# **THE WORK OF THE ACITC FUTURE PLANS TO SUPPORT TECHNOLOGY DEPLOYMENT AND INNOVATION ACROSS THE SOCIAL CARE ENVIRONMENT**

PRESENTED BY DR GEORGE MARGELIS, ANNE LIVINGSTONE AND GAVIN TOMLINS

# ACIITC

Aged Care Industry Information Technology Council





### THE AGED CARE INDUSTRY INFORMATION **TECHNOLOGY COUNCIL (ACIITC)**



# **Presentation Outline**

The Future Digital Direction for Social Care Services and Consumer **Engagement - The Technology Roadmap** Dr George Margelis, Independent Chair, ACIITC

Maximizing Consumer Independence through Digital Innovation in the Home Anne Livingstone, Chair, National Home Care Group

> Creating Standard Invulnerability & Common Infrastructure Gavin Tomlins, Chair, CIO Forum





Aged Care Industry Information Technology Council

**FUTURE DIGITAL DIRECTION FOR SOCIAL CARE SERVICES AND CONSUMER ENGAGEMENT** - THE TECHNOLOGY ROADMAP

DR GEORGE MARGELIS INDEPENDENT CHAIR, ACIITC

# Aged Care Industry

Information Technology Council

## **ABOUT ACIITC**

### A BRIEF BACKGROUND

- Formed in **2007** under the banner of ACSA and the then ACAA (LASA);
- Aim to Speak with one Voice on Technology and Innovation Issues;
- Specific intent to raise Innovation and Technology issues with policy and decision makers and to improve technology update and innovation in the sector; and
- Emphasis on harnessing Innovation and Technology to create sustainable and quality Aged and Community Care Services.



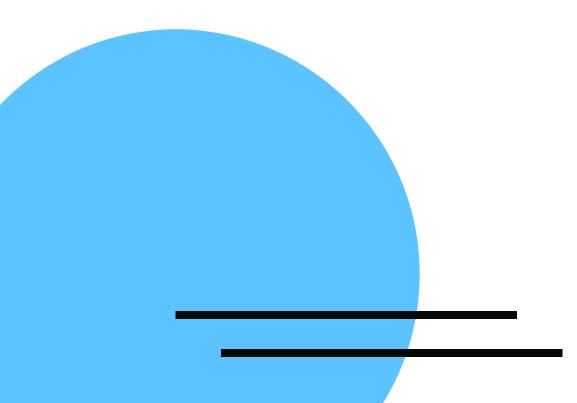


TO PROVIDE THE INDUSTRY WITH A VEHICLE TO **CONSIDER AND DEBATE INNOVATION AND TECHNOLOGY RELATED OPPORTUNITIES AND TO DISSEMINATE THE LESSONS LEARNED FROM THAT PROGRESS TO THE WIDER AGED AND COMMUNITY CARE INDUSTRY.** 

AGED CARE INDUSTRY INFORMATION TECHNOLOGY COUNCIL



### **TECHNOLOGY ROADMAP** FOR AGED AND **COMMUNITY CARE IN** AUSTRALIA



**RELEASED IN 2017** 

LED BY ACIITC COMMITTEE CHAIRS ANNE LIVINGSTONE, GAVIN TOMLINS AND ROD YOUNG INCONJUNCTION WITH FLINDERS UNIVERISTY

THERE HAS NEVER BEEN A BETTER TIME TO PLAN AND IMPLEMENT NEW THINKING AND PROCESSES TO ENSURE **ONGOING QUALITY SERVICES PROVISIONS IS AVAILABLE IN** AGEING AUSTRALIA

### LAUNCHED BY THEN MINISTER FOR AGEING IN PARLIAMENT HOUSE

# TECHNOLOGY ROADMAP FOR AGED CARE IN AUSTRALIA

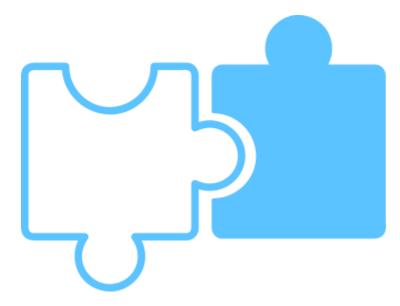


Landmark Publication



Developed off the back of robust research





Driven Research, Decision Making and Strategy

### ACKNOWLEDGES INNOVATION AND TECHNOLOGY ACROSS THE AGED CARE, COMMUNITY AND HEALTH SECTOR

POPULATION AGEING THAT HAS NEVER BEEN EXPERIENCED AT THE SAME LEVEL;

THE RAPID DEVELOPMENT OF NEW TECHNOLOGIES;

REFORM OF THE AGED CARE SECTOR THAT FUNDAMENTALLY CHANGES THE WAY IN WHICH OLDER AUSTRALIANS WILL BE SUPPORTED;







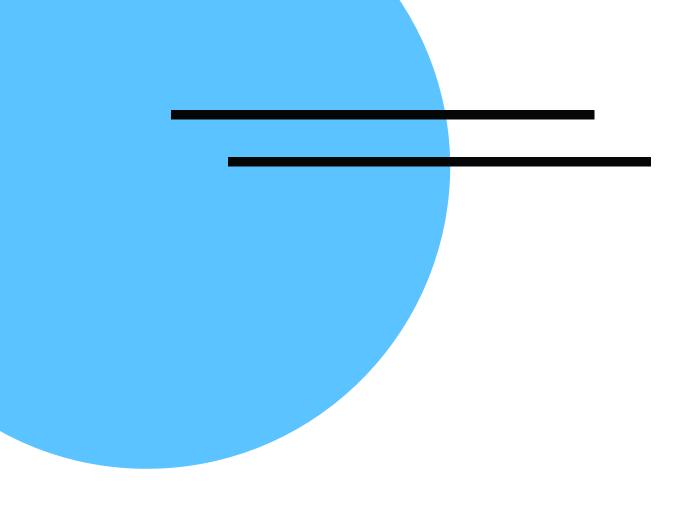


RECOGNISED THE NEED TO OUTLINE A VISION OF AN INNOVATIVE, TECHNOLOGY- ENABLED SECTOR FOR THE NEXT FIVE TO TEN YEARS

HELP POLICY MAKERS EVALUATE THE BENEFITS OF EMBRACING TECHNOLOGY AS WELL AS PROVIDE GUIDANCE AND INFORMATION

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# INTENT OF THE TECHNOLOGY ROADMAP



Technology-enabled operational, business & communication systems

Technology-enhanced care & support for older people

Technology-enhanced information & access to care

# ROADMAP STRUCTURE OVERVIEW

Technology-enhanced assess to eligibility & changing needs

Technology-literate and enabled workforce

### **DESTINATION 1**

### DESTINATION 2

### **DESTINATION 3**

### **DESTINATION 4**

### **DESTINATION 5**



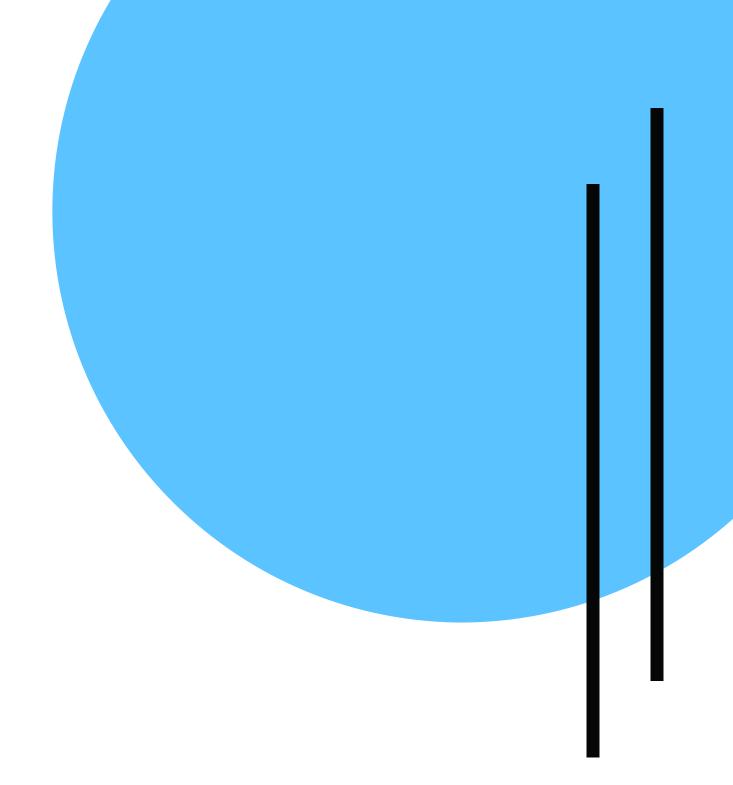
DESTINATION 1 - TECHNOLOGY-ENABLED SYSTEMS

AGED CARE OPEN STANDARDS AND PROTOCOLS THAT FACILITATE INTEROPERABILITY AND SHARING OF INFORMATION;

TECHNOLOGY MATURITY ASSESSMENT AND REVIEW USE OF TECHNOLOGY ACROSS THE SPECTRUM;

COLLABORATION WITH AUSTRALIAN DIGITAL HEALTH AGENCY AND DEPARTMENT OF HEALTH.



