The voice of aged care

DISRUPTIVE TECHNOLOGIES

What do governments need to do?

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Leading Age Services Australia (LASA)

Leading Age Services Australia (LASA) is the peak body for service providers of retirement living, home care, and residential aged care. LASA is committed to improved standards, equality and efficiency throughout the industry; helping older Australians to live well. LASA advocates for the health, community and accommodation needs of older Australians, working with government and other stakeholders to advance the interests of all age service providers, and through them, the interests of older Australians.

LASA represents private, church, charitable and community care organisations, which gives it the unique ability to provide a comprehensive view on behalf of the aged care industry to enable all Australians to have access to, and choice of, high quality age services. To assist in achieving this, LASA pursues relevant issues with robustness and vigour in order to maintain and enhance age care services throughout Australia.

LASA has a number of offices across Australia allowing it to focus on State and Territory specific considerations and concerns, as well as at a national level. Together LASA presents a strong, unified voice on behalf of the industry to Government and other stakeholders.

Thank you for the opportunity to comment on the disruptive technologies project. Should you have any questions regarding this submission, please don't hesitate to contact Rebecca Storen on 02 6230 1676.

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Background

Leading Age Services Australia (LASA) thanks you for the opportunity to comment on the Productivity Commission's *Disruptive Technologies: what do governments need to do* research project. LASA is a strong advocate of enhancing innovation in order to support the establishment of care and services that are accessible and sustainable, whilst still maintaining safeguards in quality and focuses on continuous improvement.

LASA recognises innovation is not necessarily reliant on information and communication technology, however, it is worth noting that there is still considerable variation in the technical competency and capability of aged care service providers, with many still using paper based record systems and struggling to keep pace with emerging ICT capabilities. LASA is supportive of calls for a baseline evaluation to be undertaken to make information available on ICT use by service providers', which in turn, would support the drafting of a strategic plan that would outline resource and investment prioritises for the industry. Therefore, one of the challenges for potential innovation is that there is insufficient infrastructure uniformly available across the age services industry.

As previously recognised by the Productivity Commission, meeting the health and welfare demands presented by an ageing population with finite resources, presents a significant challenge. As a larger proportion of the population reach 65 years, alternative methods of products design and delivering services needs to be explored, evaluated and implemented to ensure that older people living in Australia have the opportunity to make their own choices to assist them to live well.

Defining Disruptive Innovation

LASA acknowledges the use of the term 'disruptive technology' by the Productivity Commission but proposes 'disruptive innovation' may be more appropriate as it recognises that something does not necessarily have to be an advanced technology to be considered disruptive. Instead these innovations are often a combination of existing components that combined, result in innovation rather than the development of a specific type of technology. Innovations of this nature make services and products more accessible to the broader population by making something more convenient, affordable, and simpler as the status quo may be complex and/or expensive[i]. However, it should be recognised that the original definition of disruptive innovation was written in a United States context, and is acknowledged to still be evolving[ii]. Therefore whilst it is a good starting point, adaption is likely to be required for effective use in the Australian context. Furthermore, it is also worth noting that disruptive innovation is only one type of innovation[iii]. The Expert Panel on Effective Ways of Investing in Health, as part of the European Commission, propose that there is two different types of innovation: disruptive and sustaining. They suggest that sustaining innovation does not have the same impacts as disruptive innovation does, in so much as creating new markets, but rather evolves the existing market so it may provide better services or products. A sustaining innovation can be further divided into two different types: discontinuous, which is transformative, or continuous, which is incremental[iv].

For example, consumer directed care (CDC) in aged services is a new way of recognising the rights and responsibilities of consumers and providers, explicitly acknowledging the key elements for consumers to exercise choices in relation to the care provided to them. Consumers are active

participants in their care, making decisions relating to their own care to maintain their independence as much as possible.

Determining outcomes and prioritise

In recognising there are finite resources available, it is necessary to determine what the desired outcomes are and how they are to be prioritised. To address this, there are a number of complex factors that need to be considered.

