

Can a digitally enabled workforce save aged care?

Dr George Margelis

“If I had an hour to solve a problem and my life depended on it, I would use the first 55 minutes determining the proper question to ask, for once I know the proper question, I could solve the problem in less than five minutes.”

Albert Einstein

Does Aged Care need Saving?

- Royal Commission onto Aged Care Quality & Safety 2021
- CEDA Duty of Care: Meeting the Aged Care Workforce Challenge 2021
- CEDA Duty of Care: Aged Care Sector in Crisis 2022
- CEDA Duty of care: Aged care Sector Running on Empty 2023



65K
WORKERS LEAVING
THE SECTOR EACH YEAR

INCREASED RATES OF ATTRITION MEAN
WE ARE LIKELY TO BE LOSING AROUND
65,000 WORKERS A YEAR FROM THE SECTOR

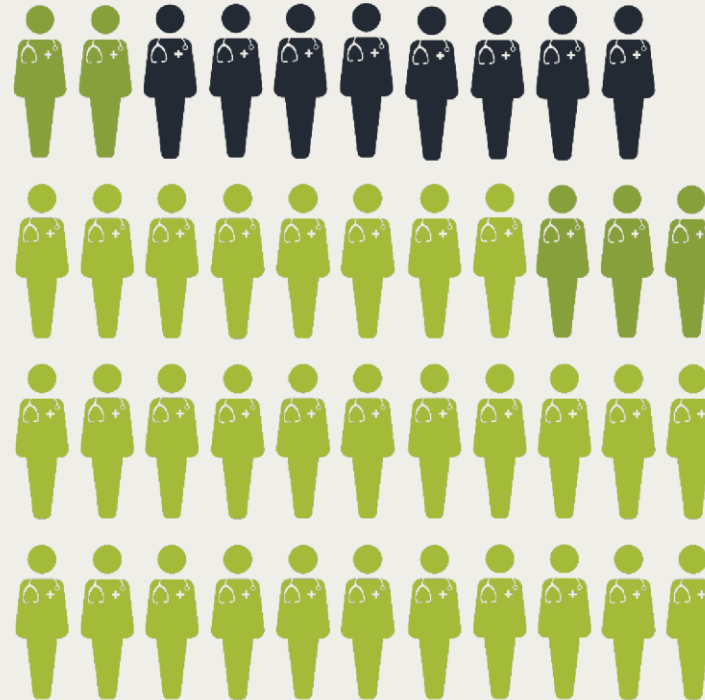


**WORKERS LEAVING
IN THE NEXT 12 MONTHS**



**WORKERS LEAVING
IN THE NEXT 1-5 YEARS**

WORKFORCE SHORTAGE



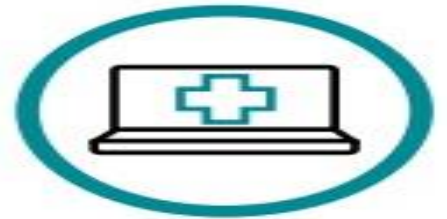
8,000
ADDITIONAL WORKERS
NEEDED TO MEET
INTERNATIONAL BEST
PRACTICE STANDARDS

35,000
WORKER SHORTFALL
PER YEAR

 = 1000 WORKERS

OUTCOME 2

Aged care workers, service providers and health professionals are digitally empowered to provide higher quality and better-connected care.



This outcome focuses on increasing worker digital literacy and building and sustaining the digital maturity of service providers. It includes the establishment of data and digital solutions to connect care services, and improve the quality and delivery of person-centred care.

THE PRIORITY AREAS TO ACHIEVE THIS OUTCOME ARE:

3. Maximise time for direct care

This priority is about using data and digital technology to optimise the use of time and resources, so more time can be dedicated to providing high-quality care for older people.

It aims to build organisational digital capabilities and digital skills of the workforce, so that less time is spent on non-care activities, including:

- duplicative data entry
- administration
- communication
- information collection.

4. Strengthen care connections

This priority seeks to:

- improve care coordination
- enhance treatment outcomes
- provide a more holistic and person-centred approach to care, recognising the complex needs of each person.

It aims to facilitate the seamless flow of information across:

- health
- aged care
- allied health
- other care sectors.

Its purpose is to create an integrated and connected care ecosystem, ensuring that relevant data can be shared securely and efficiently where needed. The story and information of an older person should flow seamlessly between health and aged care professionals, utilising treatment plans and ensuring timely interventions.



OUTCOME 2

Aged care workers, service providers and health professionals are digitally empowered to provide higher quality, and better-connected, care.

