

DIGITALLY SUPPORTED AND COORDINATED AGED CARE

Vision

The Digitally Supported and Coordinated Aged Care flagship program will empower the Australian aged care sector to design and implement new models of care based on innovative technologies. The novel solutions will enable the sector to operate in a transparent, safe and efficient manner and to proactively deliver personalised aged care services to recipients in both residential and homecare support programs.

DHCRC flagship programs are large multi-participant collaborative research programs designed to deliver systemic impact across the health sector by focus on areas of demonstrated industry need.

The Australian Aged Care Sector

Australia’s demographics are shifting. The proportion of people aged 65 or over is projected to increase from approximately 15.3% (3.8 million) of the population in 2017 to 21.8% in 2056. In 2017–18, governments spent over \$17 billion on aged care services. Of this, 69% of the budget was allocated to residential care (Figure 1), which is utilised by 23% of consumers. The Commonwealth Home Support Program (CHSP) has the largest number of people accessing the service, with around 76% clients receiving some level of CHSP service at home (Figure 1), while only receiving a budget allocation of 26%.

Drivers for Change

The aged care sector as a whole has been relatively untouched by digital health technologies and faces significant challenges. Most residential facilities still maintain paper-based patient records with very little digital data exchanged with hospital EMRs, laboratories, and general practice systems, making it impossible for the entire healthcare sector to provide continuity of care for older people towards their end of life when healthcare needs and costs are at their highest.

Lack of technological support coupled with a skilled local workforce shortage have

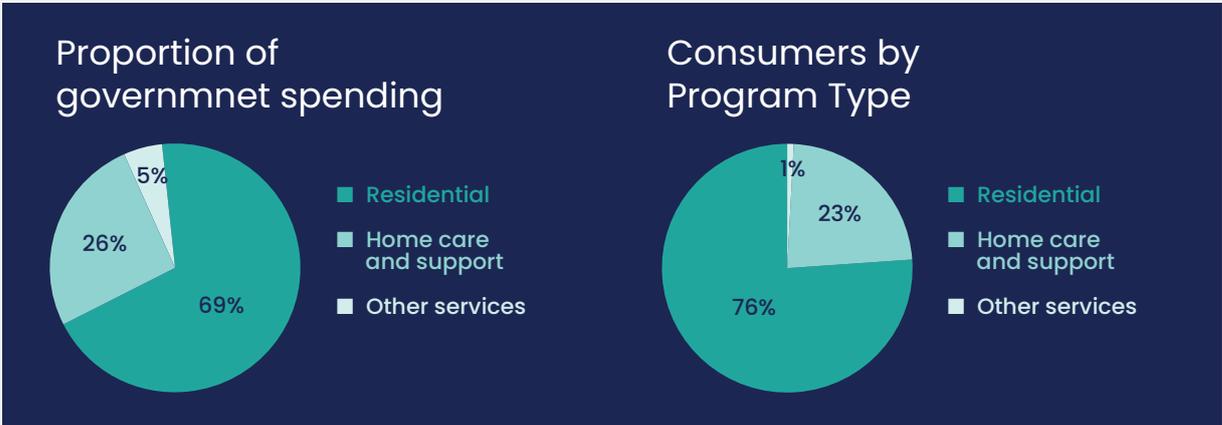


Fig. 1 Government Spending

lead to problems that affect service quality, compliance and transparency, resulting in sub-standard quality of service and loss of control for consumers and their carers, a problem that is being addressed by the Aged Care Royal Commission for Safety and Quality¹.

Research and Innovation

Based on extensive discussions and workshops with our industry partners and domain experts, the DHCRC research agenda is designed as a multi-layered framework. We will address broad, policy level, issues identified by the Aged Care Commission while simultaneously delivering high impact innovative technologies and solutions to support consumers and service providers in both public and private sectors. This will improve business efficiency, streamline reporting,

coordinate care with culturally appropriate and personal, family portals and dashboards, to deliver continuous quality improvement and decision support.

By using resident, service and clinical data, the resulting key innovations will address existing and future challenges of a nation with a culturally diverse aging population.

Key Innovations



Identification of deteriorating health trajectories

The focus here is to develop algorithms, tools and technologies that use the full spectrum of health data to develop predictive models to identify individuals on deteriorating health trajectories and provide an integrated view of this cohort so that appropriate real-time clinical and aged care services can be offered.



Intelligent service planning

Intelligent service planning solutions will address a range of factors related to communication and coordination across care teams including general practice and acute services to optimise care. Predictive modelling techniques will be used to identify which residents need what type of support to optimise resource and workforce allocation and ensure continuity of care across care settings.



Real-time continuous quality improvement

Key performance indicators and quality and safety standards will be continuously monitored and measured so they can be integrated into service planning, care delivery and real-time compliance reporting to government and regulators.



Shared service consumer portal

Shared portal-based solutions and dashboards will be designed to engage consumers, families, carers and providers to construct culturally sensitive care plans that foster social cohesion and adapt to the changing clinical needs of both residential and home-based aged care service consumer.

¹ <https://agedcare.royalcommission.gov.au/Pages/default.aspx>.