Who is the primary target of the outcome/s?

In order to simplify this question, the target audiences have been divided into three:

- Consumers
- Providers
- Government

Each of these groups not only has a different lens that needs to be applied when considering priority outcomes but also has an interconnected relationship, whilst having different roles.

Are these outcomes evolving?

LASA recognises the demographics of aged care consumers is transforming and with this change, the desired services and products are starting to alter. This shift is not only due to different attitudes and expectations of consumers but also due to the changing environment in which services and products are delivered. For example, as recently noted by the Productivity Commission, there is a strong preference for older people to live in their own home. Furthermore, this position is being supported by the increase of services and products to assist in enabling people to do so. This change is also resulting in a shift in the demographic of people living in residential aged care, with people now more likely to be older and more frail when they enter a facility, as well as their stay to be for a shorter period of time than has been seen historically.

How can these outcomes be prioritised?

A significant proportion of the examples currently available in disruptive innovation have occurred/ are occurring in a U.S. context, which means the overarching objectives may be different to the ones that would be prioritised in an Australian context. Therefore, it may be necessary to consider what the key aims may be:

- Access
- Safety
- Quality
- Equity
- Efficiency
- Effectiveness
- Cost – financial; social
- Other

How do these desired outcomes align with the existing priorities and programmes?

Before seeking to introduce wide-spread innovations, it is important to evaluate the existing products and programmes to determine whether these initiatives are likely to be successful in improving the existing system. Challenging existing services and products is not necessarily a

negative thing, but it does need to be considered against whether it is an effective use of limited resources, as well as whether these initiatives have the potential to actually improve, rather than simply replace existing products. Furthermore, does it compliment the national priorities and will it be acceptable to the general population, especially if it is funded by government? To assist in achieving this, collaborations between innovators and industry experts is strongly advantageous, as has been recognised through initiatives such as linkage grants. Whilst the innovations that arise from these partnerships needs to be assessed for their cost benefit, it is important to support them in other, perhaps less direct ways, such as ensuring that they are not encumbered by red tape, out of date regulations or restrictive legislations. In order to embrace innovation it may be necessary to consider the barriers of the existing system and assess whether they are achieving their original goals or whether they are acting to stifle innovation.

Current State

The World Economic Forum's Report: The Global Competitiveness Report 2015-2016

As identified in *The Global Competitiveness Report 2015-2016* by the World Economic Forum[v], Australia is ranked 21 overall, out of 140 economies, in the Global Competitiveness Index. However, in terms of the subindex of innovation and sophistication factors, Australia starts to slip, with it ranking 26th for these specific pillars. This highlights that for the other two indices (basic requirements and efficiency enhancers), Australia is placed significantly higher than its overall ranking, but that when compared to other economies around the world, Australia has historically had less focus on business sophistication and innovation. Focusing specifically on the innovation pillar, when this is broken down into its components, it becomes apparent that there are a number of areas that Australia is recognised as being strong. This includes the quality of scientific research institutions and the availability of scientists and engineers, for which Australia is recognised as being in the top 20 economies in the 140 that were considered. However, in terms of government procurement of advanced technology products, Australia ranks 70th, which is in significant contrast to all the other facets of the innovation pillar.

The Global Competitiveness Report also highlights the most problematic factor for doing business in Australia is the restrictive labour regulations, the score for which places Australia in the top 10. For example, regulations on rostering staff (and subsequent payment of staff) may have very significant negative impacts on the way CDC is implemented, especially when a person identifies to an age service provider, when, where and how they want care delivered to them.

