dementia awareness; Dementia identification, assessment and diagnosis; Dementia risk reduction and prevention; Person-centred dementia care; Communication, interaction and behaviour in dementia care; Health and well-being in dementia care :pharmacological interventions in dementia care; Living well with dementia and promoting independence; Families and carers as partners in dementia care; Equality diversity and inclusion in dementia care; Law, ethics and safeguarding in dementia care; End-of-life dementia care; Research and evidence-based practice in dementia care; Leadership in transforming dementia care Appendices: Sources of further guidance User guide Links to relevant standards, curricula and qualifications and comparisons and mapping: Dementia education standards for curricula design (Appendix 3) Related standards: National Occupational Standards, Core Skills Frameworks, Care Certificate standards, HEDN A curriculum for UK Dementia Education (Appendix 4) Links to social care qualification framework (Appendix 5) Suggested standards for training delivery (Appendix 6) Guidance on frequency of refresher training or assessment. (Appendix 7) The Framework also supports the assessment of competence, training needs analysis and provision of minimum standards of performance within performance management systems (e.g. as part of supervision or appraisal). The Dementia Training Standards Framework is structured in three tiers to reflect the scope of Health Education England's prioripal mandate requirements. With increasing levels of integration between health and social care services and their respective workforces, it is als

ID	Levels of training	Key elements of the framework					
		 Supporting organisations to: Standardise the interpretation of dementia education and training. Guide the focus and aims of dementia education and training delivery Ensure the educational relevance of dementia training Improve the quality and consistency of education and training provision 					
F5b	Not specified at the time. <i>Note</i> : But they recommended to use the online The Health Functional Map (https://tools.skillsforhealth.org.uk/) to identify national occupational standards. This is a tool to find relevant competences and includes all of the required functions to deliver effective health care services. The tool has a breakdown of levels starting broadly and then drilling down to more detailed functions. The end point of the map is where National Workforce Competence (NWC) and National Occupational Standards (NOS) are located, which can be added to profiles (Skills for Health, Tools Overview Guide 2008).	 The Framework is presented in with 8 core principles - each principle with the following structure: Context Indicative behaviours for the workforce Embedding the core principles: provides guidance for leaders and managers, commissioners and training and education leads to develop a workforce that can create dementia friendly settings. Use indicative behaviours in context: Review local workplace and plan the training and development to make service dementia-friendly. Use as benchmark record to monitor the improvements. Plan training and development: provides guidance on planning and delivering education tailored to local context, including signposting to national occupational standards and qualifications that support education and training but not a prescriptive list of competences. Describe detail of training and development for specific context. The Common Core Principles have been mapped against suggested functions (Use the Health Functional Map to identify NOS for your context https://tools.skillsforhealth.org.uk/) and national occupational standards (NOS). Validate these standards with staff groups, ensuring person-centred approach. Devise learning outcomes accordingly and relevant to operational policies and procedures Resources and Dementia specific Qualification and Credit Framework Units (QCF) Note 1: Diagram 1: p5: The role of the common core principles provides useful overview. 					

ID	Levels of training	Key elements of the framework
F5d	Not explicitly described. See: Skills for Health, Health Education England and Skills for Care (2015) Dementia Core Skills Education and Training Framework.	 To help professionals involve people living with dementia and their carers in decision-making, so they can get the care and support they need, care coordination and staff training, and how dementia may impact on the care offered for other conditions. About the guideline (why, what, development, statutory and non-statutory guidance, more information) Person-centred care principles Recommendations by topic area: Topics: 1.1 Involving people living with dementia in decisions about their care 1.2 Diagnosis 1.3 Care coordination 1.4 Interventions to promote cognition, independence and wellbeing 1.5 Pharmacological interventions for dementia 1.6 Medicines that may cause cognitive impairment 1.7 Managing non-cognitive symptoms 1.8 Assessing and managing other long-term conditions in people living with dementia 1.9 Risks during hospital admission 1.10 Palliative care 1.11 Supporting carers 1.12 Moving to different care settings 1.13 Staff training and education Putting guideline into practice Recommendations for research Terms used.
F6	 Tier 1 - Introductory: Is universally relevant to all health and social care staff. It provides a baseline level of dementia knowledge for every person who works in health and social care settings. This level of knowledge should be the minimum standard across all grades of staff. This may include staff in reception, administration, support services e.g. domestic, catering, , dementia friends, families and informal carers. Tier 2 - Foundation: Builds on the Introductory level by ensuring staff have knowledge that will enable them to understand the needs of people living with a dementia and provide better quality care. It is generally aimed at all registered and non-registered health and social care staff with expertise in a non-dementia environment or who are 	 Foreword: expert by experience The Journey of Dementia (not a linear journey): Living well with dementia (centre) Finding out it's dementia Making changes Planning for the future Collaboration between PLWD, carers, family, and staff The Framework is presented with 13 thematic subjects - each theme with the following structure and different colour: Four tiers of training A Context Statement Statements by People Living with a Dementia Target Audience Knowledge - Learning Outcomes by Tier Skills - Learning Outcomes by Tier

ID	Levels of training	Key elements of the framework						
	 involved in any aspect of care for a person living with a dementia. Tier 3 - Informed Practice: aimed at health and social care staff working within specialist dementia settings or who come into contact with a high proportion of people living with a dementia. These staff will undertake holistic assessments, develop and initiate a range of therapeutic interventions, review care and support plans and lead in the delivery of person-centred and relationship-centred dementia care. Tier 4 - Advanced Practice: targets specialist health and social care staff who are working at an advanced level of expertise. These health and social care staff will act as role models in dementia care, playing a key role in leadership and assisting in driving forward improvements in dementia research. 	 Recommended Reading - Guidance and/or Legislation Subjects: 1. Dementia Awareness 2. Communication 3. Receiving a Diagnosis of Dementia 4. Person-Centred and Relationship-Centred Dementia Care 5. Promoting Physical, Psychological and Social Wellbeing in Dementia Care 6. Holistic Approach to the Management of Dementia Care 7. Promoting Enabling Environments 8. Legal and Ethical Considerations in Dementia Care 9. Equality, Cultural Diversity and Inclusion in Dementia Care 10. Palliative Care in Dementia/End-of-life Dementia Care 11. Working in Partnership with Families and Carers 12. Research and Evidence-based Practice in Dementia Care 13. Leadership in Transformational Dementia Care Frameworks and Important Links Self-assessment tool by Tier, topic and Knowledge or skills (Appendix 3) Note: Work began following an extensive regional scoping exercise which collated information on the type/ volume of training currently available to staff in Ireland. (p. 8) 						
F7	 Dementia Informed Practice Level Dementia skilled Practice Level Enhanced Dementia Practice Level Expertise in Dementia Practice Level Note: See F8 Scotland for definition 	 Demand drivers and service change Defining workforce skills and capability and minimum standards for staff per 4 Tiers of Practice: Key areas for developments Description target staff groups Examples of staff Recommendations workforce development plan including responsibility and timeline Implementation and monitoring. The 6 Steps Methodology Workforce planning (Process) (Appendix A) Tiered Training Guide (Appendix B): Suggested target staff groups for levels of development Accessing learning resources/training by: 4 levels; and National Resources, GGC-wide, local level and external providers. 						

