

COMPETENCY STANDARDS

DIGITAL CAREGIVING



HUMAN HEALTH/HEALTH CARE SECTOR

TECHNICAL EDUCATION AND SKILLS DEVELOPMENT AUTHORITY
East Service Road, South Luzon Expressway (SLEX), Taguig City, Metro Manila

*Technical Education and Skills Development Act of 1994
(Republic Act No. 7796)*

Section 22, “Establishment and Administration of the National Trade Skills Standards” of the RA 7796 known as the TESDA Act mandates TESDA to establish national occupational skill standards. The Authority shall develop and implement a certification and accreditation program in which private industry group and trade associations are accredited to conduct approved trade tests, and the local government units to promote such trade testing activities in their respective areas in accordance with the guidelines to be set by the Authority.

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The Competency Standards (CS) serve as basis for the development of:

- 1 Competency-Based Curriculum;
- 2 Micro-Credential; and
- 3 Institutional Assessment Instruments

The CS has two sections:

Section 1 **Definition** describes and defines the competencies that comprise the of Competency Standards.

Section 2 **Competency Standards** gives the specifications of competencies required for effective work performance.

The competency standards in this document was developed through adopt and adapt process, benchmarking with APEC Human Resources Working Group's Training Package on Caregiver Digital Upskilling published in July 2022 as the main reference, amongst many other international references. The micro competencies were validated with industry experts from TVET, academe, associations and stakeholders specializing in caregiving services.

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COMPETENCY STANDARDS FOR DIGITAL CAREGIVING: MICRO-COMPETENCIES

SECTION 1 DEFINITION

The micro-competencies of **DIGITAL CAREGIVING** provides basic knowledge and skills in operating digital tools and equipment and utilizing digital or technological assistance to deliver basic care service and management.

Caregivers or carers will be equipped with digital competencies to operate digital tools and technological assistive devices to reduce the workload and stress of providing daily care services and to alleviate the crisis of physical injury in the workplace and utilize digital technologies and skills in practical scenarios for individual care.

The micro-competencies comprising Digital Caregiving are:

UNIT CODE	UNIT TITLES
CS-HHC532001	Operate digital tools and equipment in delivery of caregiving services
CS-HHC532002	Utilize digital technologies in caregiving management

SECTION 2 COMPETENCY STANDARDS

This section gives the details of the contents of the units of competency required in **DIGITAL CAREGIVING**.

UNIT OF COMPETENCY : **OPERATE DIGITAL TOOLS AND EQUIPMENT IN DELIVERY OF CAREGIVING SERVICES**

UNIT CODE : **CS-HHC532001**

UNIT DESCRIPTOR : This unit covers the skills, knowledge and attitudes required to understand the concept of healthcare digital environments and practical abilities, be familiar with skills of digital and basic care service, accurately operate digital tools and execute healthcare techniques, cultivate the trait of autonomous learning to client, possess the safe workplace risk evaluation ability and self-protection ability, and maintain functionality of digital devices.

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Demonstrate understanding on care service using digital tools and equipment	1.1 Concept of digital technology in healthcare services is explained. 1.2 Understanding on current development state of care using digital tools and equipment is demonstrated. 1.3 Concept of utilizing digital tools and equipment to observe health status of the client is explained. 1.4 Importance of maintaining client's privacy and rights to consent information are explained. 1.5 Importance of ensuring client's safety and ownself are explained.	1.1 Concept of digital technology in healthcare services 1.2 Current development state of care using digital tools and equipment 1.3 Concept of using digital tools and equipment to monitor health status of client 1.4 Importance of continuous learning and adaptation to emerging technologies and advancements in digital healthcare for enhanced service provision 1.5 Patient's Bill of Rights 1.6 RA No. 10173 – Data Privacy Act	1.1 Communication Skills 1.2 Active listening skills 1.3 Critical thinking skills 1.4 Adaptability skills on willingness to learn and adapt to new technologies and advancements in digital healthcare, staying updated with emerging tools and trends 1.5 Understanding of relevant regulations and guidelines governing the use of digital tools and equipment in healthcare, including data protection and

