

Unit 42: Assessment, Implementation and Review of Assistive Technology in Care Settings

Unit reference number: K/616/7417

Level: 4

Unit type: Optional

Credit value: 4

Guided learning hours: 27

Unit summary

Assessments in an individual's own home or social care settings will determine how assistive technology can support independence and wellbeing. This unit is intended to enable you to gain an understanding of how to support individuals and others in the assessment and provision of assistive technology. You will learn about the review process involved in the ongoing use of assistive technology, which is important for ensuring that the equipment used is fit for purpose and continues to meet individual needs.

In this unit, you will learn about the range of assistive technology available to meet physical, social and emotional needs. You will learn how to carry out assessment of assistive technology solutions in a social care setting, an outpatient setting or in an individual's home. You will record the needs and choice of the individual. You will also learn how to carry out and record risk assessments for the use of assistive technology.

Learning outcomes and assessment criteria

To pass this unit, the learner needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements the learner is expected to meet to achieve the unit.

Learning outcomes	Assessment criteria
<p>1 Understand how legislation and regulatory procedures impact on the provision of assistive technology</p>	<p>1.1 Analyse how assistive technology provision is affected by:</p> <ul style="list-style-type: none"> • legislation • mental capacity • regulatory procedures
<p>2 Understand how assistive technology can support independent living and individual wellbeing</p>	<p>2.1 Critically compare assistive technology solutions for each of the following:</p> <ul style="list-style-type: none"> • communications • wellbeing • employment • finance • keeping safe • travel • social networking <p>2.2 Research developments in assistive technology</p> <p>2.3 Compare how assistive technology can improve outcomes for different individuals, including:</p> <ul style="list-style-type: none"> • independence • wellbeing
<p>3 Be able to carry out assessment for assistive technology</p>	<p>3.1 Support an individual and others to review assistive technology</p> <p>3.2 Use assessment to identify assistive technology solutions that preserve dignity for an individual</p> <p>3.3 Support an individual to express their informed choice about assistive technology</p> <p>3.4 Assess the suitability of the home environment for assistive technology</p> <p>3.5 Undertake risk assessment for the assistive technology</p> <p>3.6 Use agreed processes to establish consent when an individual is not able to express informed consent for themselves</p> <p>3.7 Record outcomes of assessment according to agreed ways of working</p>

Learning outcomes	Assessment criteria
<p>4 Be able to support an individual and others to implement assistive technology</p>	<p>4.1 Offer advice and guidance in relation to assistive technology procurement</p> <p>4.2 Support an individual and others to measure the impact of assistive technology</p> <p>4.3 Support an individual and others to understand roles and responsibilities regarding contractual obligations</p> <p>4.4 Evaluate support measures available to individuals using assistive technology to maintain their independence</p> <p>4.5 Establish contingency plans for assistive technology provision to address areas identified in risk assessment</p> <p>4.6 Develop a strategy for ongoing assessment and review according to agreed ways of working</p>
<p>5 Be able to work in partnership with an individual and others to review provision of assistive technology</p>	<p>5.1 Review the provision of assistive technology with an individual and others</p> <p>5.2 Record review process and outcomes according to agreed ways of working</p>

What needs to be learned

Learning outcome 1: Understand how legislation and regulatory procedures impact on the provision of assistive technology

Legislation and regulatory procedures

- Work policies:
 - safeguarding
 - infection prevention
 - fire risk
 - risk assessment.
- Relevant up-to-date legislation from the Health and Safety Executive (HSE) for health and safety in a care work setting, e.g.:
 - Health and Safety at Work Act etc. Act 1974
 - Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) 2013
 - Manual Handling Operations Regulations 1992 (as amended)
 - Health and Safety (First-Aid) Regulations 1981
 - Management of Health and Safety at Work Regulations 1999 (as amended)
 - Control of Substances Hazardous to Health (COSHH) Regulations 2002.
- Other legislation:
 - Care Standards Act 2000
 - Freedom of Information Act 2000
 - Mental Capacity Act 2005
 - Human Rights Act 1998
 - Disclosure and Barring Service (DBS)
 - Safeguarding Vulnerable Groups Act 2006
 - Care Act 2014
 - Data Protection Act 1998.

How assistive technology provision is affected by the following

- Legislation/regulation:
 - assessment
 - funding
 - procurement
 - implementation
 - maintenance
 - replacement
 - security
 - safety ownership.
- Mental capacity:
 - assessment
 - understanding of the need for and use of assistive technology
 - support required
 - use of terminology
 - competence in using assistive technology.