Potential Barriers and Enablers

Below are a list of some of the broader barriers and enablers for innovation that may exist within the Australian context. This is not meant to be a comprehensive list but rather seeks to identify some of the possible areas that may be inhibiting or facilitating innovation in Australia. Also of note, whilst some of these factors may be considered a barrier or enabler in one industry does not mean that they are considered so in another:

- Cost
- Economic desirability
    - Actively identifying what will not be funding
    - Cost compared to benefit

- Lack of political buy in
- Lack of industry buy in
  - Supporting industry change management
  - Lack of drivers to engage industry
- Insufficient infrastructure to support innovation
- Aligning with existing national priorities
- Australian business culture
  - Investment in research and development
  - Collaborative partnerships with research groups, innovators, think tanks, etc.
- Existing legislations and regulations

Existing Prioritise and Actors

As identified above, the potential shift in focus to disruptive innovation, and other forms of innovation more broadly, would not take place in a naive setting but rather would need to factor in previous and existing work that has assisted in shaping the current environment. Whilst the definition of disruptive innovation includes the creation of new markets for a service or product, that item must be palatable for the target audience in order to be successful. If something is considered too extreme then there is the potential for the product to fail as the consumers may not be interested in identifying its benefit.

For example, the aged care Commonwealth Home Support Programme (CHSP) provides an entry-level tier of support in an increasingly responsive, integrated and client-centred aged care service system, delivering a relatively small amount of care and support to a large number of frail, older people to help them to remain living at home. However with recent changes to the way people may need to pay for this service, or when a higher level of care is required than can be offered through the CHSP, consumers may find this care delivery model unpalatable[vi].

Australia is recognised as having paternalistic social policies, as do many other western countries. This can create an uneasy companion when, on one hand the population calls for freedom of choice, whilst governments present restricted individual choices in certain areas due to what may be perceived as the undesirable outcomes of some options (e.g. gambling and tobacco)[vii]. Whilst the discussion relating to the justification of paternalism is beyond the scope of this paper, it is worth noting that innovations that disrupt existing markets and increase people's choice, must also recognise the significance of certain confines and public expectations.

Disruptive innovation transforms existing markets with new products or services which have the potential to redefine an industry. One of the challenges is how to create a business environment which supports innovation when there is the potential for the innovation to strongly affect the current dominant actors in the industry. The implementation of CDC illustrates the required change to a business environment, (in this case to the culture of an organisation), that has had a significant impact on service delivery and has redefined the Home Care sector.

Health and Ageing

Why should Health and Ageing be a Priority?

Australian's life expectancy from birth is ranked among the highest in the world at 80.3 years for males and 84.4 years for females (2014 figures)[viii]. Life expectancy from 65 years of age is also high, with 2014 estimates at 19.4 years for men and 22.2 years for women[ix; x]. However, this places strain on health and aged care services and income sources during retirement. Some examples include:

- 2010 figures suggest that 1 in 5 women yet to retire have no superannuation and 90% of women will have inadequate superannuation savings[xi].
- 2013 figures showed that 46% of people that had retired reported that their main source of income at retirement was a government pension/allowance. This figure grew to 66% of people using a government pension/allowance as their main source of income during their retirement.[xii]
- 52% of people with a tertiary qualification are still employed between the ages of 60 – 69 years compared to only 30% of people that graduated year 12 and lower.
- People aged between 60 and 69 and who rate their health as very good or excellent are far more likely to be in paid employment than people of the same age that rate their health as fair or poor, especially for women[xiii].
- It is estimated that 90% of people aged 65 years and over have at least one chronic condition and 57% have three or more chronic conditions[xiv].
- Roughly a third of residential aged care providers were found to have a net operating cash flow below a notional level of repairs and maintenance considered necessary to maintain a facility to a good standard[xv].
- Data recently made available by the OECD indicates that Australia has the second highest poverty rate for people over 65 years of age at 36%[xvi].
- In 2013-14, 9.5 hospital patient days per 1000 patient days was used by individuals waiting for residential aged care[xvii].

Reviews and reforms are currently being undertaken by Government to adjust the sector as it is recognised that existing systems are not sustainable. Therefore, the potential for disruptive innovation is significant. It has the ability to assist in addressing barriers for sustainability and can help people to access services and products that support them to maintain and potentially improve their health and wellbeing, as well as providing greater choice in how to achieve this.

