Statement of Tanya Petrovich

Name: Tanya Petrovich

Date of birth: 14th September 1964

Address: 8 Allambee Ave, Camberwell

Date: 1st October 2019

1. This statement made by me accurately sets out the evidence that I am prepared to give to the Royal Commission into Aged Care Quality and Safety.
2. This statement is true and correct to the best of my knowledge and belief.
3. The views I express in this statement are my own based on my education, training and experience. The views I express in this statement represent the views of, Dementia Australia.

Professional background

4. I am currently the Business Innovation Manager, Centre for Dementia Learning at Dementia Australia. I have been in this role since 2018, but I have held various roles in Education within Dementia Australia (and its predecessor organisation Alzheimer's Australia Vic) over the past 11 years (2008- present). Some of my responsibilities have included teaching and assessing personal care workers in Certificate III qualifications, developing a Certificate IV in dementia practice, developing education courses and increasingly, working with technology providers to deliver immersive education experiences.
5. I completed a Science Degree (with honours) and PhD in Genetics, specialising in the field of Neurobiology at Melbourne University. I undertook a postdoctoral position at the Marie Curie Research Institute in Surrey UK, and I hold a Graduate Diploma of Education.
6. Prior to working at Dementia Australia (and its precursor entity Alzheimer's Australia Vic) I worked as an independent contractor/sessional educator for various Universities and private providers of Vocational Education and Training, including the University of Melbourne, and Victoria University (TAFE and University) from 1995-2007.
7. My experience includes involvement in both Australian and international aged care. I have participated in two trade missions with the Department of Economic Development, Victoria. These were tours of Aged Care Services and facilities in Japan and China. Most recently in 2018, I was invited by Austrade to give a presentation on Dementia

Australia's Technology products to the European Ageing Network congress (EAHSA-EDE Congress) in Prague, Czech Republic. As a result of this visit we have sold the Enabling EDIE workshops to a peak body delivering education services to Aged Care workers in the Czech Republic.

Background - Dementia Australia

8. Dementia Australia (formerly known as Alzheimer's Australia) is the peak, non-profit organisation for people of all ages, living with all forms of dementia, their families and carers. We represent the more than 447,000 Australians living with dementia and the estimated 1.5 million Australians involved in their care.

9. In addition to advocating for the needs of people living with all types of dementia, and for their families and carers, Dementia Australia provides support services, education and information aimed at addressing gaps in mainstream services.

10. Dementia Australia has undergone enormous change in the past 3 years. It was formed in 2017, being the unification of 7 entities of the Alzheimer's Australia federation to become one national organisation. This transition has taken place in a relatively short period of time; and our Education service the Centre of Dementia Learning, has undergone tremendous change and growth. This successful transition from federation to unification has been delivered under the inspiring leadership of our CEO, Ms Maree McCabe.

11. Dementia Australia's Leadership team is headed by the CEO, Maree McCabe; who is supported by the executive consisting of the, Executive Director Corporate Services & Governance, Anthony Boffa; Executive Director Advocacy and Research, Kaele Stokes; Executive Director, People and Culture, Anneliese Coghlan; Executive Director Business Development, Leanne Emerson; Executive Director, Client Services, Susan McCarthy. The Centre for Dementia Learning is led by Director, Dr David Sykes who reports to the Executive Director Business Development. My role as Business Innovation Manager, Centre for Dementia Learning reports to the Director.

Affiliations

12. As the peak organisation, Dementia Australia is often approached to participate in research projects run by Universities and Research bodies around Australia.

13. We are currently involved in over 20 projects nationally, usually in an advisory/steering group capacity.

14. The most significant affiliation for the Centre for Dementia Learning is our consortium membership of Dementia Training Australia (DTA).The consortium consists of Dementia Australia and 4 Universities - the University of Wollongong, La Trobe University, Queensland University of Technology and the University of Western Australia. DTA was

established in 2016 with the aim to improve the care and wellbeing of both the people living with dementia and the staff delivering their care.

15. The vocational training component of DTA's remit is delivered by Dementia Australia to over 6,500 workers each year through the Dementia Essentials unit of competency – CHCAGE005 Provide support to people living with dementia.

16. We also have a partnership with the National Ageing Research Institute (NARI) through the Melbourne Ageing Research Collaboration (MARC), which aims to improve the lives of older people through the rapid translation of research into policy and practice to influence systemic change.