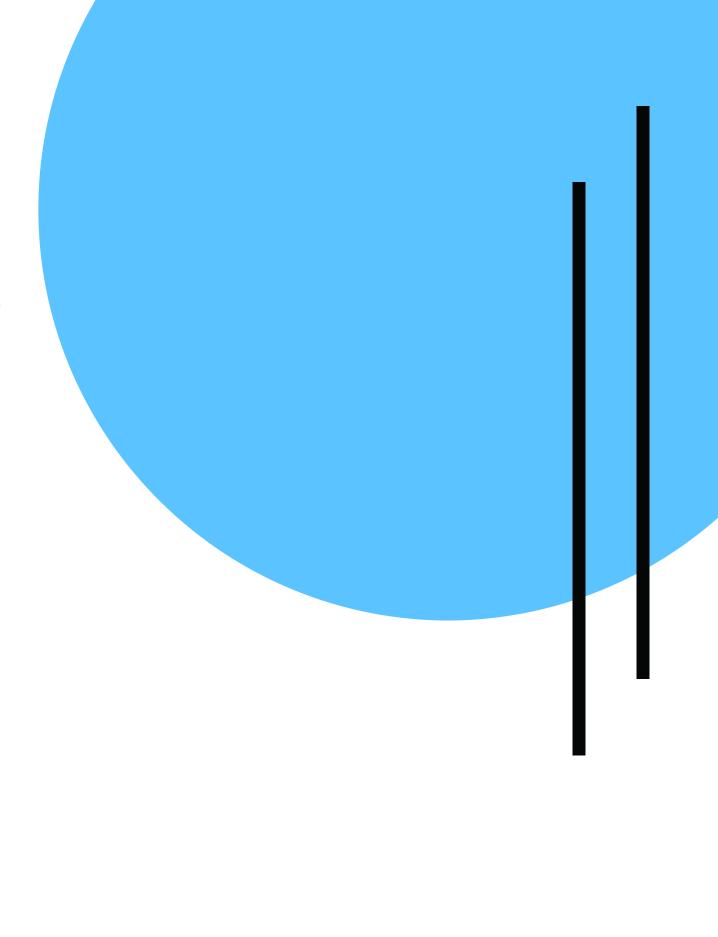


**DESTINATION 2 - TECHNOLOGY-ENABLED SERVICES** 

ESTABLISH A NATIONAL NETWORK LINKING END USERS WITH DEVELOPERS OF TECHNOLOGY TO SUPPORT CO-DESIGN;

EXPLORE WITH THE DISABILITY SECTOR SCOPE TO PROVIDE A SPECIFIC COMPONENT FOCUSED ON OLDER PEOPLE;

DEVELOP A SERIES OF DEMONSTRATION PILOTS TO DEMONSTRATE HOW TO EXTEND EXISTING TELEHEALTH AND TELEMEDICINE PROGRAMS.





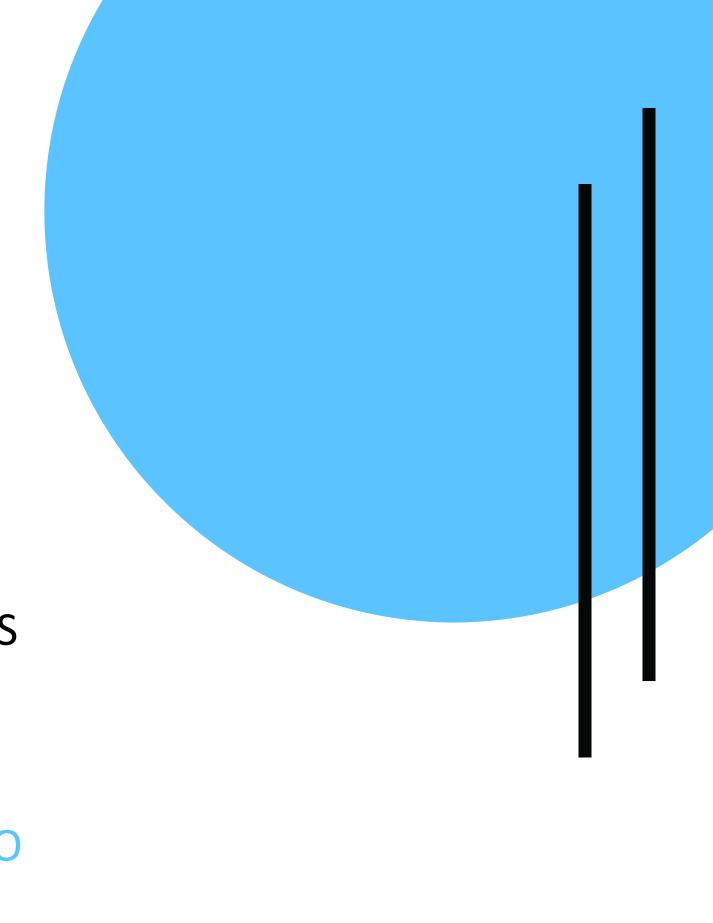
DESTINATION 3 - TECHNOLOGY-ENABLED INFORMATION AND ACCESS

DEVELOP A NATIONAL DIGITAL LITERACY STRATEGY FOR CONSUMERS, SUPPORTERS AND PROVIDERS TO ENSURE THEY HAVE THE SKILLS;

DEVELOP A NATIONAL TECHNOLOGY AWARENESS RAISING STRATEGY AND EQUITY STRATEGY; AND

DEVELOP A TOOL FOR AGED CARE PROVIDERS TO PROFILE THEIR CONSUMERS' TECHNOLOGICAL READINESS/DIGITAL LITERACY.





DESTINATION 4 - TECHNOLOGY-ENABLED ASSESSMENT DESTINATION 5 - TECHNOLOGY-LITERATE AND ENABLED WORKFORCE

DEVELOP A PILOT TO TRIAL THE EMBEDDING OF TECHNOLOGY EXPERTISE IN ASSESSMENT AND CARE PLANNING, AND ANALYSE OUTCOMES ACHIEVED FOR PROVIDERS AND CONSUMERS;

REVIEW EXISTING VALIDATED ASSESSMENT TOOLS, IDENTIFYING THOSE THAT HAVE BEEN AUTOMATED; AND

NATIONAL WORKFORCE TECHNOLOGY DEVELOPMENT STRATEGY.

### IDENTIFIED BARRIERS



The failure to embed technology as a core feature of Aged and Community Care rather than being an after thought;



Separation of key sector into service silos, particularly Aged and Community Care and Health and lack of interoperability;



Under-developed and variable technology readiness at sector level;



### IDENTIFIED BARRIERS



Under-develo readiness;



Under-developed capability for assessment of initial and changing needs; and



An Aged Care funding model that fails to acknowledge the investment that aged care services need to make an technology, innovation, research and development.