Innovation and Regulation

Innovation is synonymous with risk, and in the context of industries that seek to avoid risk as much as possible, this inevitably creates tension between the two. Therefore how does health and aged care embrace innovation whilst still maintaining high levels of safety and quality? To further complicate the situation, both health and ageing are heavily regulated industries. Whilst these regulations have been put into place to protect vulnerable people, they can have the unintended consequence of stifling innovation due to the rigidity that they can create. Careful consideration needs to be given to the impacts of regulation and how it may be possible to incorporate innovation into an existing system or whether it is necessary to look at evolving the system to support changes in services and products.

The residential aged care accreditation standards, for example, were written in 1997 and are currently under review. How they might reflect contemporary consumer choice and subsequent self-accountability, versus a provider's responsibility to offer a safe, quality environment of care and service delivery can raise tensions between innovation and regulation.

Determining Priorities

As discussed above, it is necessary to determine the national priorities across all industries. These priorities then need to be translated into key considerations for the industry themselves so that they can be considered in future services and products. Therefore, how are health and ageing priorities to be determined? Health and aged care present unique challenges given that these industries not only generally work with vulnerable people, but that there is a certain amount of innate trust to provide what is needed for the best outcomes for the individual. This creates significant challenges for service providers in balancing finite resources, rapidly progressing technology and consumer expectations.

LASA proposes the following five areas for aged care innovation:

- Access:
  - The ability to support and respond to the needs of people regardless of their culture, background, location or entry point.
  - Services and products that are able to be delivered where and when the person wants them.
  - Services and products that are capable of meeting the demand and the changing needs of the population.
  - Economic viability, sustainability and the ability to meet demand.
- Quality:
  - Services and products that are available that reflect the population needs by incorporating such factors as: appropriate environment and infrastructure; ability to meet consumer expectation; and a suitable and skilled workforce.
  - Quality and innovation safeguards without unnecessary regulation and red tape.
  - Services and products that are able to enjoy a high level of public confidence.
  - Services and products that are able to evolve to meet best practice.
- Economics:
  - Sufficient funding to deliver a fair, accessible and affordable system.
  - Sufficient funding for services and products to be sustainable.
  - The ability to ensure vulnerable, marginalised or disadvantaged people are able to access affordable services and products.
- Workforce:
  - The ability to meet demand via a workforce that is available, skilled, appropriate and valued.
  - A workforce that is flexible, stable, safe and affordable.
  - A workforce that is equipped to best meet the changing needs of older people.
  - A workforce strategy that supports stakeholders to create a well-trained and sustainable workforce which provides consistent and continuous quality care.

- Capability:
  - A health and aged care services industry that ensures it is fit for purpose via initiatives such as: strategy; systems and process; leadership; workforce; skills; structure; shared values; culture etc.

Consideration should also be given to the ability to evaluate and scale interventions to ensure that they are achieving their desired outcomes and not having any serious unintended consequences.

Potential Barriers

Below is a list of potential barriers that are likely to have an impact on future innovation in the health and aged care industry. This list has been complied as a starting point rather than a complete list.

- Workforce
  - Opposition by workforce
  - Culture (professional; organisational)
  - Insufficient training and/or motivation
  - Inadequate communication
  - Insufficient clarification regarding responsibility
- Service users:
  - Culture
  - Opposition by consumer (tradition, real or perceived)
  - Capacity-capability
  - Inadequate education and/or communication
- Service providers
  - Unrealistic business model
  - Insufficient implementation
  - Lack of support from management/executive
  - Inadequate systems (e.g. IT)
  - Inadequate funding
  - Change management – internal and external stakeholders
  - Strategies to cease existing/previous services
  - Organisational model (private; public etc.)
- Economic and legal
  - Regulatory barriers/requirements
  - Legislation and regulation
  - Investment commitment (start up and ongoing)
  - Cost effectiveness of product or service
  - Reimbursement systems.