17. On a personal level, I was recently involved in the project advisory group for a project called Talk2Me Technology - which was to enable older people living at home from CALD backgrounds to communicate their everyday needs using an iPad application to improve communication of their everyday needs. The product was co-developed with clients and staff of Mercy Health. I was not involved in the evaluation of this project, but from the co-design phase I understood that the CALD community was very supportive of the product.

18. Centre for Dementia Learning has also been involved in the NARI led project – PITCH. Promote Independence Through quality dementia Care at Home (PITCH) project is a co-designed and developed dementia-specific training program for home care workers. The aim is to help home care workers realise the value of their role and their influence on the experiences of the person with dementia and family carers. We have not been involved in the evaluation of this project to date.

19. We are also a member of the ARC Industrial Transformation Research Hub for Digital Enhanced Living. Our CEO is a member of the Advisory board and as a member we are running a project through the hub. Deakin University is the administering organisation and the membership consists of other Universities including Flinders University, Monash University, Software companies, and Aged Care providers. The purpose of the hub is to develop affordable, scalable and safe in-home and in-residential care solutions for 'smart home' focused assisted living.

    We have worked in collaboration with the Swinburne University, Future Self and Design Living Lab, developing an application for people living with dementia called 'A Better Visit'. Evaluation of this application continues with collaboration with Sheffield University, UK.

Funding

20. Approximately 60% of Dementia Australia's funding is provided through Federal Funding; 10% State Government; and the remaining 30% consists of 20% Fundraising activities and 10% commercial services.

21. The majority of Dementia Australia activities stemming from research affiliations are unfunded/in-kind arrangements.

22. Dementia Australia has also received government funding to deliver specific technology solutions, including our 'Decoding Dementia' technology trials.

Technology for the Aged Care Workforce and People living with Dementia

23. Dementia Australia has a history of using various technologies to raise awareness of dementia and improve engagement and understanding for those people who support people living with dementia as well as for engaging people living with dementia themselves.

24. Dementia Australia has utilised its world-first applications of serious games and virtual reality technologies as a point of difference, globally, that has resulted in achieving sustained national and international media coverage, increased the organisation's leadership profile and successfully advocated for and influenced changes in dementia policy and practice.

25. The first application developed and released internationally by Dementia Australia in partnership with Bupa Health Foundation was Brainy App, released in 2011. This smart phone application was designed to raise awareness of the risk factors of dementia whilst providing advice on how to reduce your risk.

26. In 2013, Dementia Australia (then Alzheimer's Australia Vic) was growing and moving to new premises in Parkville. We took this opportunity to review our education programs and how we engaged with the Aged Care Industry. We felt that our education was too focused on telling people what to do and not providing sufficient experiential learning. In designing a new training room in Parkville we decided to create a sensory and immersive training room, one with surround sound, colour lighting, touch screens, a wall for projection, 10 meters long 2.5 meters in height and able to interact with the user through kinetic sensors. The room was funded by the generous donation of the Lorenzo and Pamela Galli Foundation and is known as the Perc Walkley Dementia Learning Centre.

27. This room has allowed us to provide training that is experiential and memorable for the user. We have used this room to create experiences for participants which they can reflect upon and change their practice because of it.

28. The following Virtual Reality applications were developed as a consequence of our experience in delivering experiential education from the Perc Walkley Dementia Learning Centre.

29. The Virtual Dementia Experience™ was launched in 2013. It is an immersive, interactive virtual reality experience that takes people into the world of a person living with dementia, by walking through a virtual home and seeing the home as if you were living with the symptoms of dementia. Its purpose is to provide an experience for carers of what it might be like to live with dementia, and in so doing giving them a greater understanding and empathy for the person living with dementia. The experience is used as a learning tool in a 2 hour workshop that is delivered to professionals and family carers at Parkville, Melbourne. Since its launch in October 2013 the Virtual Dementia Experience™ has had more than 5,000 participants and has achieved national and international media coverage. The Virtual Dementia Experience™ has been consistently well received; it increases knowledge and empathy of participants; and the feedback from participants has been that they recalled and reflected upon the experience in their workplace.