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#### Under-developed workforce technology



Embed technology as a core feature of Aged and Community Care, reflected in policy, industry standards, the delivery of care and the operational and business systems supporting care provisions;



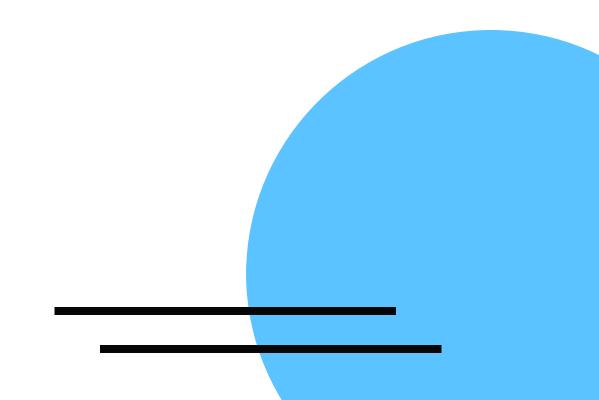
Breaking down sector silos and supporting interoperability;



Building technology readiness at sector level;



## IDENTIFIED SOLUTIONS





Building technology readiness at a systems levels;



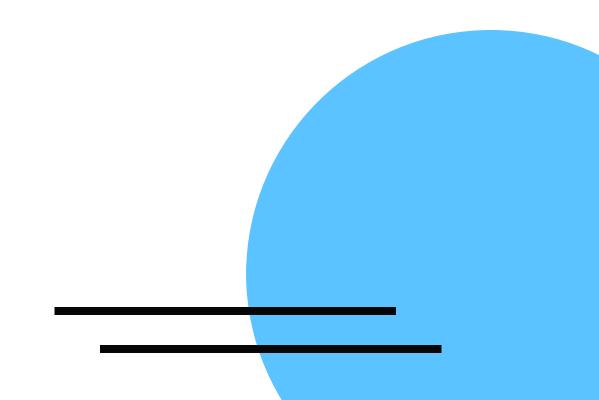
Develop a technology-aware assessment workforce and support the adoption of technology-enhanced assessment and



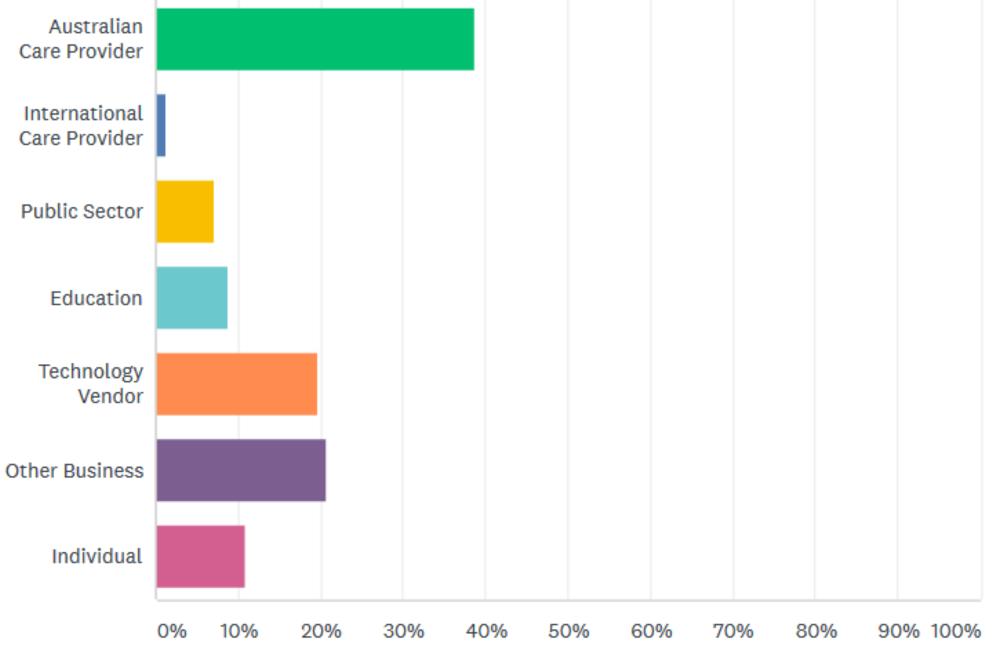
Funding model that acknowledges the cost involved in technology enabled quality care, research and service transformation.



## IDENTIFIED SOLUTIONS



## INDUSTRY RESPONSE ONLINE DOWNLOADS: 1,163

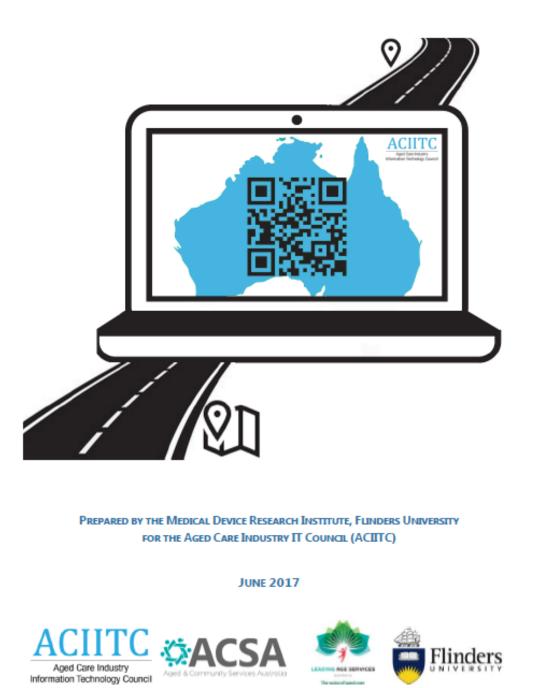




HARDCOPIES: 2,000 +

\*as of 29/02/2020

A TECHNOLOGY ROADMAP FOR THE **AUSTRALIAN AGED CARE SECTOR** 

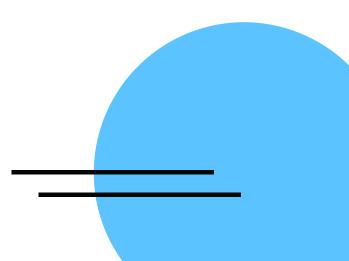


https://www.surveymonkey.com



**DOWNLOAD THE TECHNOLOGY ROADMAP FOR** THE AUSTRALIAN AGED CARE **SECTOR** 

/r/ACIITCRoadmap

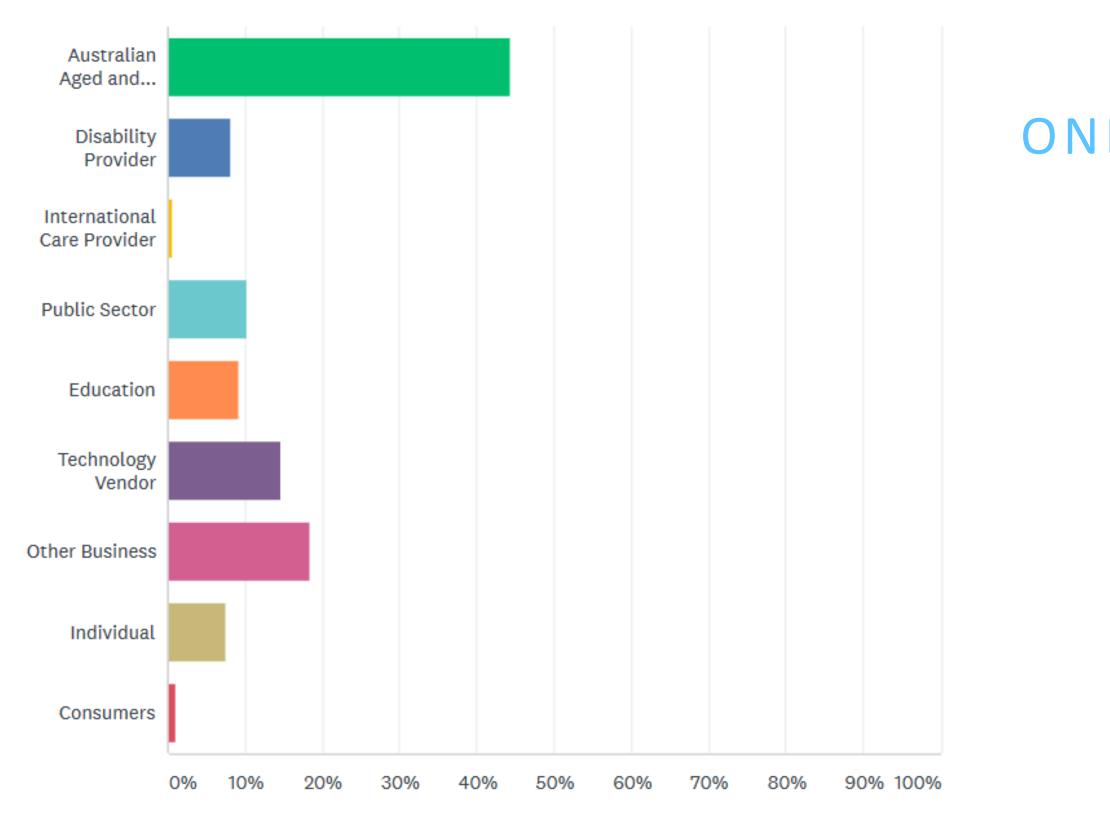


### AGED AND COMMUNITY SECTOR TECHNOLOGY AND INNOVATION PRACTICE - A REPORT ON WHAT THE RESEARCH AND EVIDENCE IS INDICATING