ID	Levels of training	Key elements of the framework						
F8	 The 'Dementia Informed Practice Level' outlines the baseline knowledge and skills needed by all staff working in health and social care settings including a person's own home. The 'Dementia Skilled Practice Level' provides the knowledge and skills required by all staff that have direct and/or substantial dealings with PLWD and their families and carers. The 'Enhanced Dementia Practice Level' describes the knowledge and skills required by health and social services staff who have more regular and intense contact with PLWD, provide specific interventions, and/or direct/manage care and services. The 'Expertise in Dementia Practice Level' provides the knowledge and skills required for health and social care staff who by virtue of their role and practice setting, play an expert specialist role in the care, treatment and support of people with dementia. 	 Standards of Care for Dementia in Scotland (<i>e.g. I have the right to a diagnosis</i>) (p10): having the right to 1) a diagnosis 2) be regarded as a unique, individual and to be treated with dignity and respect 3) access a range of treatment and supports 4) end-of-life care that respects wishes 5) to be as independent as possible and be included in the community 6) have carers who are well supported and educated about dementia. Knowledge and Skills Framework Quality of Life Outcome Indicators (p10) are intended to encourage workers and services to consider the impact and end result of the support, care, interventions and treatments they provide against these indicators. Four Levels of Practice mapped by Quotes from PLWD: <i>Through our eyes, a life with dementia</i> Knowledge: What workers know Four stages of the dementia journey: Keeping well, prevention and finding out it's dementia Living well Living well with increasing help and support 						
F9	 Informed people: understand what dementia is and how it affects a person with dementia and those around them. They also understand how to communicate effectively. They should have clear understanding of the core principles of this Framework, the knowledge and skills associated with the Dementia Friends training programme in Wales, and essential communication skills. Skilled people: are Informed but have also developed more detailed and comprehensive knowledge and skills across a range of key learning and development topics over time, according to their experience, role, interests and needs. The learning and development topics for Skilled people (2.4) are mapped against the wellbeing themes in the National Well-being Statement. 	 End-of-life and dying well Compassionate practice Everyone matters Everyone has something to contribute Everyone is different Everything matters and the normal and ordinary are important Every word matters (positive and strengths based terminology) Code of Professional Practice Competent practice: Outcome focussed Knowledge and skills for three groups: Informed people and Skilled people and Wise (engaged) practice Learning and development topics by for Informed people and Skilled people by: Summary topic 						

ID	Levels of training	Key elements of the framework						
	3. Influencers: are people who are Informed, possibly Skilled and who also have a management, leadership and/or strategic role. It is not just managers who can be leaders, this can apply to anyone who is able to inspire, lead or influence others, including dementia activists. Learning topics centres around engagement.	 Learning outcomes Topics Informed people: Dementia Friend Skilled people: Rights and entitlements; Physical and mental health; safeguarding; meaningful living; meaningful relationships; Community inclusion and contribution; social and economic wellbeing; physical environment Wise practice: Engagement (the influencer): Includes a strong focus on emotional wellbeing of frontline staff and PLWD and their carers: Whole system approach to supporting the development of an 'enriched environment of learning and practice Good leadership within organisations Robust and meaningful quality assurance An effective approach to individual and collective learning and development Learning and development topics and learning outcomes for influencers. Resources: Suggested reading; Relevant Welsh organisations; Relevant UK organisations; Free web-based learning and development resources mapped by specific learning and development themes. Additional messages, prioritised learning outcomes and links for the NHS workforce. Sections describe and give examples of the knowledge and skill set for each group of staff in the NHS and signposts to the learning resources. See separate topic list. VIPS Framework. V for Value base, I for Individualised approach, P for understand world from the perspective of the person with dementia and providing care and support that is intume with this, S Providing a social environment that supports psychological needs 						
F10	Not specified	 The Framework is presented in with 4 core topic areas in four public health domains- each topic area with the following structure: Rationale List of actions Outcomes 						

ID Levels of training	Key elements of the framework
	 Compelling data Case studies The topic areas are further mapped against the following topics that were identified as needing improvement in previous roadmaps: 1) Risk identification and reduction 2) Diagnosis & quality of care 3) Caregiving 4) Education and training for professionals 5) Data and evidence for action. (Appendix C)
	 Topic Areas: Educate and empower Develop policies and mobilise partnerships Assure a competent workforce Monitor and evaluate. The following education-related actions are listed: Topic Area 2- Partnerships: P-2 Assure academic programs, professional associations, and accreditation and certification entities incorporate the best available science about brain health, cognitive impairment, and dementia caregiving into training for the current and future public health workforces. P-3 Support better informed decisions by educating policymakers on the basics of cognitive health and impairment, the impact of dementia on caregivers and communities, and the role of public health in addressing this priority problem. P-6 Assure public health plans that guide emergency preparedness and emergency response address the special needs of people with dementia on during crises, and prepare emergency professionals for situations involving people with dementia. Topic Area 4- Assure a competent workforce: W-1 Educate public health and healthcare professionals on sources of reliable information about brain health and ways to use the information to inform those they serve. W-2 Assure that health promotion and chronic disease interventions include messaging for healthcare providers that Surger that health promotion and chronic disease interventions include messaging for healthcare providers that

ID	Levels of training	Key elements of the framework
		 underscores the essential role of caregivers and the importance of maintaining their health and well-being. W-3 Educate public health professionals about the best available evidence on dementia (including detection) and dementia caregiving, the role of public health, and sources of information, tools, and assistance to support public health action. W-4 Foster continuing education to improve healthcare professionals' ability and willingness to support early diagnoses and disclosure of dementia, provide effective care planning at all stages of dementia, offer counselling and referral, and engage caregivers, as appropriate, in care management. W-5 Strengthen the competencies of professionals who deliver healthcare and other care services to people with dementia through interprofessional training and other strategies. W-6 Educate healthcare professionals about the importance of treating co-morbidities, addressing injury risks, and attending to behavioural health needs among people at all stages of dementia. W-7 Educate healthcare professionals to be mindful of the health risks for caregivers, encourage caregivers' use of available information and tools, and make referrals to supportive programs and services. Topic area. Monitor and Evaluate: M-4 Embed evaluation into training and caregiving support programs to determine program accessibility, effectiveness, and impact. M-5 Estimate the gap between workforce capacity and anticipated demand for services to support people with dementia and their caregivers.