		1.7 RA No. 11058 - OSH Law or current/existing law	security measures
2. Utilize digital tools to carry out measurement and recording	<p>2.1 Personal protective equipment are worn in accordance with infection control and OSH standards.</p> <p>2.2 Functionality of digital tools are checked and tested in accordance with manufacturer's manual of operations.</p> <p>2.3 Client is made aware of the procedure to be taken.</p> <p>2.4 Client's concerns regarding the procedure are addressed.</p> <p>2.5 Digital measuring tools are operated to perform vital signs measurement in accordance with manufacturer's manual of operations.</p> <p>2.6 Normal values of vital signs are enumerated.</p> <p>2.7 Self-testing digital devices for chronic conditions are operated in accordance with manufacturer's manual of operations.</p> <p>2.8 Accuracy is observed during use of digital tools and equipment.</p> <p>2.9 Safety of own self and client is demonstrated.</p> <p>2.10 Measurement results and observations on client's physiological state are recorded following the established policies and procedures.</p> <p>2.11 Basic first aid is administered as needed and/or escalated to medical</p>	<p>2.1 Principles of infection control</p> <p>2.2 Principles of doffing and donning of PPE (Personal Protective Equipment)</p> <p>2.1 Kinds of digital measuring tools for vital signs measurement</p> <p>2.2 Normal values of vital signs of different age groups</p> <p>2.3 Kinds of self-testing digital devices for chronic conditions</p> <p>2.4 Categories, functions, usages, and timing of digital measuring tools and devices</p> <p>2.5 Target, operating method, and cautions during usage of digital measuring tools and devices</p> <p>2.6 Methods and steps in operating digital measuring tools and devices</p> <p>2.7 Concepts of different modes of communication</p> <p>2.8 Difficult and challenging behavior</p> <p>2.9 Client issues which need to be referred to an appropriate health professional</p> <p>2.10 First aid standard operating procedures</p> <p>2.11 Rules of health professionals and</p>	<p>2.1 Applying principles of infection control</p> <p>2.2 Following the steps of doffing and donning of the PPE appropriately</p> <p>2.3 Checking and testing digital measuring tools and self-testing digital devices to obtain accurate measurement</p> <p>2.4 Operating digital measuring tools and self-testing digital devices for chronic conditions</p> <p>2.5 Able to interpret able to interpret vital signs results</p> <p>2.6 Applying innovation skills</p> <p>2.7 Able to identify physical hazards</p> <p>2.8 Keen to details</p> <p>2.9 Applying effective communication and interpersonal skills</p> <p>2.10 Applying observation skills</p> <p>2.11 Respecting client's rights</p> <p>2.12 Identifying issues relating to difficult and challenging behavior</p> <p>2.13 Identifying client issues which need to be referred to an appropriate</p>

	<p>personnel in accordance with established policies and procedures.</p> <p>2.12 Digital measuring tools and devices are cleaned and stored according to manufacturer’s manual of operations.</p> <p>2.13 Medical wastes are disposed in accordance with existing ecological solid waste management law.</p>	<p>team involved with the care of client</p> <p>2.12 Techniques in reporting and documentating using digital measuring tools and devices</p> <p>2.13 Interpretation of manual of operations</p> <p>2.14 RA No. 10173 – Data Privacy Act or current/existing law</p> <p>2.15 RA No. 9003 - Ecological Solid Waste Management Act of 2000 or current/existing law</p> <p>2.16 RA No. 11058 - OSH Law or current/existing law</p>	<p>health professional</p> <p>2.14 Applying emergency action principles of first aid</p> <p>2.15 Reporting and documenting with accuracy using digital tools and devices</p> <p>2.16 Cleaning and storing digital measuring tools and devices</p> <p>2.17 Adhering to data privacy, OSH standards, infection control, environmental and established rules, guidelines, policies and procedures</p>
<p>3. Utilize digital assistive devices in daily life assistance and work safety of the client</p>	<p>3.1 Proper and safe use of digital assistive devices are accurately and clearly explained and demonstrated to client to maintain autonomy and independence following manufacturer’s manual of operations.</p> <p>3.2 Surrounding area are freed from potential hazards prior use of digital assistive devices.</p> <p>3.3 Functionality of the digital assistive device is checked and tested prior use in accordance with manufacturer’s manual of operations.</p> <p>3.4 Client is prepared by ensuring proper clothing are worn and is informed on the activity that will take place.</p>	<p>3.1 Categories, functions, usages, and timing of digital technological assistance devices in life assistance</p> <p>3.2 Target, operating method, and cautions during usage for moving and mobile digital assistive devices</p> <p>3.3 Principles of proper body mechanics and posture in operating digital assistive devices</p> <p>3.4 Methods and steps in utilizing digital technological assistance in going up/down the stairs, getting onto/off the bed and turning over</p> <p>3.5 Methods and steps in operating digital</p>	<p>3.1 Able to assist client in safely using digital assistive device</p> <p>3.2 Able to promote client independence and autonomy in using digital assistive device</p> <p>3.3 Able to demonstrate proper body mechanics and posture while operating digital assistive devices</p> <p>3.4 Able to use moving and mobile digital assistive devices</p> <p>3.5 Applying innovation skills</p> <p>3.6 Able to identify physical hazards</p> <p>3.7 Keen to details</p>