30. The success of the Virtual Dementia Experience™ encouraged us to further develop the virtual reality (VR) experience in a mobile version so that participants did not have to come to Parkville and instead the education could be delivered at any location. In September 2016, we launched the EDIE experience. EDIE is an acronym for Educational Dementia Immersive Experience, but it is also the name of the character, Edie, who is a person living with dementia. Unlike the Virtual Dementia Experience™, which is experienced through a role play in a specially designed room, EDIE gives the user a very personal experience of living with dementia. It allows the user to walk in the shoes of the person living with dementia, waking in the middle of the night to find the bathroom. Edie has great difficulty in finding the bathroom, walking from the bedroom and trying to find which door is the bathroom door, whilst navigating other difficulties caused by the symptoms of dementia. Edie's spatial awareness is affected, as is his depth perception and recognition of objects. The dark coloured mat on the floor appears to be a hole he could fall into; what appears to be a toilet is in fact a laundry basket. We have now delivered the workshop to locations across the whole of Australia, including remote locations such as Cape York. Enabling EDIE is also available internationally in Canada, Singapore and the Czech Republic.

31. Our next development was a 'Day in the Life' experience. In this experience we have introduced Avatars. We have developed the 'Day in the life...mealtime experience' with two Avatars: one is Ted, the person living with dementia in a residential care facility and the other is Priya, an aged care worker. We see the dining experience through the eyes of the busy care worker and then again the dinner from the point of view of Ted, the person living with dementia. We see from Priya's point of view the pressure to deliver care to a number of clients all with individual needs and then from Ted's point of view an uninviting dinner, in a busy atmosphere with little personal engagement. Mealtime is a time to be enjoyed and savoured, so this experience will move aged care workers to reflect on their activity and how through small changes the meal time experience can be much improved for Ted, the person living with dementia.

32. We are currently working on the Artificially Intelligent Avatar - Ted. This tool is particularly focused on improving communication for people working in Home-based care (including Commonwealth Home Support Program and home care). These workers are typically middle-aged women, working part time for say 15 hours a week and with a certificate level of education. These workers are hands on and don't learn well from a lecture style delivery of education. We feel that an online or mobile offering of education would provide a more valuable delivery of knowledge and information for these workers. This education is more engaging and provides short experiences from which they can learn to implement in their work.

33. The worker can learn communication skills by having an online discussion with Ted and, through the experience, learn good communication skills. The experience allows workers to learn by making errors in a safe learning environment, they are given hints and encouraged to apply their new learning. The learner will get feedback on their performance and will be able to implement a change in their approach as they go through the learning experience. This learning tool is still being developed. A prototype is currently being evaluated with the assistance of aged care workers.

34. As there is a need for greater flexibility in delivery of dementia education, we are also looking at developing a digital engagement platform. The platform would replace traditional online learning with a mobile digital learning that is delivered in shorter burst and incorporates games and engagement strategies to improve learner engagement. This platform will be accessible on phones and could provide daily 'bite size' information to encourage learning and practice change.

35. In 2015, we released an application that can be downloaded on phone or tablets called the "Dementia-Friendly Home'. Its purpose to provide information to carers and family on simple things that can be done to make a home more enabling for the person living with dementia. It brings to life the 10 principles of Dementia Enabling Design, or the Enabling

Environment Principles. With 70 per cent of people with dementia living in the community, the app enables people to make their home to be made more dementia-friendly and this can allow the person to stay in their home, and engaged in their community for longer. Many of the app suggestions are small, inexpensive solutions ranging to more significant changes.

36. In 2016, we developed The Virtual Forest experience, designed for people living in residential care. The purpose of this application is to provide engagement and enjoyment for people living with dementia. The nature setting was deliberately chosen because research tells us that nature settings are calming for all people and we found people living with dementia connect well with nature settings. This application works through the projection of the Forest on to a wall or screen and a sensor that pics up movement, allowing the user to interact with the virtual world. The Virtual Forest is a park-like setting where the seasons can change with a clap of the hands. The virtual world responds to the persons hand movements, no movement means no change on the screen, with movement the virtual scene responds. We found that people with dementia responded most positively to insects and other animals. The Virtual Forest has ducks, a butterfly, a dragonfly, a boat and fish. These were all elements chosen because of the positive responses they elicited from people living with dementia.

37. 'A better visit', is an application we developed for use on a touch screen tablet, apple and android and released in 2018. The application is a free download and it consists of 8 simple games that can be played in pairs. The purpose of the application is to assist family, friends and carers to have a better visit with their person living with dementia. As dementia progresses the ability to recall friends and family may diminish and so visiting can become a challenge for all concerned. Through the use of this application the anxiety of visiting can be reduced. A better visit application is a tool that can aid connection and engagement. The person living with dementia when immersed in the game may often reminisce and through the reminiscence will recall past experiences that aid communication and connection with their family member or friend.