ID	Levels of training	Key elements of the framework
F11	Not specified.	 This is the seventh Update to the National Plan. Goals: Prevent and Effectively Treat Alzheimer's Disease and Related Dementias by 2025. Enhance Care Quality and Efficiency. Expand Supports for People with Alzheimer's Disease and Related Dementias and their Families. Enhance Public Awareness and engagement. Track Progress and Drive Improvement. Specifically, for Goal 2, Strategy 2A Build a Workforce with the Skills to Provide High-Quality Care (Page 24) is of relevance which has 17 actions derived from the National Plan. Each Action has information on: Methods of action; Lead Agency; Partners; Project status; Activities completed in 2018-2019. Activity descriptions: 2a1 Educate health care providers. 2a3 Strengthen state aging, public health, and IDD workforces. 2a4 Develop and disseminate a unified primary care AD/ADRD curriculum. 2a5 Ensure aging and public health network providers have access to research-based up-to-date information on AD/ADRD. 2a6 Engage the public health workforce on brain health. 2a7 Strengthen the ability of primary care teams in Indian Country to meet the needs of people with AD/ADRD and their caregivers. 2a8 Develop a baseline understanding of self-reported competence and confidence of IHS, Tribal and Urban Indian Health nursing staff in care of individuals with AD/ADRD. 2a9 Improve educational resources for primary care staff in Tribal communities caring for individuals with AD/ADRD and their families 2a10 Provide decision support for clinicians in Tribal communities 2a11 Provide decision support for clinicians in Tribal communities

ID	Levels of training	Key elements of the framework
F12	Not specified	 Provides information regarding priority topics for training, key training elements for Direct Care Workers (DCWs), and appropriate tools and resources for choosing or developing appropriate training materials along with strategies for implementation. The Framework is presented in with 9 priority topic areas in four public health domains- each topic area with the following structure: Explanation Skill statements Priority topics for DCW Training with associated skill statements: Understanding Dementia Person-centred Care; Communication; Reduction of preventable hospitalization; Dining and nutrition; Pain management; prevention and reporting of abuse; empowering the person and enriching their life; palliative and end-of-life care. Key training elements for DCW with a focus on active learning strategies.
F13	Health professionals, Direct Care Workers, Family/ Lay Caregivers	 The implementation of interprofessional education to strengthen the ability of health professionals to work together to deliver integrated patient care across different care settings e.g. hospital, hospice or home care. Assessing Care of Vulnerable Elders (ACOVE) outcome measures can be build into a education and training model (e.g. Initial and annual screening for dementia). WVGEC - uses a web-based database to track all of its education and training activities. It can identify course participants, their respective backgrounds, locations, training outcomes. It is proposed to make the database state-wide, covering the entire dementia care workforce (health professionals, DCW's, and FLC's) mapped against topics and training providers in a shared training matrix. Each professional will have records associated with background, training, competencies and outcomes recorded.

	SUPPORTIN	SUPPORTING DOCUMENTS							
F4	Person with Dementia, Lay carer or Friend, Public facing services, Informed Practice Level, Dementia Skilled Practice Level, Enhanced Dementia Practice Level, Expertise in Dementia (Irving et al, 2014)	 Seven priority areas identified during national educational needs analyses (Section 7.1, p 62): National Dementia awareness and communication skills training (Slevels-L1: everybody; L2: public-facing; L3: all health and social care staff) Expand practice development/dementia champions program for al nurses and Allied Health Professionals Therapeutic skills module for any health care professional: psychosocial approaches to supporting cognition, validation and working with couples affected by dementia (2 levels: open access unaccredited; and accredited) A module specific on clinical and ethical decision-making including nutrition, hydration and pain assessment Training on dementia awareness for managers and service leaders. Skills in responding to memory complaints - targeting health and social care practitioners (HSCPs). Bespoke GP training including; diagnosis, disclosure, treatment (both social and medical) carer support, ethical and legal issues, therapeutic communication for dementia and formulation of persor centred care. Eliminated priority areas: Carer Support/Psycho-education; Advocacy Training for People with Dementia; an education Module for Qualified Therapists; Best Practice Guide on the Environment and Dementia. Dementia Elevator Education Matrix (Section 8, p70): 7 levels of training by: dementia trajectory 1) Prevention, Awareness and Assessment 2) Diagnosis and Post Diagnosis 3) On-Going Support, Care and Review 4) End-of-life by level of available education. 	II g						
F5	 Three dimensional: 1. International Standard Classification of Education (ISCED): level 7, masters or equivalent, vocational; ISCED 	 Mapping of Dementia care tasks by categories: screening; diagnostic procedures; pharmacological treatment dementia, non- pharmacological treatment, pharmacology treatment for behavioural 							

 level 6, Bachelors or equivalent, vocational short cycle tertiary education, vocational; Post-secondary non-tertiary, vocational; Upper secondary, vocational; Level 0 Be no formal health-care 2. Care provider type (e.g. GP, RN) 3. Level of training: No formal healthcare healthcare training; specialised health care specialised training in dementia. (Hallbergen) 	 SCED level 4 SCED level 3 SCED level 3 Mapping of home care activities by categories: needs assessment; team-based home care; team-based community mental health for olde people; home help/ care with IADL; home help with PADL; Home Nursing Care; Specialist psychiatric home nursing care; rehab at home; Mobile comprehensive MD expert team; Personal safety alarm/
--	--

Training topics	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	Total
Care Settings	Ī		Ī		Ī	-						Ī		0
Primary Health	Х	Х	Х	Х	Х	Х	Х		Х		Х			9
Rehabilitation				Х	Х		X	Х	Х		Х	Х		7
Home care	Х		Х	Х			Х	Х	Х	Х	Х	Х	Х	10
Community care	Х	Х	Х	Х	Х		Х	Х	Х	Х	Х	Х	Х	12
Hospital/ acute care		Х	Х		Х	Х	Х	Х	Х	Х	Х	Х	Х	11
Residential aged care/ nursing home		Х	Х	X			х				X	Х	Х	7
Respite care			Х						Х	Х				3
Integrated care	Х		Х	Х		Х	Х	Х		Х			Х	8
People in regular close contact with PLWD	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	13
Basic skills														0
Person-centred care			Х		Х	Х	Х	Х	X			Х	Х	8
Basic dementia awareness (positive views of ageing)	Х	Х		Х	X	Х	Х	Х	Х	Х	X	X	Х	12
Holistic care			Х		Х	Х		Х	Х		Х	Х		7
Dementia risk reduction/ prevention	Х	Х		Х	Х	Х	Х	Х	Х	Х	Х		Х	11
General Communication, interaction and behaviour in dementia care	X		X	X	X	Х	Х	Х	X	Х	X	X	X	12
Communication with PLWD	Х					Х	Х	Х	Х	Х		Х	Х	8

Table A5.4. Training topics common themes and occurrence in Frameworks.