P3 Maximise time for direct care

P4 Strengthen care connections

Virtual nursing in aged care project



e-Prescribing



Worker digital literacy



Wellness and reablement support tool - KeepAble™



Integrated Assessment Tool application



My Aged Care to My Health Record integration



Aged Care Transfer Summary



Stage	Description	Definition
0	Non-existent IT solutions / EMR	Electronic medical records (EMR) not used. No overarching IT governance.
1	Incomplete or disparate fragmented IT solutions	Different incongruous IT systems that have distinct functionality. with no integration, isolated systems, may use some standardised terminology.
2	Established IT leadership that governs and coordinates structures, procedures, processes, and policies.	IT leadership with specific duties and functions; incorporates super-users (e.g. staff knowledgeable about IT use) to assist in building, troubleshooting, and supporting front line staff with IT tasks. Implementing IT governance and data stewardship processes (e.g. ensuring data quality, capturing appropriate information for each data element).
3	Automated internal connectivity and reporting	Utilises common interfaces that permit secure sharing of data across multiple internal applications. Uses master data sources and classifications to establish data relationships between systems. Implementation of new applications requires adherence to standards for connectivity and reporting.
4	Automated external connectivity and reporting	Utilises standard interfaces that permit secure data sharing across external applications for treatment related purposes. Interface with third parties for revenue cycle or quality management. Incorporates Health Information Exchange (HIE) technology.
5	Clinical risk intervention and predictive analytics	System driven tools that influence the development and care of treatments and care plans, while minimising risk. Includes clinical decision support. Analytics guide timely intervention to improve clinical outcomes. Interfaces allow delivery of all-inclusive clinical reporting using virtually all relevant data from internal and external systems. Enables association of external and internal data to predict outcomes and provide benchmarks.
6	Use of data by resident and/or resident representative generate clinical data and drive self-management	A secure and protected means for resident and/or resident representative to generate and access clinical data. Increases transparency of their clinical data in a format that is easily understood by these types of end-users. Resident data is accessible electronically.

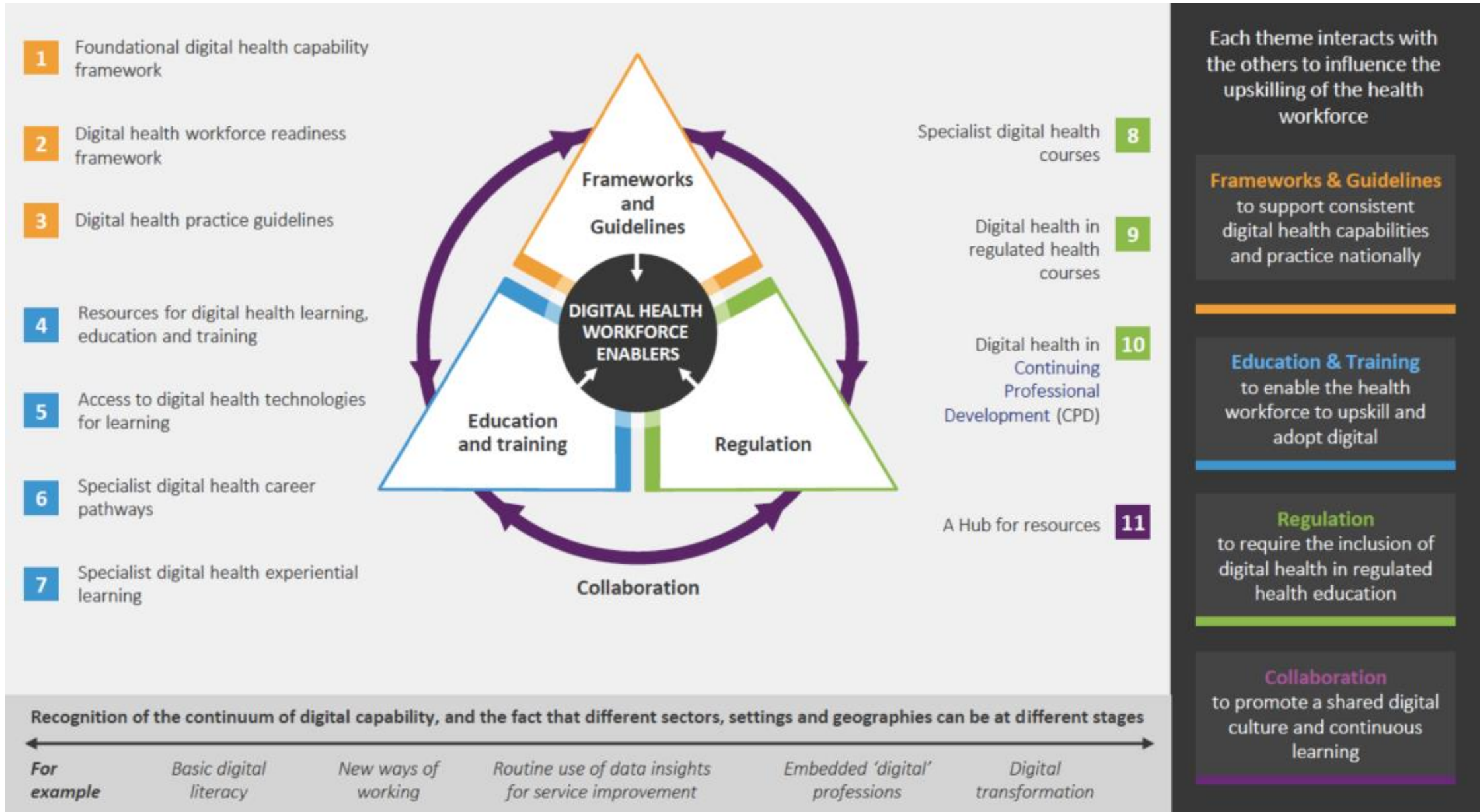
TABLE 5: IT MATURITY STAGING MODEL (ALEXANDER & POWELL 2021)