Evaluation of the Technology

38. Swinburne University conducted an evaluation of the Virtual Dementia Experience™ with aged care workers in 2014, which showed that the workshop was effective in:

a. increasing knowledge of dementia enabling environments with participants being able to identify more dementia-friendly changes

b. The experience increased empathy for the person living with dementia

c. Participant reflected on their practice.

39. In 2017 Monash University, School of Public Health and Preventative Medicine, Faculty of Medicine, led by Julia F.M. Gilmartin-Thomas, conducted an evaluation of the Virtual Dementia Experience™ with Medical students and Pharmacy students. Two papers were published: one in the Journal of Alzheimer's Disease and the other in the journal Dementia. These papers showed that the Virtual Dementia Experience™ improved the student's attitude towards people living with dementia and also improved their knowledge of dementia. These 2 elements are required to improve patient- centred care.

40. An evaluation of EDIE was conducted in 2018 and reported earlier this year, with plans to publish shortly. The summary of the findings was:

a. EDIE significantly improved attitudes towards dementia, empathy towards people living with dementia, and understanding of dementia care environments from pre-test or post-test.

b. EDIE significantly improved understanding of dementia care environments to a greater extent that the Virtual Dementia Experience™ and non-VR based training from pre- test and post-test, particularly for participants born in non-English speaking countries.

c. Participants who were trained with EDIE felt more immersed in the virtual world, than participants trained with the Virtual Dementia Experience™. Across both VR groups, those who reported feeling more immersed in virtual reality experienced greater improvement in understanding of dementia care environments from pre-test to post- test.

d. EDIE elicited highly positive feedback from participants with many articulating the ways in which they intended to implement, or had implemented skills learnt from the workshop. Participants reported an increased (a) empathy for how a person living with dementia may feel, (b) understanding of appropriate environmental modifications for people living with dementia and (c) confidence in supporting the independence and enablement off people living with dementia.

41. Anecdotal evidence suggests that VR is effective in eliciting practice change in aged care workers. Measuring practice change in aged care workers is not easily done. However, research in VR has shown that virtual experiences can change practice.

VR has been used effectively to change and improve practice in Medicine and Surgery, Defence services, and Football.

We often receive anecdotal evidence that the EDIE experience changes practice. An example is provided below:

> *"As discussed today I would like to let you know about a shift that I really noticed in the XXX wing following the EDIE training. I noticed staff taking more time, being calmer with residents, validating their emotional experiences, and just generally being more supportive of residents rather than being firm and directive with their interactions.....*
>
> *I also had feedback from a family member in the carer support group last night, where she reflected that she had noticed a massive shift in the approach staff had taken in the past*

week, which she had noticed while spending time with her mum. She had also had a conversation with a carer who has worked at XXX for a long time, who told this family member that her approach and perceptions of how to best support residents with Dementia had completely shifted following the EDIE training."

Kind Regards,
Natalie James
Doctor of Clinical Psychology Student / Provisional Psychologist
Mental Health Trainee with Swinburne University
School of Psychology, Faculty of Health - Deakin University, Burwood Campus

42. A small scale evaluation of the Virtual Forest was conducted by Prof Wendy Moyle of Griffith University (2018). The evaluation showed that what we had set out to achieve with the technology was met. The Virtual Forest has a high level of environmental stimulus and these greater levels of stimulus reduced apathy. There was increased engagement and enjoyment. The study also measured observed emotions. It was found that the residents in the study when interacting with the Virtual Forest showed higher levels of pleasure, alertness and anxiety as compared to previously established levels for people with dementia in an activity context. We have found that for some people with dementia, when first introduced to the Virtual Forest, may exhibit some anxiety in how to interact with a technology they have not used before. However, by training staff in how to support and encourage these individuals this initial anxiety is quickly overcome.

43. An evaluation of the Better Visit application was conducted by Swinburne University Future Self and Design Living Lab led by Assoc. Prof Sonja Pedell (2018). The Better Visit application was co-designed with people living with dementia and their family carers, professional carers and volunteers over more than 12 months. Understanding personhood is essential in creating meaningful and engaging interactions to increase quality of life for people living with dementia. This iterative development ensured that the product met the need of the end user. The games were evaluated over a 6 month period by remotely logging play sessions from multiple iPads used by 24 residents across 4 care homes to gain insight into favoured games, frequency and duration of play. Evaluating the game data was challenging because time on task is not an effective measure of engagement. In addition to this data collection interviews with staff, volunteers and family members and the people with dementia were held with onsite observations as well. It was found that game play sessions varied in frequency and duration across the range of participants throughout the evaluation. A small number of participants established a routine time of day for play where as others were opportunistic, spontaneous and sporadic. Moments of recognition would create a flow-on cognitive 'buzz' effect, stimulating memories and reminiscing stories and emotions through the images and music shared by both participants.