- A summary of the contemporary evidence of impactful and quality technology and innovation;
- Provides the latest and greatest to inform strategic thinking;
- The ACIITC has the done the work for the sector, we know you will find it of value.



# INDUSTRY RESPONSE



### **ONLINE DOWNLOADS: 189**

### HARDCOPIES: 100+

\*as of 29/02/2020



## AGED AND COMMUNITY SECTOR TECHNOLOGY AN

A REPORT ON WHAT THE RESEARCH AND EVIDENCE IS INDICATING

UPDATE FROM THE ORIGINAL ACIITC LITERATURE **REVIEW THAT INFORMED THE DESIGN OF THE** TECHNOLOGY RAODMAP FOR THE AGED CARE SECTOR

#### BARNETT K, LIVINGSTONE A, MARGELIS G, TOMLINS G, YOUNG R



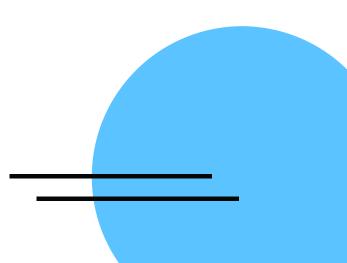






### **DOWNLOAD ACITC LATEST** REPORT

### https://www.surveymonkey.com /r/ACIITC2019LitReview

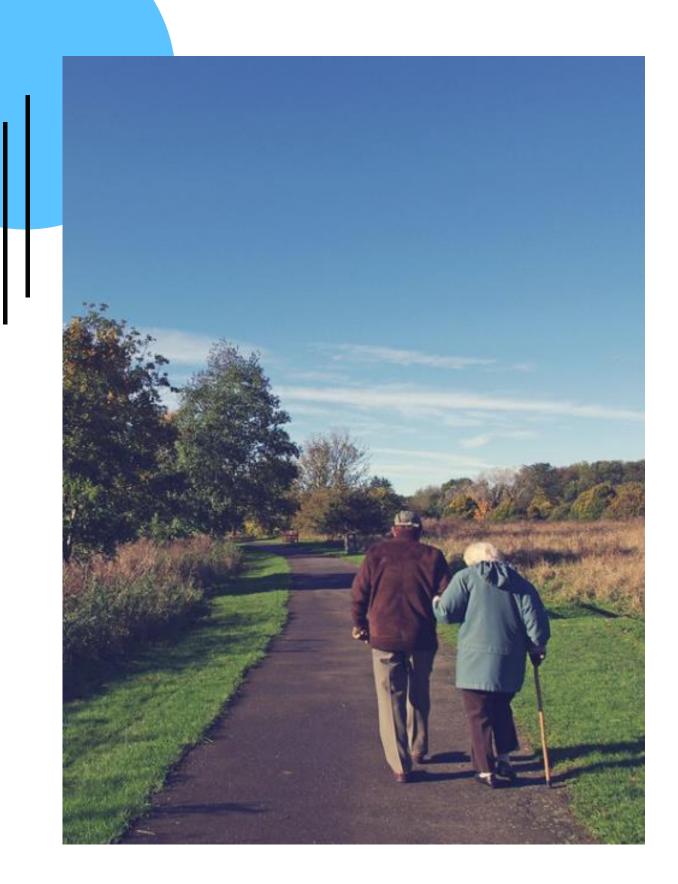


# WHAT'S NEXT ON THE HORIZON FOR ACIITC...

### ACIITC

Aged Care Industry Information Technology Council





ACIITC joining a leading collaborative partnership that is forging a global leading innovation initiative to working together to resolve many of the Aged and Community Care sector's most critical issues through the greater leveraging of digital technologies and innovation.



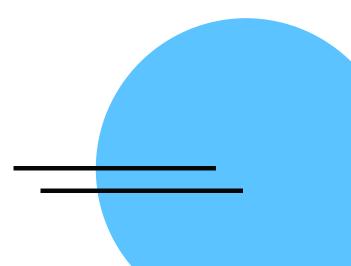


Aged Care Industry Information Technology Council



### ANNOUNCEMENT

#### Partnership with Digital Health CRC





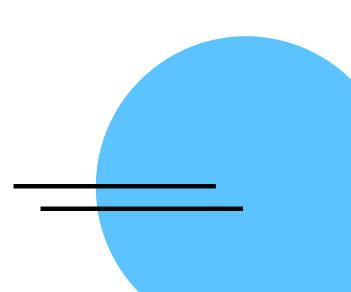
- Unique Partnership;
- Prioritising digital engagement and change advancement in Aged and Community Care;
- Global importance of what Australian can achieve;
- Investment in digital opportunities; and
- Major research opportunity to build evidence-based change.





Information Technology Council

### **ABOUT PARTNERSH**



Partnership with the Aged Care Industry **Information Technology Council** 

**Dr Victor Pantano** CEO, Digital Health Co-operative Research Centre

### digital health

### Aged Care Industry

Information Technology Council



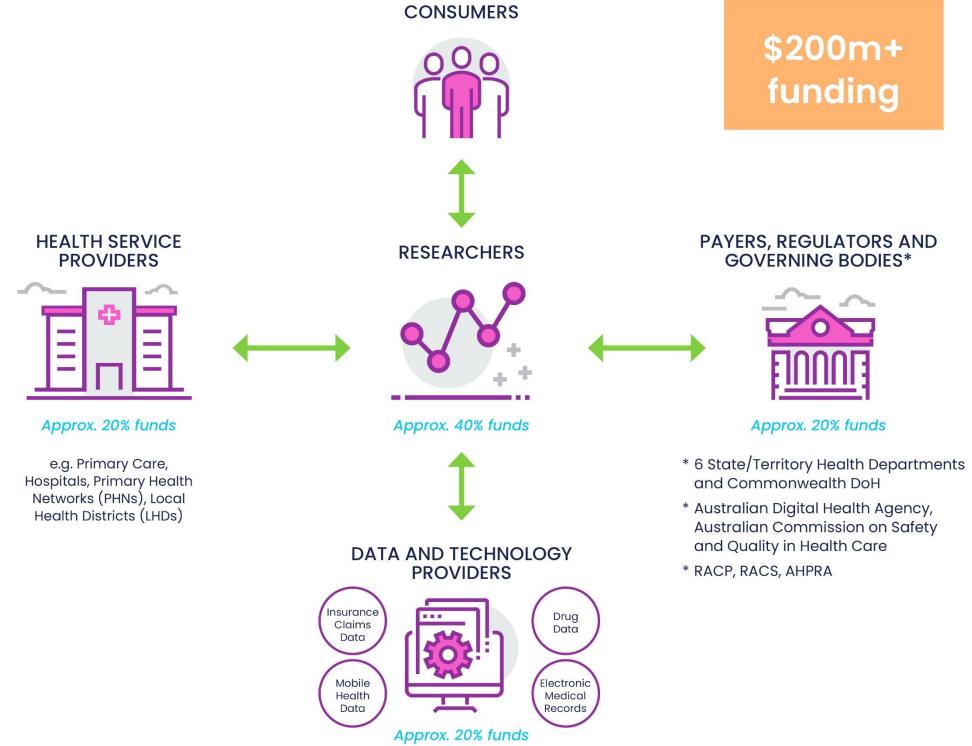


3 March 2020Dr Victor Pantano CEOChief Executive Officer

#### Who are we?

- One of the largest CRCs in Australia
- The largest digital health cooperative in the world
  - 75+ participants, including 18 universities
  - \$110 million in cash
  - \$120 million in kind
- Coverage across all areas of the health sector
- 7 years of funding
- Objective: to improve the health and wellbeing of individuals and communities through the digital transformation of our health system