Evolving Challenges for Health and Ageing

Health and age care services are shifting in response to a decrease in acute illnesses and diseases, an increased prevalence of chronic disease and co-morbidities, evolving service delivery models and emerging innovations and technologies. In response to this, a larger focus is now being given to initiatives that support health promotion, disease prevention and consumer empowerment.

Therefore, health and aged care services are having to adapt their systems to respond to these challenges as traditional models are becoming less desirable, as well as unsustainable. Consumer empowerment is seeing the emergence of consumer responsibility and therefore a more significant focus is being placed on concepts such as behaviour theory to develop services and products to assist the consumer in taking more control of their health and welfare. This shifting landscape also presents new opportunities for innovations that can be directly utilised by consumers in a way that health and ageing haven't previously experienced.

Morals and Bioethics

As health and aged care services and products evolve, it is important that moral and bioethical considerations are given sufficient attention in a timely manner in order to support and protect people delivering services as well as service users. This is especially relevant in situations where medical science has advanced so rapidly that the existing laws and regulations are no longer relevant or sufficient. The use of the personally controlled electronic health record, or the implementation of advance care plans are examples of where personal morals and ethics might impact on the individual receiving care.

Limitations of Existing Systems

Existing systems have the ability to impact on reforms and policy changes due to their inability to perform in a way that fully supports future initiatives. It is less than ideal when the systems and processes negatively influence significant policy change and industry reform. Recent examples from the aged care industry include:

- In July 2015, CDC was introduced to all home care services. This is the first stage of shifting home care towards a CDC model with future changes already flagged that will result in the funding following the consumer rather than the funds being held by the provider. However, the system that exists to support this process has limited functionality and only allows one provider to be paid per consumer. As the funds start to follow the consumer, and the consumer is able to engage different providers for different services, this will present a problem. At this stage, it has been flagged with the industry that to address this system issue, one provider will be paid by the system and then that provider will have to distribute the funds to other providers as necessary. This ineffectiveness is created as a response to the limitations of an existing software program and where functionality dictates policy.

- The My Aged Care system (website and call centre) function changed significantly in July 2015 by creating an entry point or gateway to aged care services for all future consumers. This change was, in part, driven by the desire to streamline information gathering as a person moves through the system. The data collection capability of My Aged Care also aims to increase efficiencies for the service providers by decreasing data collection processes. In conjunction with the introduction of My Aged Care, the Department of Social Services has also introduced the use of the reporting system known as the Data Exchange (DEX), for which a subset of providers are required to report. However, whilst there is some cross over with the information reported through both systems, they are unable to share data with one another. This therefore means that staff work-arounds are required.

Facilitating Co-Design

LASA strongly supports the concept of co-design between policy makers, funding bodies, consumers, service providers, research and development groups and other relevant stakeholders. One of the challenges that can exist is the inability for innovators to link with industry experts so that they may work together on producing responsive services and products.

In March 2015, LASA, in partnership with 4 other organisations, held the inaugural InnovAGE event. The concept for which was developed based on hackathon events. The aim was to provide people with information about aged care and challenge them to innovate age related solutions to improve the lives of older Australians and their families. Events such as InnovAGE are initiatives that assist in linking industry with innovators so that new ideas can be developed and existing assumptions can be challenged.

Big Data

Consideration should be given to the drafting of strategies that support an industry-wide coordinated approach to big data. To date, very little focus has been given to the power of big data for the aged care industry. Any potential strategy would need to address this issue and effectively communicate the potential of large data analytics whilst also considering the possible limitations and collection requirements that may be required. Furthermore, attention would have to be given to whether the existing data is of a sufficient quality to be utilised; whether continuing to collect current data is still needed; what questions are likely to be asked that will challenge the data; and whether additional safe guards may need to be implemented.

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