	<p>3.5 Digital assistive device is operated to assist the client safely in upward/downward and transfer movements according to manufacturer's manual of operations.</p> <p>3.6 Digital monitoring devices and accessories are operated according to manufacturer's manual of operations.</p> <p>3.7 Safety of own self and client is observed.</p> <p>3.8 Basic first aid is administered as needed and/or escalated to medical personnel in accordance with established policies and procedures.</p> <p>3.9 Incidents and observations are reported and documented following the established policies and procedures.</p> <p>3.10 Digital device is cleaned and stored according to manufacturer's manual of operations.</p>	<p>monitoring devices and accessories</p> <p>3.6 Concepts of mode of communication</p> <p>3.7 Difficult and challenging behavior</p> <p>3.8 Client issues which need to be referred to an appropriate health professional</p> <p>3.9 First aid standard operating procedures</p> <p>3.10 Rules of health professionals and team involved with the care of client</p> <p>3.11 Techniques in reporting and documenting using digital measuring tools and devices</p> <p>3.12 Interpretation of manual of operations</p> <p>3.13 RA No. 11058 - OSH Law or current/existing law</p>	<p>3.8 Applying effective communication and interpersonal skills</p> <p>3.9 Applying observation skills</p> <p>3.10 Interpretation of Verbal and Non-Verbal Cues/Skills</p> <p>3.11 Respecting client's rights</p> <p>3.12 Identifying issues relating to difficult and challenging behavior</p> <p>3.13 Identifying client issues which need to be referred to an appropriate health professional</p> <p>3.14 Applying emergency action principles of first aid</p> <p>3.15 Reporting and documenting with accuracy using digital tools and devices</p> <p>3.16 Cleaning and storing digital tools and monitoring devices</p> <p>3.17 Adhering to OSH standards, environmental and established rules, guidelines, policies and procedures</p>
<p>4. Monitor and maintain digital devices</p>	<p>4.1 Regular check-up of physical and electronic condition of digital devices, tools and</p>	<p>4.1 Familiarization with technical specifications</p>	<p>4.1 Problem-solving skills to troubleshoot technical issues</p>

<p>tools and equipment</p>	<p>equipment are performed for optimum performance.</p> <p>4.2 Routine maintenance procedures are conducted as recommended in manufacturer's manual of operations.</p> <p>4.3 Maintenance or repair needs are identified and reported following the established policies and procedures.</p>	<p>4.2 Familiarization with Operating Instructions</p> <p>4.3 Safety and Risk guidelines according to specified technical standards</p> <p>4.4 Concept of troubleshooting technical issues related to technical tools and equipment to ensure uninterrupted service delivery</p> <p>4.5 Scope of work</p>	<p>4.2 Performing basic maintenance tasks on digital tools and equipment</p> <p>4.3 Identifying and reporting maintenance and repair needs outside of scope of work</p> <p>4.4 Effective communication skills with healthcare team members</p>
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RANGE OF VARIABLES