#### **Our Participant Ecosystem**



#### \$200m+ funding

### Just some of participants...







The Royal Australasian College of Physicians



Metro North Hospital and Health Service



**Curtin University** 



University of South Australia





Government of Western Australia Department of Health





7





Australian Health Practitioner Regulation Agency



Government of Western Australia WA Country Health Service







MONASH University



Australian Government

Department of Health





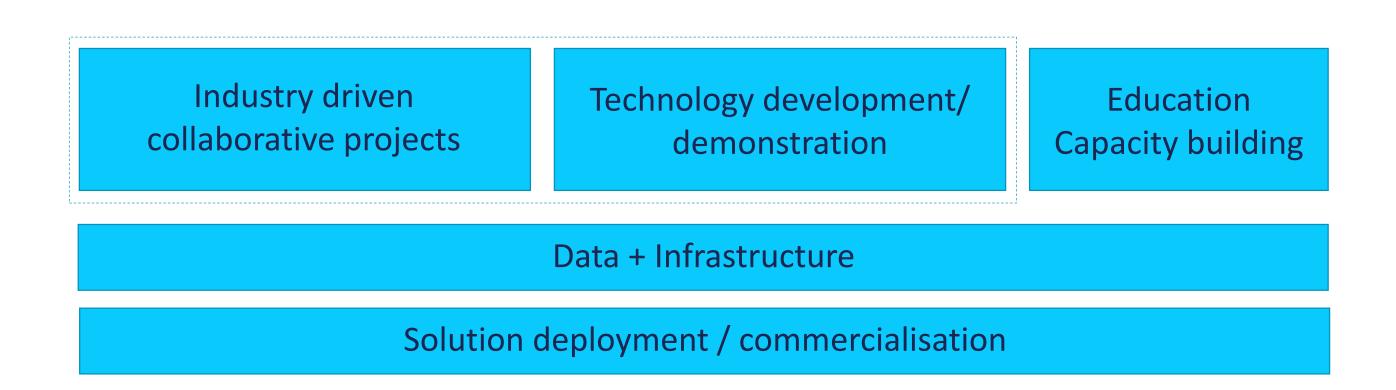
### **AlfredHealth**





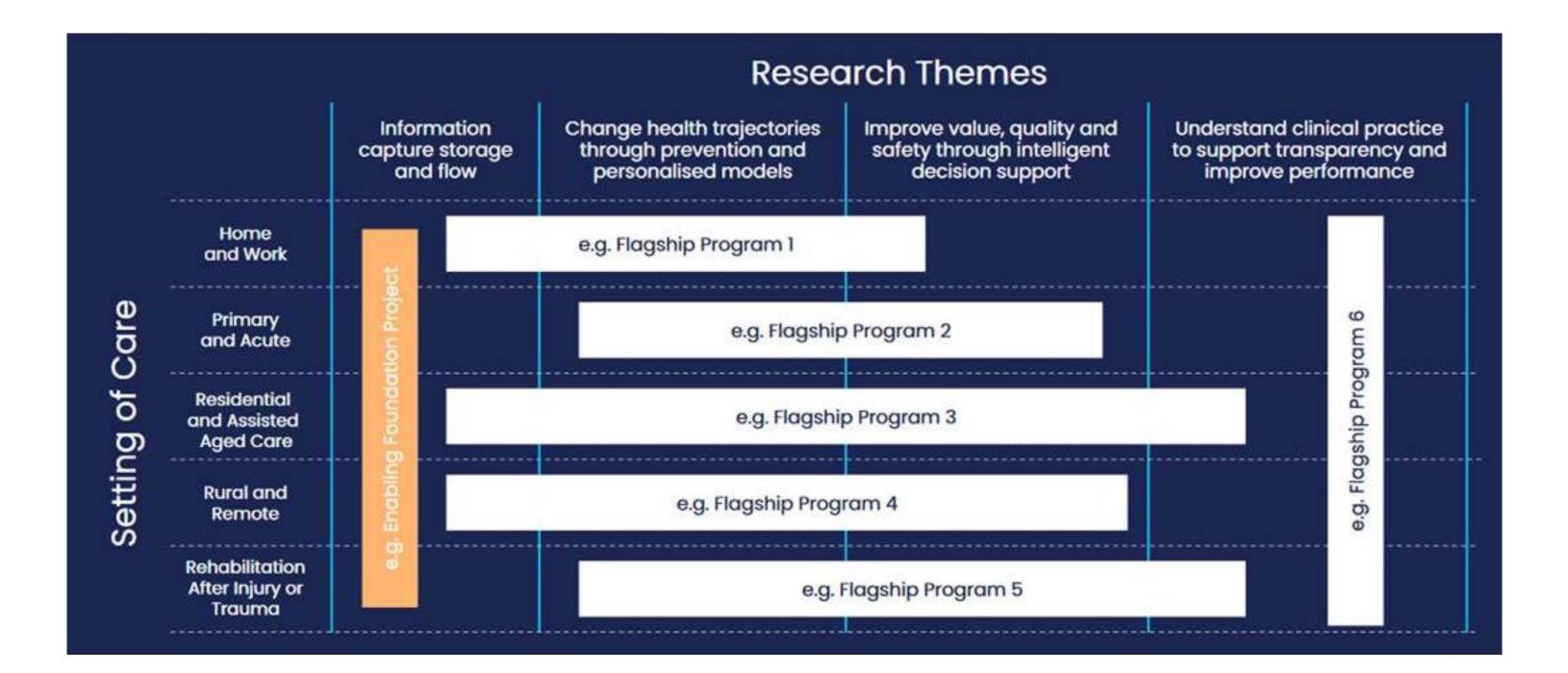


#### The DHCRC Approach



- Bring together technology, government, service and academic participants to address industry problems
- Work across jurisdictions and build national collaboration
- Integrate solutions directly into practice understand commercial pathways
- Equip health professionals to operate in a digital environment

#### Where we Focus Our Investment





# **Residential & Assisted Aged Care**

Transforming care through application of digital technologies

### **Our aged care objectives**

- Delivery of real time actionable data for providers 1.
- Identify the technologies that support independence for older people 2.
- 3. Identify clinical and technical data standards that support sharing of information across the continuum of care
- Digitise quality and safety audits in residential aged care 4.
- Support the development of a technology literate and enabled aged care 5. workforce

### Activity so far.....

 Predicting clinical deterioration & acute care needs of reside (DHCRC 0078)

- Industry Partner: Telstra Health
- University Partner: RMIT
- Enabling interoperability & reuse of aged care assessment data for benchmarking & CQI (DHCRC 0013)
  - Industry Partners: Bupa Health Foundation, DoH
  - University Partner: University of Queensland
- Live streaming clinical analytics for hospital accreditation in a second Australian digital hospital (DHCRC 0108)
  - Industry Partners: Eastern Health, ACHS, others
  - University Partner: Monash