One staff member commented; "it's a no brainer... you don't have to come in to your visit thinking 'what am I going to talk about what is my family member going to remember? What are they going to do?"

Limitations to uptake of Technologies

44. The uptake of the Enabling EDIE Workshops by the aged care industry has been very positive. Typically, the greatest hindrance to uptake of the education offering is not the cost of the education itself, but rather the cost of paying staff to attend the education and then additionally paying staff to backfill for those that are involved in the education. This has been an ongoing issue, with and without VR education. The problem seems more significant in home care, where investing in staff development is typically less than in residential care. At times staff are asked to attend training without being paid for their time to attend. This seems a big ask for workers who are not well paid and typically time poor as they support family and children.

45. The Better Visit app is being downloaded, currently at over 3,800 downloads. There is a limitation in that it only works on a tablet, though it is worth noting that tablet-size is required to ensure the person living with dementia can see and engage appropriately.

46. For the Virtual Forest, we have found that uptake to be slow, as it was released in 2016, however, uptake is now gaining momentum. It is a more complex and costly solution than 'A Better Visit and some basic technology understanding is required to install the application and purchase appropriate hardware. To date we have sold 74 copies of the Virtual Forest.

Thoughts on Strategic Action 12 –Aged Care Centre for Growth and Translational Research- A Matter of Care

47. My understanding of the purpose of the centre for growth is to support investment in aged care innovations, and the translation and uptake of innovations to improve workforce capability and care quality.

There are already a number of translational research centres, including NARI, Cognitive Decline Partnership Centre, and the Dementia Centre for Research Collaboration. There have been numerous quality tools and products that have been released over the years, by these and other research centres; however their dissemination or uptake through the industry has in general been poor.

Dementia Training Australia, however, is a collaboration of researchers and educators (including Dementia Australia) with a focus to translate research in to practice through the education of the aged care workforce and so improve care outcomes for people living with dementia.

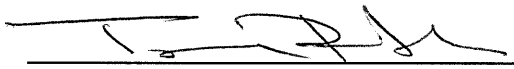
From our experience, for knowledge transfer to occur, there needs to be a strong linkage between research and practical experience, which is lacking from a significant proportion of research. The role of an organisation such as Dementia Training Australia is pivotal in the translation of the research into practice through education of the aged care workforce.

48. The reforms to the sector to date have been driving the industry to be more responsive to the client. Funding is increasingly in the control of the client. The Aged Care Quality

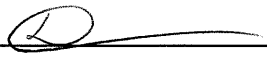
Standards speak to the outcomes of the client. It is clear that business models need to change to be more client-centric.

In encouraging Service Providers to be more client focused in an increasingly competitive environment, service providers will be looking to differentiate their service from others to gain competitive advantage. A growth hub may – and possibly should - focus on lifting the base level of the industry, but the efforts to do this will be impacted somewhat by those providers who want to differentiate themselves and be seen as above or distinct from their competition. Consideration will need to be given to finding a balance between innovations/research translation that will improve the capacity of the sector as a whole, versus innovations that lead to competitive advantage for particular providers that choose to invest in them.

49. To be successful in transforming aged care services and to embed change into practice, our experience shows that what is required is leadership and culture change. We have worked with a number of organisations to shift culture and improve dementia care practice. Firstly, the education of aged care workers is foundational, and is the first step required to initiate a change in culture. Increasing understanding of, not only the frontline staff, but also the board and management's understanding of dementia is pivotal. For change to become embedded, the Board of Directors, CEOs and senior management must be in agreement and lead the change they want to see in their service delivery. Our approach is to work with a select group of leaders, or change champions, providing them with the tools, mentoring and coaching required for change to occur. But most importantly they build the model of care that is particular to their service. Through the process of building their model of care the organisational change buy-in grows and embedding of the new normal is likely more successful.

Signed: 

Date: 4th October 2019

Witness: 

Date: 4th October 2019