VARIABLE	RANGE
1. Health status	May include: <ul style="list-style-type: none"> 1.1 Diet 1.2 Sleep 1.3 Blood pressure 1.4 Defecation
2. Personal Protective Equipment (PPE)	May include: <ul style="list-style-type: none"> 2.1 Disposable rubber gloves 2.2 Disposable face mask 2.3 Shoe cover 2.4 Apron 2.5 Head cover or Hair net
3. Digital measuring tools for vital signs	May include: <ul style="list-style-type: none"> 3.1 Pulse oximeter 3.2 Heart rate monitor 3.3 Digital sphygmomanometer / Digital blood pressure monitor 3.4 Digital thermometer <ul style="list-style-type: none"> 3.4.1 Oral 3.4.2 Ear (tympanic) 3.4.3 Forehead (temporal)
4. Normal values of vital signs	In healthy adults at rest, normal values are as follows: <ul style="list-style-type: none"> 4.1 Heart rate (pulse): 60-100 bpm 4.2 Respiratory rate: 12-18 breaths per minute 4.3 Blood pressure: between 90/60 mmHg and 120/80 mmHg 4.4 Temperature: 97.8°F (36.5°C) to 99.1°F (37.3°C); average 98.6°F (37°C)
5. Self-testing digital devices for chronic conditions	May include: <ul style="list-style-type: none"> 5.1 Glucose meter “Glucometer” 5.2 Uric acid meter 5.3 Cholesterol meter
6. Recorded	May include: <ul style="list-style-type: none"> 6.1 Documented 6.2 Uploaded in cloud 6.3 Reported
7. Digital assistive devices	May include: <ul style="list-style-type: none"> 7.1 Electric wheelchair 7.2 Electric chair lifts or Patient hoist lifts 7.3 Transfer chair stretcher
8. Upward/downward and transfer movements	May include: <ul style="list-style-type: none"> 8.1 Going up/down of the stairs or steps

	<ul style="list-style-type: none"> 8.2 Getting onto/off the bed 8.3 Turning over on bed 8.4 Sitting up/down the chair/toilet bowl 8.5 Getting onto/off the shower area
<p>9. Digital monitoring devices and accessories</p>	<p>May include:</p> <ul style="list-style-type: none"> 9.1 Camera (tablet or web cam) 9.2 Sensors <ul style="list-style-type: none"> 9.2.1 Bed sensors 9.2.2 Chair sensor pad 9.2.3 Activity and motion sensors 9.2.4 Door sensors 9.2.5 Fall detection sensors 9.2.6 Temperature sensors 9.3 Portable monitor / Plug-in monitor 9.4 Smart phone 9.5 Smart watch 9.6 Alarms 9.7 Microphones

EVIDENCE GUIDE

<p>1. Critical Aspects of Competency</p>	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> 1.1 Operated digital tools, equipment and devices, accurately: <ul style="list-style-type: none"> 1.1.1 Measuring tools for vital signs 1.1.2 Self-testing monitoring devices for chronic conditions 1.1.3 Assistive devices 1.1.4 Monitoring system and its accessories 1.2 Demonstrated personal safety and of the client during operation of digital tools, equipment and devices. 1.3 Explained and demonstrated proper and safe use of digital assistive devices to client. 1.4 Cleaned and stored digital tools, equipment and devices.
<p>2. Resource Implications</p>	<p>The following resources should be provided:</p> <ul style="list-style-type: none"> 2.1 Tools, Materials and Equipment appropriate for the unit of competency 2.2 Workplace environment appropriate for the unit of competency
<p>3. Methods of Assessment</p>	<p>Competency in this unit may be assessed through:</p> <ul style="list-style-type: none"> 3.1 Interview 3.2 Demonstration with Questioning 3.3 Written Examination 3.4 Role Play
<p>4. Context of Assessment</p>	<p>4.1 Competency may be assessed individually in the actual workplace or simulation environment</p>

UNIT OF COMPETENCY : UTILIZE DIGITAL TECHNOLOGIES IN CAREGIVING MANAGEMENT

UNIT CODE : CS-HHC532002

UNIT DESCRIPTOR : This unit covers the skills, knowledge and attitudes required to utilize integrated digital tools and technologies for individual health data records for care service items and healthcare service connection, measure updates and health tracking management, cultivate the trait of autonomous learning, and possess the people-oriented concept to provide comfortable care and safe daily care for individual cases and own self.