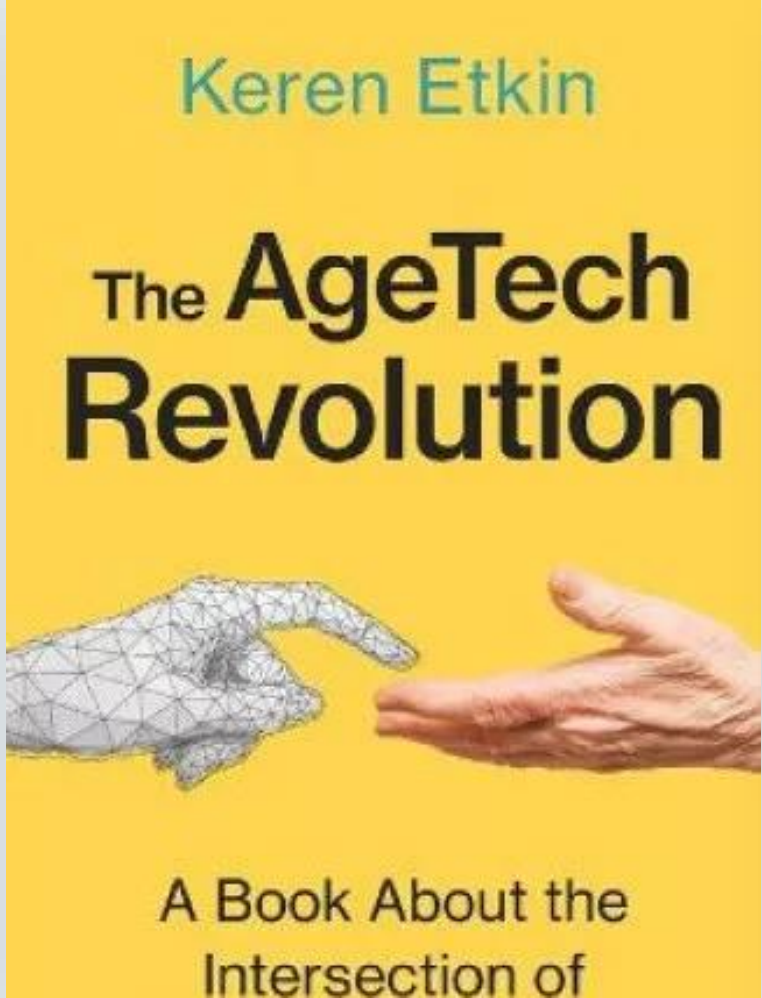
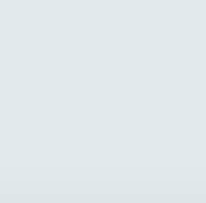

DIGITAL MATURITY SCORES

Cybersecurity practices	5.1	IT capability: Software	3.3
Cybersecurity protection	4.6	Data Analytics	3.2
Communications technology	4.4	Internal Interoperability	3.1
Cybersecurity policy and processes	3.9	Governance: Strategy	3.1
Governance: Disaster recovery	3.6	Governance: Policies & Procedures	2.8
Leadership	3.6	Resident / Client input	2.6
External Interoperability	3.5	Digital Teams & Positions	2.0
Digital Literacy & Usage	3.5	Resident / Client Access	1.4
Digital Training	3.4	IT capability: Innovation	1.2

FIGURE 11: DIGITAL MATURITY SURVEY A SCORE BY SUB-DOMAIN (N=142)