Training topics	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	Total
Communication with carer or family	Х		Х	Х	X	Х	Х	Х		X	1	Х		9
Evidence based decisions/ practice	Х		Х	Х	Х	Х	Х	Х	Х	Х		Х		10
Nutrition/ food/ oral health	Х				Х	Х	Х	Х	Х		Х	Х		8
Delirium (vs dementia and depression)	Х	Х		Х	Х	X	Х	Х	Х	Х	Х	Х	Х	12
Advanced skills														
Diagnosis	Х			Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	11
Cognitive assessment & screening/ memory function	X					Х	Х		Х	Х	Х		Х	7
Younger Onset Dementia		Х		Х	Х	Х	Х		Х	Х	Х			8
Bio-psycho-social assessment			Х	Х	Х	Х	Х					Х		6
Palliative care		Х	Х	Х	Х	Х	Х	Х	Х		Х	Х		10
Advance care planning/ directive/ living will	X		X		X	Х		Х	Х	Х		Х		8
End-of-life care			Х	Х	Х	Х	X	Х	Х	X	Х	Х	Х	11
Behaviour Management (non- pharmacological)		Х		X	X	X	Х	Х		Х	Х	Х	Х	10
Pain management, including effect on PLWD			X		X	Х		Х	Х			Х		6
Pharmacological care				Х	Х	Х		Х	Х			Х	Х	7
Trauma informed care														0
Health Promotion														
Maintaining PLWD wellbeing	Х			Х	Х	Х	Х	Х	Х	Х		Х	Х	10

Training topics	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	Total
 Physical (including comorbidities) 	Х	1			Х	Х		Х	Х		1			5
Mental (including comorbidities)	Х						X	X	Х					4
Psychological			Х		Х	Х	Х	Х	Х		Х	Х		8
Social	Х		Х		Х	Х		Х	Х	Х	Х	Х		9
Spiritual			Х			Х		Х	Х	Х		Х		6
Employment									Х					1
Maintaining carer wellbeing				Х		Х			Х	Х	Х			5
Prevention of falls and fractures					Х		Х	Х					Х	4
Enabling environment				Х	Х	Х	Х	Х	Х	Х	Х	Х		9
Assistive Technology				Х	Х	Х		Х	Х	Х	Х			7
Housing											Х			1
Ethics and values														1
Ethics, potential risks and safeguards	Х		X	Х	X	Х	X	X	Х	Х		Х	Х	11
Understanding legal issues and law (legislation)		Х	X	X	X	Х	X	X	Х	Х	Х	Х	Х	12
Recording & Reporting	Х	Х	Х			Х			Х	Х	Х	Х	Х	9
Equality, diversity and inclusion		Х	Х		Х	Х	Х	Х	Х		Х	Х		9
First Nations Peoples		Х	Х								Х	Х	1	4
Cultural and linguistic backgrounds		Х	Х							Х	Х	Х		5
Staff support														

Training topics	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	Total
Digital/ Health literacy		Х				-	Х	Х		Х	Х		Х	6
Health literacy													Х	1
Telehealth		Х	Х											2
Navigating the aged care support system	x	Х				Х			Х					4
Understand dementia care funding	Х			Х				Х		Х	Х			5
Leadership in dementia care	Х		Х	Х	Х	Х		Х	Х	Х	Х	Х		10
Local non-medical support (including advocacy)	X		Х	Х		Х		Х	Х	Х	Х			8
Health professional self-care	1					Х							1	1
TOTAL	26	19	30	29	34	40	33	39	41	33	34	35	24	417

¹⁾ A companion document has been developed for First Nations Peoples.

Most common themes marked in purple; Frameworks with highest occurrence across themes marked in yellow.

Table A5.5¹. NHMRC Levels of Evidence.

Grade evidence base: A=excellent- several level I or II studies with low risk of bias; B=good- one or two level II studies with low risk of bias or a systematic review or multiple level III studies with a low risk of bias; C=satisfactory; level III studies with low risk of bias, or level I or II studies with moderate risk of bias; D=poor level IV studies, or level I to III studies/ systematic reviews with high risk of bias; \sqrt{y}= best practice

Levels of evidence: I=A systematic review of Level II studies; II=A randomised controlled trial; III-1= A pseudo-randomised controlled trial (i.e., alternate allocation or some other; method); III-2= A comparative study with concurrent controls (i.e. non-randomised experimental trials, cohort studies, case-control studies, interrupted time series studies with a control group); III-3=A comparative study without concurrent controls (i.e. historical control study, two or more single arm studies, interrupted time series studies without a parallel control group); IV= Case series with either post-test or pre-test/post-test outcomes.

ID	Grade (NHMRC) A,B,C,D,√	Levels of Evidence (NHMRC)									
		I	П	III-1	III-2	III-3	IV	CONSENSUS	POLICY		
F1	V						Y	Y	Y		
F2	V						Y	Y	Y		
F3	V						Y	Y	Y		
F4	С					Y	Y	Y	Y		
F5	В		Y				Y	Y	Y		
F6	С					Y	Y	Y	Y		
F7	С					Y	Y	Y	Y		
F8	В		Y					Y	Y		
F9	V							Y	Y		
F10	V						Y	Y	Y		
F11	V						Y	Y	Y		
F12	V						Y	Y	Y		
F13	\checkmark						Y	Y	Y		

¹ Tables A.5.5, A5.6 and A5.7 are colour-referenced to group frameworks by country: F1-F3 (Australia), F4 (Ireland), F5-F9 (UK) and F10-13 (US).

Source: National Health and Medical Research Council (27)

Table A5.6. Consumer and other stakeholder participation, barriers and enablers to development and implementation, and evaluation.

Consumer Input: G=Good coverage; S=Satisfactory coverage; N = Not mentioned; Stakeholders: G=Good coverage; S=Satisfactory coverage; N = Not mentioned;

Barriers: 1. None reported; 2. Lack of funding or cost of research; 3. Unsupportive rules and regulations; 4. Variation across staff roles and responsibilities; 5. Low levels of staff literacy; 6. High turnover in staff; 7. Lack of progress in past cycles; 8. Lack of organisational support; 9. Inconsistent services; 10. Lack of appropriate and relevant training

Enablers: 1. None reported; 2. Funding & support from Govt, grant or other bodies; 3. Strength of partnerships; 4. Building on existing work; 5. Strength of research including case studies; 6. Peak Body endorsement; 7. Linked to mandatory accreditation; 8. Strong plan for implementation; 9. Access to appropriate and relevant training

ID	Consumer Input	Stakeholders	Development Barriers	Development Enablers	Implemented	Implementation Barriers	Implementation Enablers	Evaluation
F1	S	S	4	2,4,6	U	1	8	U
F2	S	S	1	2,4,6	U	1	2,4,6,8	Р
F3	Ν	N	1	4,7	U	1	4,7,8	Р
F4	G	G	1	2,3,4,5	Y	7,9,10	2,3,4,5,8	Y
F5	S	G	2	2,3,4,5,6	Y	2,3,5,8,10	2,3,6,8,9	Y
F6	G	G	1	2, 3,4,5	Y	1	1	U
F7	S	G	1	2,3,4,5,	U	1	8	U
F8	G	G	1	3,5	Y	3,8	3,5,8	Р
F9	G	S	3	2,3,4	Y	1	2,3,4	Р
F10	N	G	1	2,3,4,	Y	7	2,3,4	Y
F11	S	S	1	2,3,4	Y	1	2,3,4	Y
F12	G	G	1	2,3,4,6	U	1	1	U
F13	N	S	5,6	1	U	5,6	1	U

Implemented: Y = Yes; N = No; U = Unreported/unclear Evaluation: Y = Yes; N = No; U = Unreported/unclear; P=Plan or Template for evaluation

Table A5.7 Applicability to Australia and recommendations.