ELEMENT	PERFORMANCE CRITERIA <i>Italicized terms</i> are elaborated in the Range of Variables	REQUIRED KNOWLEDGE	REQUIRED SKILLS
1. Demonstrate understanding on educational development in digital trend	1.1 Understanding on the importance of continuous learning and education on current digital trend and approaches of caregiver is demonstrated. 1.2 Concept of using digital technologies in vital sign compilation and disease prediction of individual cases of care is described. 1.3 Concept of utilizing digital technologies in monitoring health and wellness of client is explained. 1.4 Concept of utilizing digital technologies in assisting in requirements of daily healthcare of client is explained. 1.5 Concept of utilizing digital technologies in maintaining health and wellness of caregiver is explained. 1.6 Principles of choosing digital device , internet service plan and mobile operating system (OS) or "platform" to be use	1.1 Importance of keeping up-to-date in digital trends in delivery of care 1.2 Knowledge related to utilizing digital technologies in disease sign detection and evaluation 1.3 Usage of digital technologies: 1.3.1 Monitoring health and wellness of client 1.3.2 Assisting in requirements of daily healthcare of client 1.4 Usage of digital technologies in maintaining health and wellness of caregiver 1.5 Kinds of digital devices, operation instructions, and cautions during usage	1.1 Attention to details 1.2 Listening Skills 1.3 Critical thinking skills 1.4 Adaptability skills on willingness to learn and adapt to new technologies and advancements in digital healthcare, staying updated with emerging tools and trends 1.5 Understanding of relevant regulations and guidelines governing the use of digital tools and equipment in healthcare, including data protection and security measures 1.6 Able to recognize and address phishing scams in emails, texts and

	<p>are discussed according to caregiver's preference.</p> <p>1.7 Ways of screening the websites and mobile applications for suitability with digital device use and that offers legitimate information are discussed.</p> <p>1.8 Importance of maintaining client's privacy and rights to consent information are explained.</p> <p>1.9 Phishing scams are recognized and addressed accordingly following platforms guidelines and procedures.</p> <p>1.10 Digital device are protected from viruses, malwares, hackers or malicious attacks.</p>	<p>1.6 Uses and functionality of digital devices and mobile operating system (OS) or "platform"</p> <p>1.7 Types of internet service plans</p> <p>1.8 Tips in choosing the right websites and mobile applications</p> <p>1.9 Patient's Bill of Rights</p> <p>1.10 RA No. 10173 – Data Privacy Act</p> <p>1.11 How to recognize and avoid phishing scams in emails, texts and social media</p> <p>1.12 How to keep device secure from viruses, malwares, hackers or malicious attacks</p>	<p>social media platforms</p> <p>1.7 Able to keep device secure from viruses, malwares, hackers or malicious attacks</p>
<p>2. Utilize digital technologies to aid delivery of care to client</p>	<p>2.1 Websites with information on delivery of care to client are accessed using digital devices.</p> <p>2.2 Software applications on monitoring and maintaining health and wellness of client are downloaded and installed in digital devices.</p> <p>2.3 Installed software applications for the management of care of the client are navigated and used.</p> <p>2.4 Digital device is operated to communicate with healthcare team members or report emergency to appropriate contact person following</p>	<p>2.1 Example of websites that provides information in delivery of care to client</p> <p>2.2 Categories of software applications that helps in monitoring and maintaining health and wellness of client:</p> <p>2.2.1 Coordinating Care</p> <p>2.2.2 Medication Management</p> <p>2.2.3 Wound Care Management</p> <p>2.2.4 Managing Appointments and Tasks</p> <p>2.2.5 Exercise and Nutrition</p> <p>2.2.6 Safety</p> <p>2.2.7 Emergency</p> <p>2.3 Knowledge and methods of using digital technologies in</p>	<p>2.1 Operating digital devices to access websites and software applications</p> <p>2.2 Able to use digital technologies in determining health status of client</p> <p>2.3 Able to interpret gathered information</p> <p>2.4 Critical thinking skills</p> <p>2.5 Identifying reliable sources of information</p> <p>2.6 Able to install, navigate and use software applications and platforms for data entry and monitoring tasks</p>

	established policies and procedures.	application of care and awareness evaluations 2.4 Examples of reliable sources of information (websites) 2.5 RA No. 10173 – Data Privacy Act	2.7 Operating digital devices to communicate with healthcare team members or contact appropriate person during emergency
3. Utilize digital technologies to ease management of care	3.1 Websites, social networks and software applications offering support and resources and promotes health and wellness of caregiver are accessed, downloaded and installed using digital devices. 3.2 Software applications that offers assistance in managing care of client are downloaded and installed on digital devices. 3.3 Installed software applications that promotes health and wellness for oneself are navigated and used. 3.4 Installed software applications for the management of care of the client are navigated and used.	3.1 Categories of websites, social networks and software applications offering support and resources and promotes health and wellness of caregivers: 3.1.1 Personal Health Record Tracking 3.1.2 Social and Emotional Support Group 3.1.3 Meditation and Spirituality Sites 3.1.4 Entertainment and Brain Games 3.2 Categories of software applications that offers assistance in managing care of client: 3.2.1 Information and Education 3.2.2 Shopping for Goods and Services 3.3 Examples of reliable sources of information (websites) 3.4 Procedures of downloading and installing software applications to digital devices	3.1 Operating digital devices to access websites and software applications 3.2 Able to use digital technologies to ease management of care 3.3 Able to interpret gathered information 3.4 Critical thinking skills 3.5 Able to navigate and use software applications and platforms for care management