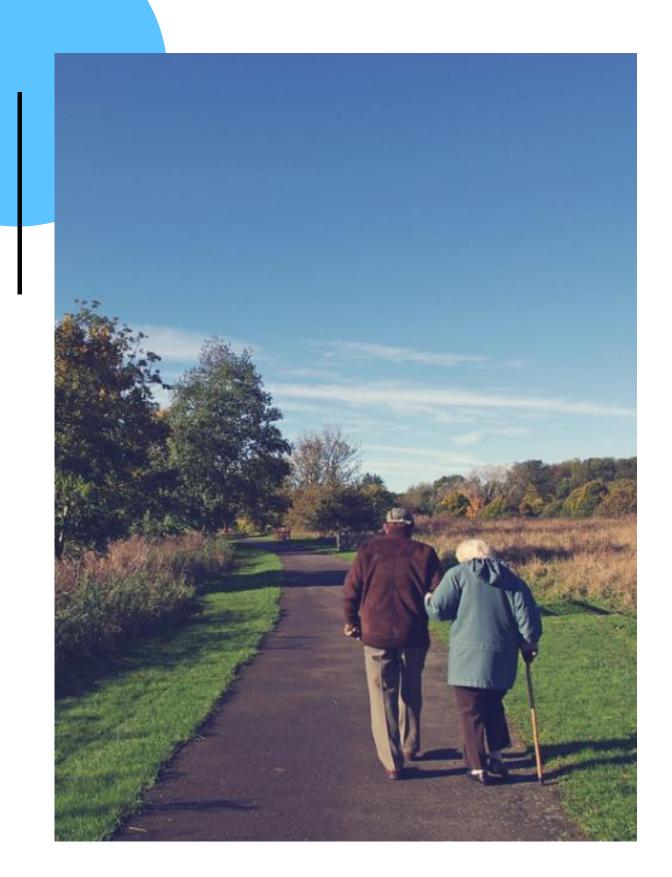


**Australian Government** 

**Department of Health** 

## How could we collaborate to transform aged care?

- Can a real-time 'surveillance' system create a step change in medication quality and safety?
- Can best practice operating standards reduce variation in operational performance?
- What standards will best ensure interoperability with My Aged Care?
- Can we develop an aged care digital compass to drive the adoption of technology for all service providers?
- Can the digital ecosystem maximise people's autonomy?



## **BE PART OF OUR NEW** JOURNEY...



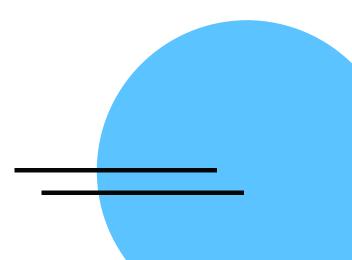


Aged Care Industry Information Technology Council



We will be asking for your ideas and for you to join us in BIG projects.

> To find out how you can be involved and express your interest...



# MORE INFORMATION

## INNOVATION & TECHNOLOGY LOUNGE



## WEBSITE

### www.aciitc.com.au

3:00 pm – 3:30 pm

## EMAIL ADDRESS

secretariat@aciitc.com.au

# UPCOMING **EVENTS**

# FRIDAY 24 APRIL 2020 **Tonsley Innovation Precinct - South Australia** + Site Tour to Living Lab in Tonsley Precinct



MONDAY 1 June 2020 Sydney

**MAXIMISING CONSUMER INDEPENDENCE** THROUGH DIGITAL INNOVATION IN THE HOME - ACIITC SUBMISSION TO THE ROYAL COMMISSION

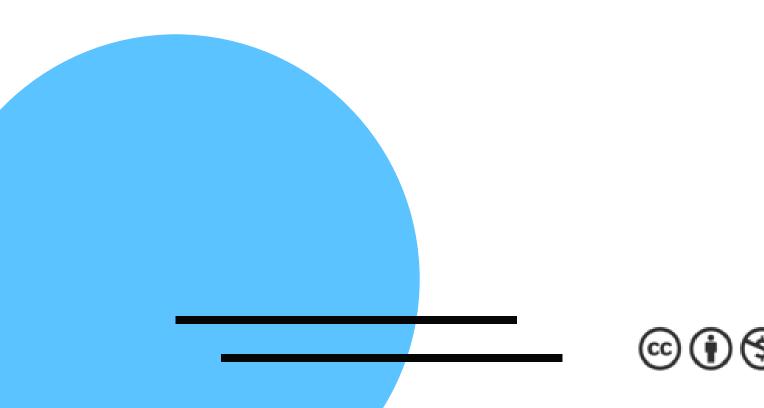
ANNE LIVINGSTONE CHAIR, NATIONAL HOME CARE GROUP

Aged Care Industry Information Technology Council

# **ROYAL COMMISSION INTO AGED CARE QUALITY & SAFETY**



"HOW BEST TO DELIVER AGED CARE SERVICES IN A SUSTAINABLE WAY, INCLUDING THROUGH INNOVATION MODELS OF CARE, INCREASED USE OF TECHNOLOGY, AND INVESTMENT IN THE AGED CARE WORKFORCE AND CAPITAL INFRASTRUCTURE"



#### ESTABLISHED 8 OCTOBER 2018

### THE ROYAL COMMISSION INTO AGED CARE **QUALITY & SAFETY IS AUTHORISED TO INVESTIGATE 7 TERMS OF REFERENCE**

### TERMS OF REFERENCE (F)

# OBSERVATIONS ALREADY FROM ROYAL COMMISSION INTO AGED CARE

OPPORTUNITY TO REFERENCE/FOCUS ON INNOVATION AND TECHNOLOGY;

WORKFORCE DEVELOPMENT IN RESPECT TO TECHNOLOGY AND INNOVATION ARE ON THE AGENDA;

SOME GOOD CASE STUDIES AROUND INNOVATION PRACTICE BUT OBVIOUS NEED FOR MORE FOCUS ON THE IMPACT OF TECHNOLOGY AND INNOVATION.





SUBMITTED AUGUST 2019;



**OUTLINES THE OPPORTUNITIES INNOVATION** AND GREATER USE OF TECHNOLOGY CAN HAVE ON ENHANCING QUALITY & SAFETY IN AGED AND COMMUNITY CARE;



UNDERPINNING THE POLICY DIRECTION OF GREATER CONSUMER CHOICE;



CALLS FOR DEVELOPMENT OF AN AGREED AGENDA FOR FUNDING AND INVESTMENT IN INFORMATION COMMUNICATION TECHNOLOGY AND CARE-SPECIFIC TECHNOLOGIES; AND



HIGHLIGHTS THE NEED FOR HIGHER LEVELS OF ENGAGEMENT AND COLLABORATION WITH INDUSTRY.

# **ACIITC SUBMISSION TO THE ROYAL COMMISSION INTO AGED CARE QUALITY & SAFETY**

NEW AGED CARE QUALITY STANDARDS (IMPLEMENTED 1 JULY 2019) NOT MENTIONED **TECHNOLOGY & INNOVATION** 

- SUPPLY AND RETENTION OF AGED CARE WORKFORCE
- SKILLS KNOWLEDGE AND ABILITY OF THE AGED CARE WORKFORCE
- **TECHNOLOGY ENHANCED BUSINESS ADMIN** FUNCTIONS
- DIGITAL LITERACY/ DIGITAL MATURITY
- **TECHNOLOGY-SPECIFIC AGED AND COMMUNITY CARE WORKFORCE PLANNING**



# ACIITC IDENTIFIED TRENDS

### Need for more evidence;

## Digital Inclusion and readiness;

- Attention to Ethical and Legal Considerations;
- Organisations and systems readiness; Let's Get B2G Processes in order.



# **ACIITC CALL**

## **DOWNLOAD ACIITC ROYAL COMMISSION SUBMISSION**

#### FROM CARE RECIPIENT TO CARE PARTICIPANT

SUBMISSION FROM THE AGED CARE INDUSTRY INFORMATION TECHNOLOGY COUNCIL (ACITC) TO THE ROYAL COMMISSION INTO AGED CARE QUALITY AND SAFETY