EMERGING TECHNOLOGIES TO SUPPORT AN AGING POPULATION

A Report by the
TASK FORCE ON RESEARCH AND DEVELOPMENT FOR TECHNOLOGY TO SUPPORT AGING ADULTS
 COMMITTEE ON TECHNOLOGY
of the
NATIONAL SCIENCE & TECHNOLOGY COUNCIL

March 2019

AgeTech Collaborative™
 FROM **AARP®**



ation to
 aging easier
 everyone

AgeTech Collaborative™ from AARP® is leading a global mission to improve people's lives as they age. We bring together a one-of-a-kind ecosystem of leading startups, forward-thinking investors, enlightened entrepreneurs and creative testbeds, all working to bring ground breaking technologies to market.

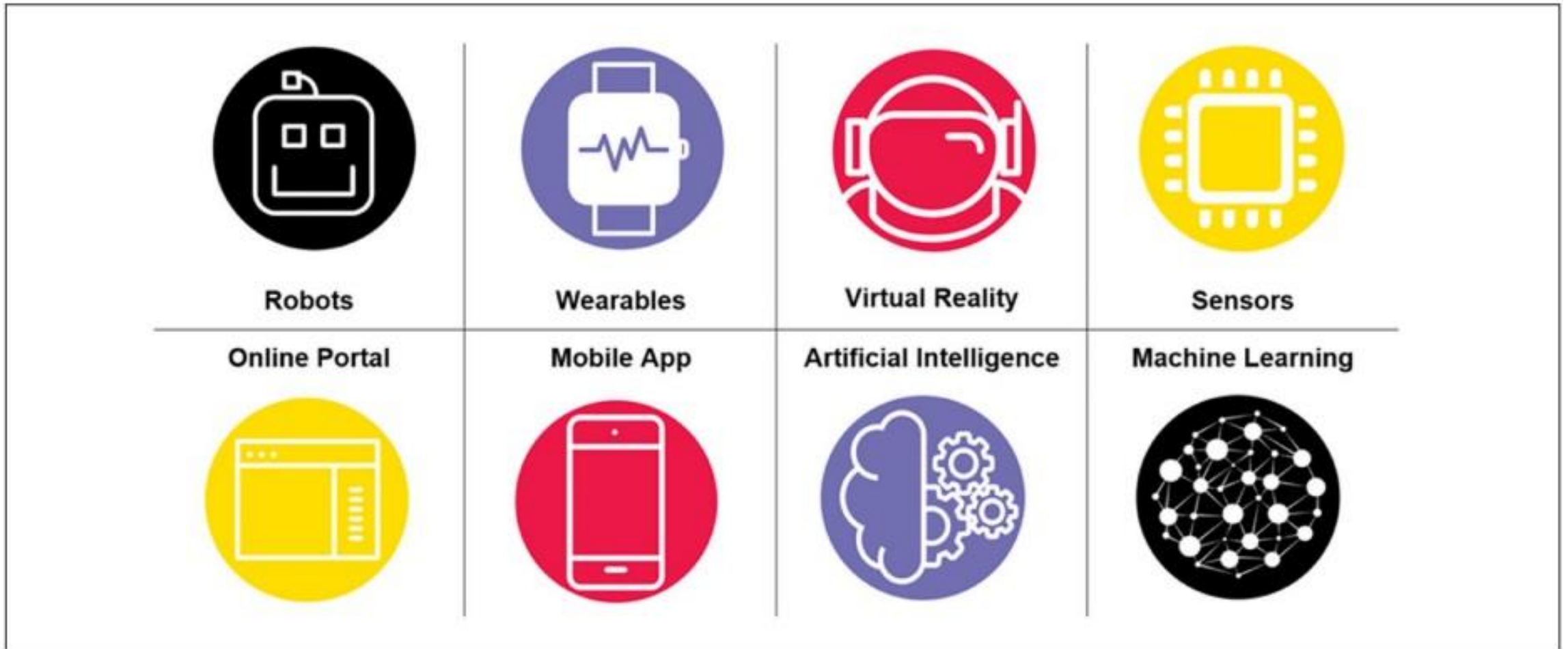


Figure 1. Taxonomy of Technology Types.

Chapman SA, Miller JR, Spetz J. Emerging Health Technologies in Long-Term Care and Suppliers' Views on Their Potential to Assist and Support the Workforce. *Med Care Res Rev.* 2023 Dec;80(6):619-630



Figure 2. Taxonomy of Technology Functions.

Chapman SA, Miller JR, Spetz J. Emerging Health Technologies in Long-Term Care and Suppliers' Views on Their Potential to Assist and Support the Workforce. *Med Care Res Rev.* 2023 Dec;80(6):619-630



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