ID	Would it be useful in the Australian context?
F1	This is an Australian Document. Very useful, particularly for: General Practice nurse; Dementia screening, assessment, and support pathway overview (p12); Dementia diagnostic screen (p15); MBS funding schedule (p16): Online and other Australian training resources; Provides useful tools and performance indicators.
F2	This is an Australian Document, developed for the Queensland Health setting. Clear mention of telehealth training and technological infrastructure as part of improving telehealth service delivery in rural/ remote Australia, and State prioritisation of participation in education packages (Cert IV, Dip Dementia Practice) and training of acute, emergency, aged care assessment teams, allied health, community, residential, multi-purpose health services, palliative care staff. Also, clear statement of Indigenous Health and CALD background. Relatively short and clear document. Education and training clearly signposted in the Key Priority Areas 'Information and education' and 'Workforce and Training'. However, some other strategies or actions related to education and training also appear in other Key Priority Areas.
F3	This is an Australian Document. Overall, it is generic in nature but capability frameworks will differ by state. It is a clear and practical document, not focused on dementia, relatively little palliative care specific content, and very streamlined from a process and procedures perspective. It could be used as a template to build a national dementia framework. See in particular: Appendix 2: Hospital & Health Service Education & Training Strategy template, Framework Overview (p5). Education must be accessible for rural and remote staff. Technologies must be sustainable particularly for remote education. The idea of change management principles plan- act do and quality improvement expectations assist to bed down knowledge.
F4	The accompanying Needs Analyses (12) page 70 provides a useful 'Dementia Elevator Education Matrix ' across the care continuum that could be replicated for Australia. The methodology of consumer participation was included in the Irish framework through a rigorous training needs analyses of PLWD and people involved in their care, which could be used in Australia. While the main document has a clear education and training section, there is no clear framework for implementation. The list of Dementia Education programs available through Health Service Executive and the Alzheimer Society of Ireland all have an evaluation component built in. Each program is annually evaluated to identify areas for change/review. Results presented to the program review board. Could be a good approach to adopt to ensure relevance of training. It is a Strategy with principles more than a framework. https://www.hse.ie/eng/about/who/cspd/ncps/older-people/resources/education/ link to Irving et al many of these documents are based on Alzheimer's International papers and they have then adapted this to their local needs. Much of this context would be helpful. The societal approach to change attitudes through education is important for frontline practitioners and partnerships.

ID	Would it be useful in the Australian context?
F5	Yes, topics could be generalised to Australia. Curriculum would have to be adapted from UK to Australian context. Tier 1 and 2 results could be applicable to Australian standard, but Tier 3 would also have to be adapted to an Australian standard as this section is designed for higher levels of education and specialist expertise. Components of this framework are not UK culture based, and will apply to an Australian demographic. However, the assumption that
	dementia care staff have received specialist training is not well founded (see Hallberg et al). The framework using National Occupational Standards and UK described Functions may be more difficult to adapt for lower educated care workers. A logic framework is provided for workforce planning purposes which focuses on key principles for social and health workers in a dementia environment which could be useful. Furthermore, the core principles,
	indicative behaviours as outcome measures, and a local training and development planning tool could be used in Australia. The mapping of Core Principles against NOS and functional groups would need to be adapted to the Australian context. In 2018, a review of the original 'Dementia Core Skills
	Education and Training Framework' was undertaken, led by the original project partners; a number of updates were proposed regarding food, drink and oral health, and the role of housing in improving the health, care and support of people living with dementia, their families and carers. Several useful tools can be adapted: Learning outcome mapping document, Dementia Training Design and delivery Audit Tool (DeTDAT) with manual. The Dementia Care Competency developed by University of Wollongong for the NSW Dementia Action plan was modelled on this UK work.
F5	Yes, the framework is applicable to the Australian workforce with changes made primarily to the legislative requirements. Many sections are not applicable to training, however the training of workforce sections (1.11-1.13) are quite useful. Australia frequently uses the NICE guidelines as a base of local clinical policies it is used across many specialties.
F6	Yes, the framework is mostly generalised. There are some adaptions that would need to be made for applicability to the Australian health care population, where guidelines and requirements will differ to Northern Ireland. Focus on the person with dementia is very impressive. The document is rigorous in that it encompasses all vital aspects of core competencies and skills (i.e. knowledge, technical and attitude/behavioural) that are essential in dementia care. The framework is succinct and effective at describing how it was developed and what resources played into its development. It is a valuable resource to adapt for Australia, as all sections are explicit, with context to their inclusion clearly provided. Once again, the Dementia Care Competencies from UoW is based on Knowledge/ Skills/ Attitude and this work so some parts have already been adapted.
F7	Unsure. The four levels of training could be applied, and the methodology of workforce planning. The Tiered Training Guide could be used as a template (not the content) locally for each region. The structure could be used and be adapted for each local health district, but the document is difficult to follow. We do not recommend following the exact format and it is preferable to have a national approach.
F8	Yes, the structure of the framework could be used in Australia. While the document is easy to follow, more concrete outcome measures would be useful as these are currently vague, and should be developed for the Australian context. The work of the Stirling University Scotland has long had a strong influence on Australian Dementia practice and I would say this framework would have provided the guiding principles.
F9	Yes, many concepts, such as the VIPS model, are in keeping with the person-centred approach, favoured in the Australian Health Care setting. Also resonates with the Aged Care Quality Standards. Concept of compassionate, competent and engaged practice linked to outcomes and learning themes could be replicated. Compassionate and technically competent practitioners are not the same as engaged practitioners. Engaged practitioners are compassionate and competent, but also feel good about what they do, and work within systems that are empowering, enabling them to make wise decisions about how they support people with dementia, carers and staff within in the context of their daily lives (p54). It is important that the framework is aligned with Australian Aged Care Quality Standards. The document also notes the importance of first language, which has implications for multicultural Australia.

ID	Would it be useful in the Australian context?
F10	Yes, the action agenda is generic, and would most likely be applicable in Australia. The framework provides very clear positioning of public health education and training within a dementia education and training framework (See App C summary). It recognises the importance of addressing education at the policy system and that the public health system has a responsibility to deliver better health care to people with dementia. Provides useful templates and conceptual framework built on applied research and translation. Case studies give some specific training programs that have been implemented. A companion Healthy Brain Initiative: The Road Map for Indian Country has been designed specifically for public health systems serving First Nations, which could be a model for Australia. First nations people must be included as there is room for improvement in the current level of service provision of dementia care for Aboriginal Torres Strait Islanders Peoples. We believe that any document that has affiliations with Alzheimer's International or national gives some consistency with what is important and generally includes broad consultation.
F11	Yes, specifically goal 2 Strategy 2A. Some sections which refer specifically to Indian Health Services could be useful for Australian First Nations. The Private-Public partnerships are a favoured concept in Australia. The strong financial support plan and enacting into Law may be a useful model. It is a complex document, addressing multiple complex areas with many stakeholders. Links with Alzheimer's Disease peak body is relevant for Australia. The annual update and evaluation process can be used.
F12	Yes, it is a guide for employers and educators of direct care workers. Shares principles of person-centred care and active learning strategies. Skill statements per priority area and active learning strategies could be adapted to Australian situation. The framework is not linked to different levels of learner needs, which we do consider important. Links with Alzheimer's Disease peak body is relevant for Australia. The concept of a 'career ladder' could be considered.
F13	Yes, especially the component of building on an existing database covering the whole state for training and education of HPs, DCW and family. The principles listed also specify the importance of state-wide collaborations with education providers and interprofessional learning. This paper does not describe a finalised framework, more so what a framework for the context of West Virginia should entail to be effective in developing the dementia workforce. The vision to mandate dementia training across the state is of interest to Australia.