AUGUST 2019





## https://www.surveymonkey.com /r/ACIITCRoyalCommission

## CREATING STANDARD INTEROPERABILITY AND COMMON INFRASTRUCTURE

GAVIN TOMLINS CHAIR, CIO FORUM

# ACIITC

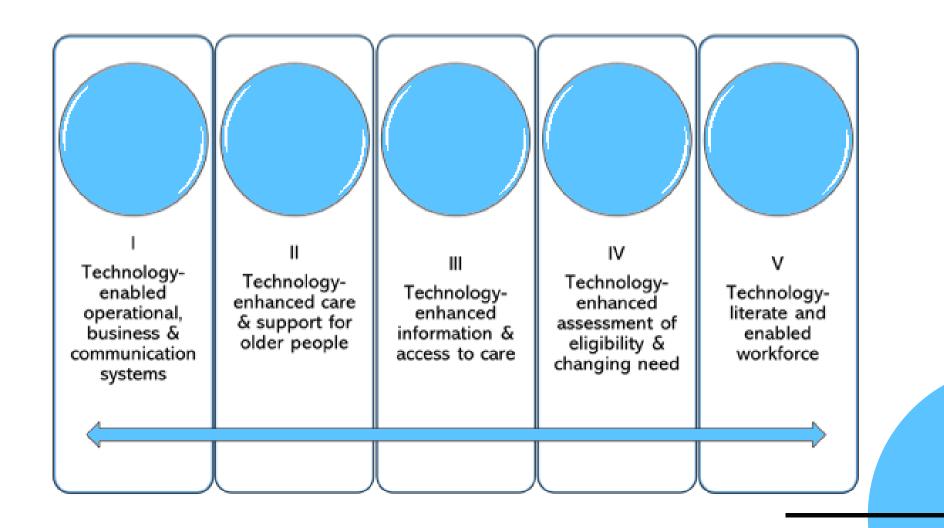
Aged Care Industry Information Technology Council



A TECHNOLOGY ROADMAP FOR THE AUSTRALIAN AGED CARE SECTOR



DESTINATION 1 Technology, enabled operational, business and communication systems





Lack of processes and protocols for data exchange and collaborative delivery of care, and a lack of interoperability within the aged care system and across sectors

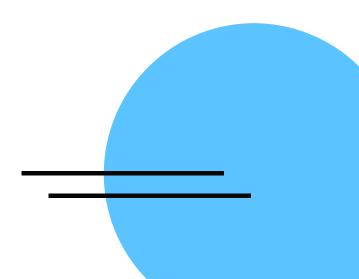
Need for interoperability, open standards and common platforms

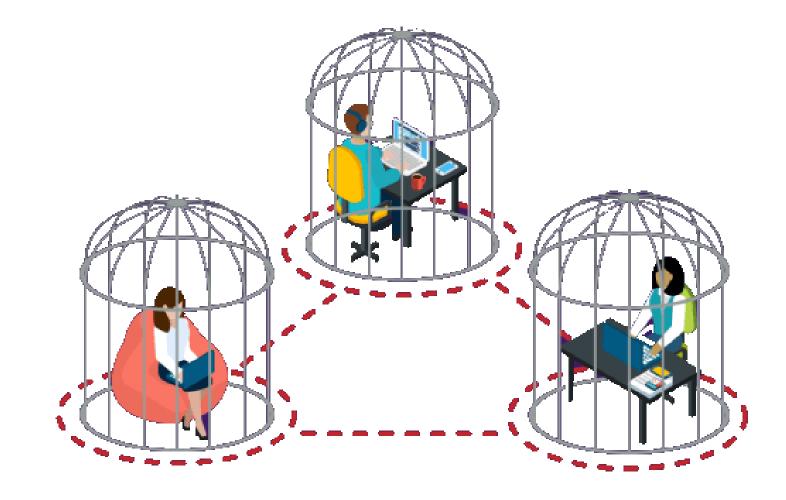
Need for national data exchange and readiness for electronic data usage

Need for aged care B2B and B2G interfaces in order to create an open ecosystem of secure data exchange.



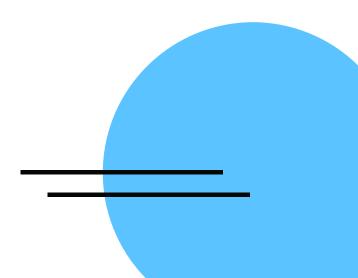
**DESTINATION 1** Technology, enabled operational, business and communication systems



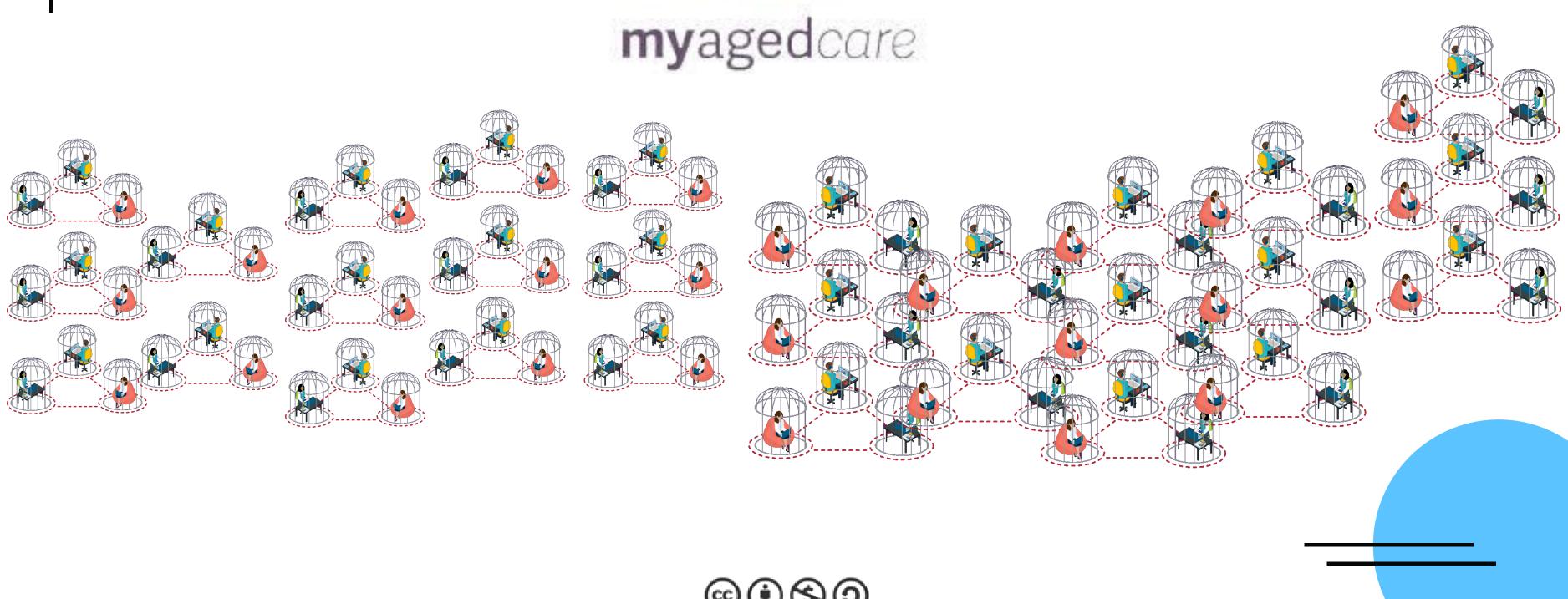




## Industry Silos?









## Industry Silos

#### **Business Prism:**

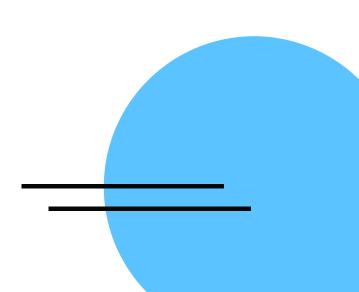
• The ability of **client**, **service** and **health systems** to **work** and interact together within and across organisation, industry, **vendor**, **government** boundaries to advance the effective and quality delivery of healthcare for **consumers**.