RANGE OF VARIABLES

VARIABLE	RANGE
1. Digital devices	May include: <ol style="list-style-type: none"> 1.1 Mobile / Smart phone 1.2 Tablet 1.3 Laptop 1.4 Desktop or Personal Computer
2. Tips on screening websites and mobile medical applications	May include: <ol style="list-style-type: none"> 1.1 For health and nutrition information, ask the doctor or health provider for suggestions. Go to trusted sources such as the U.S. National Library of Medicine or the Mayo Clinic. When reviewing a source for trusted information, check to see if a skilled professional, one who does not receive payment to promote the product or service, reviews the information. 1.2 Check for user ratings and reviews. Look for advice from real caregivers like you. It is not uncommon for companies to hire people to write positive “reviews” for their app or service. 1.3 Ask a trusted friend for their recommendations. 1.4 Visit the ‘About Us’ page on a website and check out the Board of Directors and/or staff to see if they have the expertise and knowledge on the information you’re seeking. 1.5 Before downloading an application, carefully think about what you want it to do and how it can complement what you are already doing off-line. It may be a great app for your neighbor but not right for your situation. Does the app solve a caregiving problem or meet a personal need to take care of you? If not, don’t bother. 1.6 Test the app before committing to paying a fee. You can do this by downloading a free or trial version first. 1.7 Seek out tools that work for you. Good signs are: simple installation, ease of use, regular updates for information accuracy and tool improvement. Try to avoid those that barrage you with advertising or demand too much access to private information in exchange for using the tool.

EVIDENCE GUIDE

<p>1. Critical Aspects of Competency</p>	<p>Assessment requires evidence that the candidate:</p> <p>1.1 Accessed the websites and social networks; and downloaded and installed the software applications on digital devices:</p> <p>1.1.1 Monitoring and maintaining health and wellness of client</p> <p>1.1.2 Offering support and resources and promotes health and wellness of caregiver</p> <p>1.1.3 Assist caregiver in managing care of client</p> <p>1.2 Navigated and utilized the installed software applications.</p> <p>1.3 Operated digital device to communicate with healthcare team members or report emergency to appropriate contact person.</p>
<p>2. Resource Implications</p>	<p>The following resources should be provided:</p> <p>2.1 Tools, Materials and Equipment appropriate for the unit of competency</p> <p>2.2 Lecture area appropriate for the unit of competency</p>
<p>3. Methods of Assessment</p>	<p>Competency in this unit may be assessed through:</p> <p>3.1 Interview</p> <p>3.2 Demonstration with Questioning</p> <p>3.3 Written Examination</p>
<p>4. Context of Assessment</p>	<p>4.1 Competency may be assessed individually in the actual workplace or simulation environment</p>