Appendix 6 — Excluded Articles

Abley CC, Dickinson Z, Andrews L, Prato L, Lindley L, Robinson L. (2019). Training interventions to improve general hospital care for older people with cognitive impairment: systematic review. The British journal of psychiatry: the journal of mental science 214(4): 201-212.

Aged Care Quality and Safety Commission (2019). Guidance and Resources for Providers to support the Aged Care Quality Standards. Guidance and Resources for Providers to support the Aged Care Quality Standards Canberra, Aged Care Quality and Safety Commission.

Aged Care Royal Commission (2020). Performance reporting Indicators, Measures and Targets: Dementia Training Program (DTP). Canberra, Australia, Aged Care Royal Commission.

Alush, L, Hammond JA, Wood JH (2015). Evaluation of dementia education programs for preregistration healthcare students—A review of the literature. Nurse Education Today 35(9): 992-998.

Alzheimer Europe. (2016). 2013: National policies covering the care and support of people with dementia and their carers. from https://www.alzheimer-europe.org/Policy/Country-comparisons/2013-National-policies-covering-the-care-and-support-of-people-with-dementia-and-their-carers.

Arnautovska U, Robleda S, Jackson J, NAPachana (2016). The knowledge and skills assessment (KASA) tool in the Australian Dementia Behaviour Management Advisory Service: Development and initial testing. International Psychogeriatrics 28(5): 833-844.

Association of Ambulance Chief Executives, U. (2017). DEMENTIA- Best Practice Guidance for Ambulance Services.

Alzheimer's Australia². (2016). Submission To the Senate Community Affairs References Committee Inquiry - The Future of Australia's Aged Care Sector Workforce. Canberra, Alzheimer's Australia. https://www.dementia.org.au/sites/default/files/NATIONAL/documents/AA-Submission-to-Senate-Inquiry-into-Aged-Care-Workforce.pdf

Dementia Australia. (2019). Royal Commission into Aged Care Quality and Safety Workforce Submission Canberra, Dementia Australia.

https://www.dementia.org.au/sites/default/files/submissions/DA-workforce-submission-to-royal-commission.pdf

Dementia Australia. (2020). Royal Commission into Aged Care Quality and Safety: Response to Counsel Assisting's submissions on the future of the aged care workforce Canberra, Dementia Australia. https://www.dementia.org.au/sites/default/files/submissions/Dementia-Australia-response-to-Counsel-Assistings-submission-on-the-future-of-the-aged-care-workforce.pdf

Dementia Training Australia. (2020). Aged Care Quality Standards. from https://dta.com.au/aged-care-quality-standards/#standard1.

Australian Association of Gerontology List of University Courses in Ageing: Tertiary Unit Descriptions. Melbourne, Vic, Australian Association of Gerontology.

² Later known as Dementia Australia

Australian Commission on Safety and Quality in Health Care (2014). A better way to care. Safe and high-quality care for patients with cognitive impairment (dementia and delirium) in hospital - Actions for consumers. Canberra, Australian Government Department of Social Services.

Australian Commission on Safety and Quality in Health Care (2014). A better way to care: Safe and high-quality care for patients with cognitive impairment (dementia and delirium) in hospital - Actions for clinicians. Sydney, Australian Commission on Safety and Quality in Health Care.

Australian Commission on Safety and Quality in Health Care (2014). A better way to care: Safe and high-quality care for patients with cognitive impairment (dementia and delirium) in hospital - Actions for health service managers, Australian Government Department of Social Services.

Australian Health Ministers Advisory Council (AHMAC) (2014). National Framework for Action on Dementia 2015 - 2019. Canberra, Australian Government

Australian Institute of Health and Welfare (2020). <u>Dementia data gaps and opportunities</u>, Australian Institute of Health and Welfare.

Ballard C, Corbett, Orrell M, Williams G, Moniz-Cook E et al. (2018). Impact of person-centred care training and person-centred activities on quality of life, agitation, and antipsychotic use in people with dementia living in nursing homes: A cluster-randomised controlled trial. PLoS Medicine 15(2): e1002500.

Banerjee S, Farina N, Daley S, Grosvenor W, Hughes L et al. (2017). 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. International Journal of Geriatric Psychiatry 32(1): 68-75.

Beattie E. (2017). Building staff capacity to provide responsive care. Australian Journal of Dementia Care 6(6).

Bentley MW, Kerr R, Ginger M, and Karagoz J (2019). Behavioural change in primary care professionals undertaking online education in dementia care in general practice. Australian Journal of Primary Health 25(3): 244-249.

Brooke J, Ojo O. (2018). Elements of a sustainable, competent, and empathetic workforce to support patients with dementia during an acute hospital stay: A comprehensive literature review. The International Journal of Health Planning and Management 33(1): e10-e25.

Cahill, S. (2020). WHO's global action plan on the public health response to dementia: some challenges and opportunities. Aging & Mental Health 24(2): 197-199.

Care First Ltd (2010). Working to support the implementation of the National Dementia Strategy Project - Mapping Existing Accredited Education/Training and Gap Analysis Report. uk, Skills for Health and Health Education England and Skills for Care.

Skills for Health, Skills for Care, Leeds Beckett University and Health Education England (2018). Managing success in dementia care. Leeds, UK, Leeds Beckett University.

Carter C, Bray J, Read K (2019). The Admiral Nurse Competency Framework: Encouraging Engagement and Putting It Into Practice. Journal of continuing education in nursing 50(5): 205-210.

Chow S, Chow R, Wan A, Lam K, Taylor K. et al. (2018). National Dementia Strategies: What Should Canada Learn? Canadian geriatrics journal: CGJ 21(2): 173-209.

Collier E, Knifton C, Surr C. (2015). Dementia education in Higher Education Institutions. Nurse Educ Today 35(6): 731-732.

Community Affairs References Committee (2017). Future of Australia's aged care sector workforce. T. Senate. Canberra, Commonwealth of Australia.

De Witt Jansen, Brazil BK, Passmore P, Buchanan H, Maxwell D, McIlfatrick SJ, Morgan, SM, Watson W and Parsons C. (2018). Evaluation of the impact of telementoring using ECHO© technology on healthcare professionals' knowledge and self-efficacy in assessing and managing pain for people with advanced dementia nearing the end of life. BMC health services research 18(1): 228.

Dementia Australia (2019). Quality Dementia Care Action Plan. Canberra, Dementia Australia.

Dementia Australia's Centre for Dementia Learning (2020). Dementia Learning Guide 2021, Dementia Australia.

Dementia Pathfinders. (2020). Dementia Roadmap: Helping primary care to support people with dementia. Retrieved 28 December 2020, from https://dementiaroadmap.info/.