#### **Information Prism:**

- The ability for various healthcare data and information to exchange, interpret and use data cohesively
- Simply put it is n+1 systems exchanging something,



## What is Interoperability ?

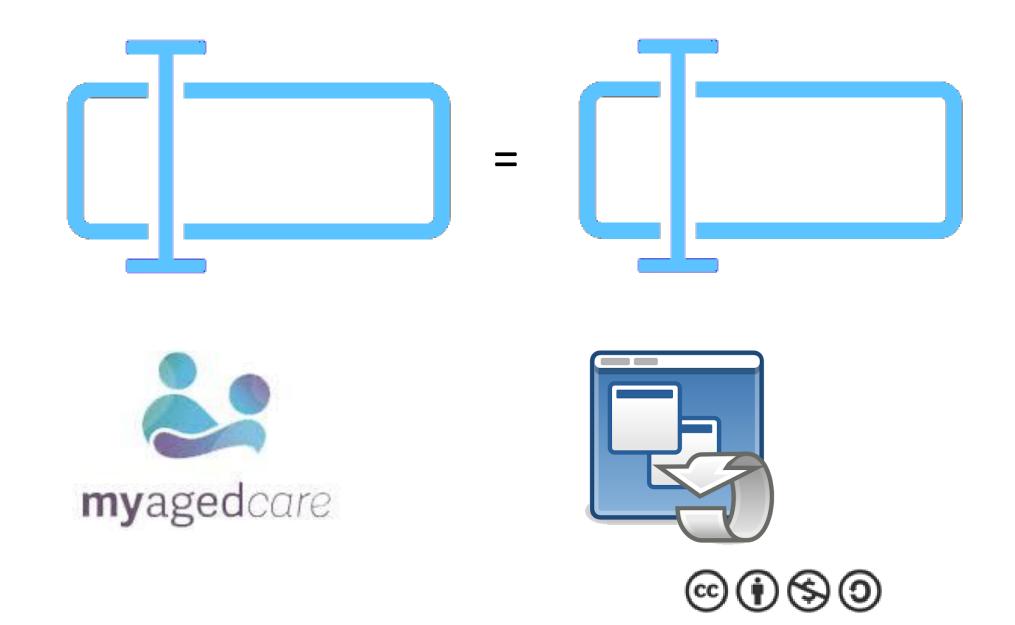




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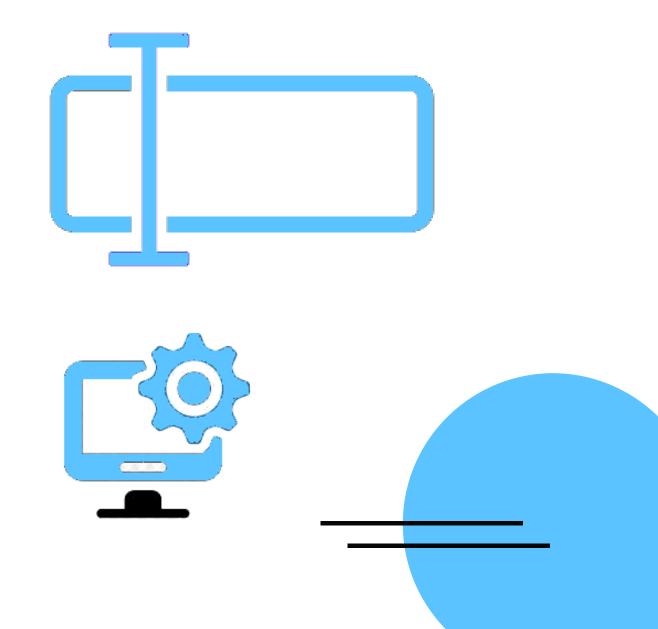
#### ClientName

#### **Client Name**



## What is Interoperability ?

#### **Person Name**



## Why do we need Interoperability ?

Significantly reduce the double handing of information to reduce administrative burden for providers and improve data quality; and



Unlock the potential of machine learning to identify issues early and improve care outcomes for consumers.







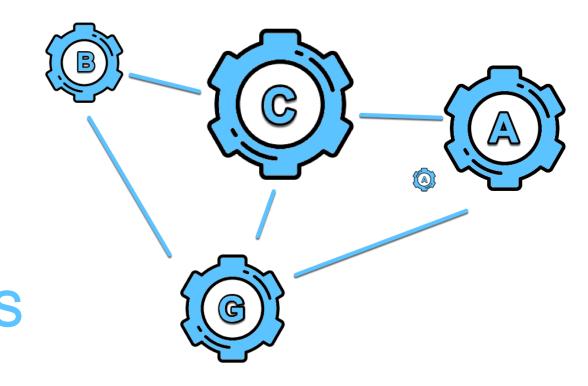
## What is the context for Interoperability?

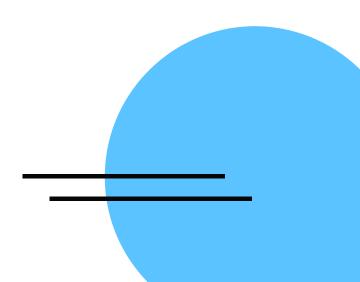
### **GOVERNMENT STANDARDS AND INTERFACES**

B2G, G2B, B2B, B2C, C2B, C2C and we are really moving to B2B2C, APIs and Microservices

Translated: How do we move data from assessors, through to service providers, onto health professionals with the focus being on the consumer







## A Model for Interoperability ?



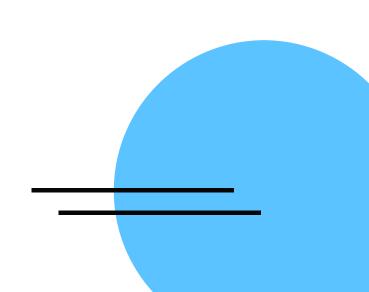




Referral



**Biometrics** 



## A Model for Interoperability?

#### FOUNDATIONAL

The underpinning of interoperability. The ability of one information system or organisation to exchange data with another. A key tenant of foundational interoperability is that the receiving system or organisation does not need to interpret the data it receives. E.g. A consumer PDF

#### **STRUCTURAL**

The definition of the data structures of the information being passed between systems. Standardising data schemas and message formatting to be interpreted at a field level. E.g. Finance System – Consumer Name -> Clinical System – Consumer Name. Client Id = UserId



The holy grail. Exchanging healthcare and consumer data to use it to its fullest extent. Looking at how data exchange and its codification allows better service delivery, informed clinical decision making, removal of duplicative data entry. E.g. Training your AI from disparate systems, a 360 view of the consumer.



#### **FIRST STEPS**

Identifying high transaction low hanging fruit - Assessment and service referrals from My Aged Care

#### **Open Standards and API**

- Federated Identification
- Consumer Identification
- Address Database



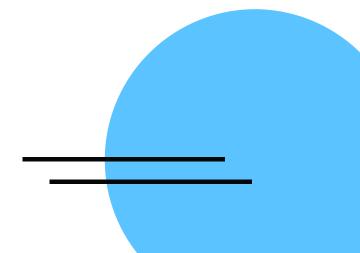
#### Organisations

- Identity Management
- Mapping Data Schema Garbage in Garbage Out
- Talk to your vendors



## Interoperability

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# Thank you!

WE LOOK FORWARD TO COLLABORATING WITH YOU





### DR GEORGE MARGLIS INDEPENDENT CHAIR

JENNENE BUCKLEY ACSA REPRESENTATIVE

GEORGE ANDREOLA LASA REPRESENTATIVE

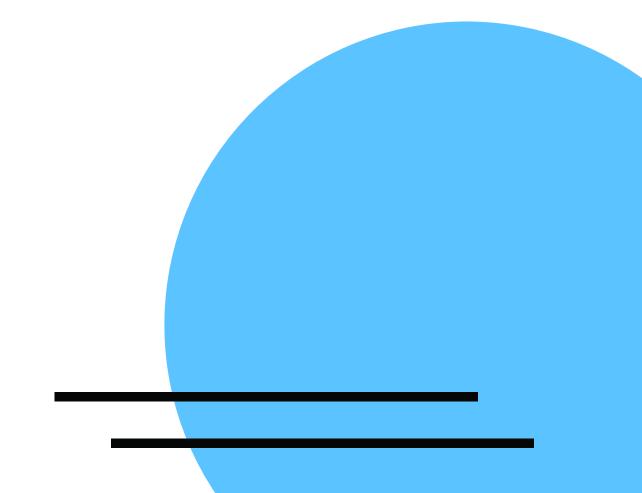
**DEREK DITTRICH** ACSA REPRESENTATIVE

BRENDAN MOORE

LASA REPRESENTATIVE



# MEET THE BOARD





#### ANNE LIVINGSTONE NATIONAL HOME CARE GROUP



#### GAVIN TOMLINS CIO FOURM



#### ROD YOUNG ITAC COMMITTEE



# MEET THE COMMITTEE CHAIRS

## CONTACT US ACIITC SECRETARIAT



## WEBSITE

### www.aciitc.com.au

## **PHONE NUMBER** 0499 006 729

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secretariat@aciitc.com.au