GLOSSARY OF TERMS

Artificial Intelligence	A device or product that can imitate intelligent behavior or mimics human learning and reasoning. Artificial intelligence includes machine learning, neural networks, and natural language processing. Some terms used to describe artificial intelligence include: computer-aided detection/diagnosis, statistical learning, deep learning, or smart algorithms.
Assistive Technology	<p>Assistive products help maintain or improve an individual's functioning related to cognition, communication, hearing, mobility, self-care and vision, thus enabling their health, well-being, inclusion and participation.</p> <p>Assistive products can range from physical products such as wheelchairs, glasses, prosthetic limbs, white canes, and hearing aids to digital solutions such as speech recognition or time management software and captioning. (<i>source: https://www.who.int/news-room/fact-sheets/</i>)</p>
Cloud	A device or product with internet-based computing that provides computer processing resources and data on demand. The cloud is a shared pool of configurable resources (that is, computer networks, servers, storage, applications, and services). Computing and data storage resources include: servers, operating systems, networks, software, applications, services, and storage equipment.
Cybersecurity	A device or product that can prevent unauthorized access, modification, misuse, or denial of use, or the unauthorized use of information which is stored, accessed, or transferred from a medical device to an external recipient.
Data	Facts that can be interpreted or analysed to gain knowledge or aid decision-making.
Digital Health	Includes categories such as mobile health (mHealth), health information technology (IT), wearable devices, telehealth and telemedicine, and personalized medicine.
Digital Technology	<p>Broad term for the variety of technologies that use computers and computerisation.</p> <p>Refers to digital devices, systems, and resources that help create, store, and manage data. An important aspect of digital technology is information technology (IT) which refers to the use of computers to process data and information. (<i>https://www.studysmarter.co.uk/</i>)</p>
Emerging Technology	Fast growing innovations such as Artificial Intelligence (AI), cloud computing and Virtual Reality (VR), which are in the early stages of acceptance or adoption.
Health	A state of complete physical, social and mental well-being, and not merely the absence of disease or infirmity.
Information	Processed or analysed data that now have relevance for a specific purpose or context.

Internet Service Plan	The specific plan that you subscribe to for use of an Internet Service. (https://www.lawinsider.com/)
Interoperability	The ability to exchange and use information across different networks and applications.
Media	Refers to various means of communication. The term can also refer to different types of data storage options.
Medical Device Data System (MDDS)	Hardware or software that can transfer, store, convert data formats, or display medical device data without controlling or altering the functions or parameters of any connected medical device.
Mobile Medical App (MMA)	A software function that meets the definition of a medical device.
Mobile Operating System (OS)	<p>An operating system used for smartphones, tablets, smartwatches, smartglasses, or other non-laptop personal mobile computing devices. (<i>source: https://en.wikipedia.org/</i>)</p> <p>Is software that allows smartphones, tablets and other devices to run applications and programs. A mobile OS provides an interface between the device's hardware components and its software functions. (<i>source: https://www.techtarget.com/</i>)</p>
Phishing	A technique for attempting to acquire sensitive data, such as bank account numbers, through a fraudulent solicitation in email or on a web site, in which the perpetrator masquerades as a legitimate business or reputable person. (<i>source: https://csrc.nist.gov/glossary/term/</i>)
Social Media	Websites and applications that enable users to participate in social networking and to create and share content.
Software as a Medical Device (SaMD)	Software intended for one or more medical uses that may run on different operating systems or in virtual environments. Software run on a hardware medical device is a SaMD when not part of the intended use of the hardware medical device. Software is not SaMD if it drives or controls the hardware medical device.
Social Networks	Social relations and links between individuals that can provide access to health information and resources, influence social norms and behaviours, and mobilize social support for health.
Social Support	Psychological, physical and financial support accessible to an individual through social ties to other individuals, groups and the larger community, which can provide a buffer against adverse life events, foster resilience and provide a positive resource for health.
Telehealth	Using information and communications technologies for longdistance clinical healthcare, health-related education, public health, and health administration.

Wireless

A device or product that uses wireless communication of any form (that is, Wi-Fi, Bluetooth, NFC) to perform at least one function.

REFERENCES

1. Training Package on Caregiver Digital Upskilling, APEC Human Resources Working Group, July 2022
2. Healthline, Advantages and Disadvantages of Different Types of Thermometers <https://www.healthline.com/health/types-of-thermometers#types>
3. National Council in Aging, 5 Best Monitoring Systems for Older Adults (2024) <https://www.ncoa.org/adviser/medical-alert-systems/best-elderly-monitoring-system-in-home-use/>
4. Family Caregiver Alliance, Digital Technology for the Family Caregiver <https://www.caregiver.org/resource/digital-technology-family-caregiver/>
5. U.S. Food and Drug Administration <https://www.fda.gov/medical-devices/digital-health-center-excellence/digital-health-terms>
6. World Health Organization, Health Promotion Glossary of Terms 2021, ISBN 978-92-4-003834-9 (electronic version)
7. World Health Organization <https://www.who.int/news-room/fact-sheets/>
8. National Institute of Standards and Technology (NIST), U.S Department of Commerce, Computer Security Resource Center <https://csrc.nist.gov/glossary/term/>
9. Australian Institute of Digital Health, Australian Digital Health Capability Framework v1.0

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