DeSouza, K, Pit SW and Moehead A. (2020). Translating facilitated multimodal online learning into effective person-centred practice for the person living with dementia among health care staff in Australia: An observational study. BMC Geriatr 20(1): 33.

Douglas JW, Jung SE, Noh H, Ellis AC and Ferguson CC. (2020). 'If They Don't Like You, They Are Not Going to Eat for You': Individual and Interpersonal Factors Affecting Certified Nursing Assistants' Ability to Provide Mealtime Assistance to Residents With Dementia. The Gerontologist.

Emory University Rollins School of Public Health (2020). A Public Health Approach to Alzheimer's and Other Dementias. USA, Alzheimer's Association.

Engedal K and Laks J. (2016). Towards a Brazilian dementia plan? Lessons to be learned from Europe. Dementia & Neuropsychologia 10(2): 74-78.

Farrell TW, Luptak MK, Supiano KP, Pacala JT and De Lisser R (2018). State of the science: Interprofessional approaches to aging, dementia, and mental health. J Am Geriatr Soc 66 Suppl 1: S40-s47.

Fellows, M and Edwards, J. (2016). Future skills and competences of the health workforce in Europe, www.healthworkforce.eu.

Finland Ministry of Social Affairs and Health (2013). National Memory Programme 2012-2020: Creating A Memory Friendly Finland. Reports and Memorandums of the Ministry of Social Affairs and Health 2013:9. Helsinki, Finland, Finland Ministry of Social Affairs and Health.

Foley T, Sheehan C, Jennings AA and O'Sullivan T (2020). A qualitative study of the dementia-care experiences and educational needs of physiotherapists in the Republic of Ireland. Physiotherapy 107: 267-274.

Fossey J, Masson S, Stafford J, Lawrence V, Corbett A, Ballard C (2014). The disconnect between evidence and practice: a systematic review of person-centred interventions and training manuals for care home staff working with people with dementia. International Journal of Geriatric Psychiatry 29(8): 797-807.

Garrod L, Fossey J, Henshall C, Williamson, Coates A, Green H. (2019). Evaluating dementia training for healthcare staff. The Journal of Mental Health Training, Education and Practice 14(4): 277-288.

Gilster SD, Boltz M, Dalessandro JL. (2018). Long-Term Care Workforce Issues: Practice Principles for Quality Dementia Care. The Gerontologist 58(1 Supplement): S103-S113.

Gkioka M, Schneider J, Kruse A, Tsolaki M, Moraitou D, Teichmann B. (2020). Evaluation and Effectiveness of Dementia Staff Training Programs in General Hospital Settings: A Narrative Synthesis with Holton's Three-Level Model Applied. Journal of Alzheimer's Disease 78: 1089-1108.

Gold Standards Framework Team (2012). The Gold Standards Framework in Dementia Training Programme. Guidance and resources to accompany the distance learning GSF Dementia Training Programme and DVD, The Gold Standards Framework-Dementia Care.

Goldberg LR, Bell E, King C, O'Mara C, McInerney F, Robinson A, Vickers J. (2015). Relationship between participants' level of education and engagement in their completion of the Understanding Dementia Massive Open Online Course. BMC Med Educ 15: 60.

Goodenough B, Watts J, Bartlett S. (2020). Making sense of self-reported practice impacts after online dementia education: The example of Bedtime to Breakfast and beyond. Brain Impairment.

GregsonnP, Nolte L, Todd J. Detering,KM. (2020). Advance Care Planning Australia Education Capability Framework: 2020 Implementation Guide. Austin Health, Melbourne, Advance Care Planning Australia,.

Guideline Adaptation Committee (2016). Clinical Practice Guidelines and Principles of Care for People with Dementia. Sydney, NHMRC Partnership Centre for Dealing with Cognitive and Related Functional Decline in Older People.

Hartigan I, Clark K., Cornally N, Rooney F, Drennan J, et al. (2019). Evaluation of the National Dementia Strategy. Cork, Ipsos MORI, University College Cork.

Hollister B, Flatt JD, Chapman SA. (2018). Dementia-Capable Care Coordination in Duals Demonstration Programs: Workforce Needs, Promising Practices, and Policy. Gerontologist 58(4): 768-778.

Hvalič-Touzery S, Skela-Savič B, Macrae R, Jack-Waugh A, Tolson D, et al. (2018). The provision of accredited higher education on dementia in six European countries: An exploratory study. Nurse Educ Today 60: 161-169.

Hyer K, Molinari V, Kaplan M, Jones S. (2010). Credentialing dementia training: The Florida experience. International psychogeriatrics 22(6): 864-873.

Jack-Waugh A, Ritchie L and MacRae R. (2018). Assessing the educational impact of the dementia champions programme in Scotland: Implications for evaluating professional dementia education. Nurse education today 71: 205-210.

Keane JM, Franklin F, Vaughan B. (2020). Simulation to educate healthcare providers working within residential age care settings: A scoping review. Nurse education today 85: 104228.

King C, Kelder J, Doherty K, Phillips R. McInerney F et al. (2014). Wiki Based Collaborative Learning in Interuniversity Scenarios. The Electronic Journal of e-Learning 12: 161-171.

Knifton C, MacRae R, Jack-Waugh A, Brown M, Surr C, Thompson R, Baillie L. (2019). Perspectives: Dementia education in Higher Education Institutions, now and in the future: the role of the professional regulatory bodies in the UK. Journal of Research in Nursing 24: 271-278.

KPMG (2015). Final Report: Analysis of Dementia Programmes funded by the Department of Social Services. Canberra, Australian Department of Social Services.

Laver K, Cumming RG, Dyer SM, Agar MR, Anstey KJ, et al. (2016). Clinical practice guidelines for dementia in Australia. Med J Aust 204(5): 191-193.

Macaden L. (2016). Being Dementia Smart (BDS): A Dementia Nurse Education Journey in Scotland. International Journal of Nursing Education Scholarship 13(1): 45-53.

Mills JA, Middleton, JW, Schafer A, Fitzpatrick S, Short S, Cieza A (2020). Proposing a reconceptualisation of competency framework terminology for health: A scoping review. Human resources for health 18(1): 15-15.

Ministry of Health and Social Affairs Sweden. (2019). Dementia strategy focusing on care. from https://www.government.se/articles/2018/07/dementia-strategy-focusing-on-care/.

Moehead A, DeSouza K, Walsh K, Pit SW. (2020). A web-based dementia education program and its application to an Australian web-based dementia care competency and training network: Integrative systematic review. J Med Internet Res 22(1): e16808.

Mustafa N, Tsaroucha A, Le Mesurier N, Benbow SM, Kingston P. (2013). Educating and Training the Workforce to Work with People with Dementia: Two Projects from the United Kingdom. Educational Gerontology 39(6): 398-412.

National Institute on Aging. (2020). Alzheimer's and Dementia Resources for Professionals. Retrieved 16 December 2020, from https://www.nia.nih.gov/health/alzheimers-dementia-resources-for-professionals.

New Zealand Human Rights Commission (2012). Caring Counts. Wellington, New Zealand, New Zealand Human Rights Commission.

New Zealand Ministry of Health (2013). New Zealand Framework for Dementia Care. M. o. Health. Wellington, NZ, Ministry of Health.

New Zealand Ministry of Health (2014). Improving the Lives of People with Dementia. Wellington, NZ, New Zealand Ministry of Health.

NHS Education for Scotland (2011). Promoting Excellence: A framework for all health and social services staff working with people with Dementia, their families and carers, NHS Education for Scotland.

NHS Education for Scotland (2012). Promoting Excellence - Guidelines for Trainers and Educators. Scotland, NHS Education for Scotland.

OECD (2018), Care Needed: Improving the Lives of People with Dementia, OECD Health Policy Studies, OECD Publishing, Paris, https://doi.org/10.1787/9789264085107-en.

O'Shea E, Cahill S, Pierce, M. (2017). Developing and implementing dementia policy in Ireland. Galway, Ireland, NUI Galway, Centre for Economic and Social Research on Dementia.

Public Health Agency of Canada (2019). A Dementia Strategy for Canada. Ottawa, Canada, Public Health Agency of Canada.

Rees G. (2020). Dementia: Australia at the crossroads. Australian Journal of Dementia Care 8: 27-29.

Riley V, Pressley A. (2019). Guiding Occupational Therapy Practice for People Living with Dementia in the Community, Dementia Training Australia.

Sampson EL, Vickerstaff V, Lietz S, Orrell M. (2017). Improving the care of people with dementia in general hospitals: evaluation of a whole-system train-the-trainer model. International psychogeriatrics 29(4): 605-614.

Sarre S, Maben J, Aldus C, Schneider J, Wharrad H, Nicholson C, Arthur A. (2018). The challenges of training, support and assessment of healthcare support workers: A qualitative study of experiences in three English acute hospitals. International journal of nursing studies 79: 145-153.

Sass C, Burnley N, Drury M, Oyebode J, Surr S.(2019). Factors associated with successful dementia education for practitioners in primary care: An in-depth case study.

Scerbe A, O'Connell ME, Astell A, Morgan D, Kosteniuk J, DesRoches A. (2019). Digital Tools for Delivery of Dementia Education for Health-Care Providers: A Systematic Review. Educational Gerontology 45(11): 681-699.

Scerri A, Innes A, and Scerri C(2017). Dementia training programmes for staff working in general hospital settings - a systematic review of the literature. Aging Ment Health 21(8): 783-796.

Scerri C. (2015). Empowering Change A National Strategy for Dementia in the Maltese Islands 2015-2023. Malta, Parliamentary Secretariat for Rights of Persons with Disability and Active Ageing.

Schütze H, Shell A, Brodaty H. (2018). Development, implementation and evaluation of Australia's first national continuing medical education program for the timely diagnosis and management of dementia in general practice. BMC Med Educ 18(1): 194.

Smith SJ, Parveen S, Sass C, Drury M, Oyebode JR, Surr CA. (2019). An audit of dementia education and training in UK health and social care: a comparison with national benchmark standards. BMC health services research 19: 711-711.

Smythe A, Jenkins C, Bentham P and Oyebode J. (2014). Development of a competency framework for a specialist dementia service.

Sun F, Chima E, Wharton T, Iyengar V. (2020). National policy actions on dementia in the Americas and Asia-Pacific: Consensus and challenges. Rev Panam Salud Publica 44.

Surr C, Baillie L, Waugh A, Brown M. (2017). Position Paper: The importance of including dementia in pre and post qualifying curricula for health and social care professionals. Higher Education for Dementia Network. London, Dementia UK.

Surr CA, Parveen S, Smith SJ, Drury M, Sass C, Burden S, Oyebode J. (2020). The barriers and facilitators to implementing dementia education and training in health and social care services: a mixed-methods study. BMC Health Services Research 20(1): 512.

Surr CA, Sass C, Burnley N, Drury M, Smith SJ, Parveen S, Burden S, Oyebode J (2020). Components of impactful dementia training for general hospital staff: a collective case study. Aging & Mental Health 24(3): 511-521.

Surr CA, Sass C, Drury M, Burnley N, Dennison A, Burden S, Oyebode J. (2019). A collective case study of the features of impactful dementia training for care home staff. BMC Geriatrics 19(1): 175.

Surr, C. Sass C, Griffiths A, Oyebode J, Smith S, et al. (2017). Dementia Training Design and Delivery Audit Tool (DeTDAT) V3.0. Auditor's Manual. Leeds, Leeds Beckett University.

Tan ZS, Damron-Rodriguez J, Cadogan M, Gans D, Price R. et al. (2017). Team-Based Interprofessional Competency Training for Dementia Screening and Management. Journal of the American Geriatric Society 65: 207-211.

The Dementia Centre. (2020). Dementia Capability Compass. Retrieved 29/12/2020, from https://www.dementiacentre.com/education/dementia-capability-compass.

The Society and College of Radiographers (2020). Caring for People with Dementia: a clinical practice guideline for the radiography workforce (imaging and radiotherapy). Practice Guideline Document. London, UK, The Society and College of Radiographers.

Tierney L, Mason R, Doherty K, Winbolt M, Long M, Robinson A. (2019). Workshops on diagnosis and management of dementia for general practitioners: a pre-post intervention study of dementia knowledge. BMJ Open 9(4): e027804.

Traynor V, Inoue K Crookes PA. (2011). Literature review: understanding nursing competence in dementia care. Journal of Clinical Nursing 20: 1948-1960.

U.S. Department of Health & Human Services Health Resources & Services Administration. (2020). Train Health Care Workers About Dementia. Retrieved 28 December 2020, from https://bhw.hrsa.gov/alzheimers-dementia-training.

Vasse E, Moniz-Cook E, Rikkert MO, Cantegreil I, Charras K, et al. (2012). The development of quality indicators to improve psychosocial care in dementia. International Psychogeriatrics 24(6): 921-930.

Alzheimer's Australia Victoria (2016). Dementia Learning Guide Health Services: Flexible education solutions to improve dementia practice for health professionals.

Wales Aligning Nursing Skills Panel (2015). Aligning Nursing Skills All Wales NHS Nursing Skill Set for Dementia and Cognitive Impairment. Wales, Wales NHS.

Warshaw G, Bragg E (2014). Preparing The Health Care Workforce to Care For Adults With Alzheimer's Disease and Related Dementias. Health Affairs 33(4): 633-641.

Weiss J, Tumosa N, Perweiler, Forciea MA, Miles T et al. (2020). Critical Workforce Gaps in Dementia Education and Training. J Am Geriatr Soc 68(3): 625-629.

Welsh Government (2018). Dementia Action Plan for Wales, 2018-2022. Wales, Welsh Government.

Wharrad H, Sarre S, Schneider J, Maben J, Aldus C et al. (2020). In-PREP: a new learning design framework and methodology applied to a relational care training intervention for healthcare assistants. BMC Health Services Research 20(1): 1010.

Wilcock J, Iliffe S, Griffin M, Jain P, Thuné-Boyle I, et al. (2013). Tailored educational intervention for primary care to improve the management of dementia: The EVIDEM-ED cluster randomized controlled trial. Trials 14: 397.