What needs to be learned

Learning outcome 2: Understand how assistive technology can support independent living and individual wellbeing

Range of assistive technology

- Telecare assistance, e.g. sensors, alarms linked by phone, activity, chair occupancy sensors, fall detectors.
- Household hazards, e.g. fire, smoke, carbon monoxide alarms.
- Telehealth, e.g. sensors and equipment to monitor pulse, blood pressure, glucose and daily weight.
- Assistance living technology, e.g. wheelchairs, walking aids, hearing aids.
- Hoists.
- Bathing and bathroom supports.
- Vehicle modifications.
- Feeding and eating aids.

Benefits of assistive technology

- Safer living environments.
- Reduced impacts of a fall.
- Reduction in support services.
- Access to education and employment.
- Support in rehabilitation.
- Individual ability to accept and use technology.
- Complementary not substitute care.
- Assessment and referral process; supporting independence and wellbeing.
- Individual identity and self-esteem.
- Awareness of individual's feelings.
- Setting realistic and achievable goals.
- Empowering individuals.
- Maintain positive environment.
- Empower individuals to make informed decisions in relation to risk.

Learning outcome 3: Be able to carry out assessment for assistive technology

Support an individual and others to review assistive technology

- Strengths.
- Needs.
- Options.
- Support to perform tasks independently.
- Assistance in daily living.
- Dressing, bathing, socialising.
- Feeding.

What needs to be learned

Use assessment to identify assistive technology solutions that preserve dignity for an individual

- Equipment designed to augment and assist communication.
- Hearing aids.
- Lightboard display systems.
- Webinars.
- iPad®/apps/tablets.
- PCs/laptops.
- Video links.
- Eye tracker systems.
- Speech generation devices.
- Communication apps.
- Software packages.
- Sensor mats, pads.
- Pendants, telecare.
- Reminding tool.
- Keypad entries.
- Keys with lights.
- Applications for budgeting/direction finding/instructions.
- Talking books.
- Key safe box.

Support an individual to express their informed choice about assistive technology

- Merits of different solutions.
- Impact of different solutions.
- Concerns an individual has.
- Convenience of technology.
- Application of technology.
- Ease of use.
- Empowerment.
- Independence.

Assess the suitability of the home environment for assistive technology

- Ease of access.
- Power point.
- Access to devices.
- Use of devices.
- Impact on the environment/ergonomics.

What needs to be learned

Undertake risk assessment for the assistive technology

- Social impact.
- Safeguarding.
- Financial implications.
- Operability.
- Data protection.

Use agreed processes to establish consent when an individual is not able to express informed consent for themselves

- Agreed ways of working.
- Informed consent.
- Implied consent.
- Written consent.
- Verbal consent.
- The role of advocates.

Record outcomes of assessment according to agreed ways of working

- Understanding own responsibility in relation to reporting and recording procedures.
- Importance of good communication.
- Sharing information.

Learning outcome 4: Be able to support an individual and others to implement assistive technology

Offer advice and guidance in relation to assistive technology procurement

- Currency of knowledge.
- Knowledge of individual's needs.
- Solution options.
- Cost.
- Availability.
- Sourcing.
- Funding options.

Support an individual and others to measure impact of assistive technology

- Social impact.
- Emotional aspect.
- Physical impact.
- Physiological wellbeing.
- Promoting independence.
- Protecting personal choice.
- Person-centred approach.
- Balance of individual's privacy and welfare.
- Adaptability.
- Impact on home environment, family life.
- Quality of services.

What needs to be learned

Support an individual and others to understand roles and responsibilities regarding contractual obligations

- Funding obligations.
- Role of provider.
- Following manufacturer's guidance.
- Agreed ways of working.
- Testing of equipment and functionality.

Evaluate support measures available to individuals using assistive technology to maintain their independence

- Contact and links to other providers.
- Access to manufacturer, support line.
- Use of support networks.
- Carer/practitioner input.

Establish contingency plans for assistive technology provision to address areas identified in risk assessment

- Removal/replacement of equipment.
- Trial and testing of additional equipment.
- How specific policies and procedures or agreed ways of working apply to own practice, e.g. safeguarding, infection prevention, fire risk, risk assessment.
- Understanding own responsibility in relation to observation, risk assessment, reporting and recording procedures.

Develop a strategy for ongoing assessment and review according to agreed ways of working

- Frequency of review.
- Use of technology.
- Outcomes of use.
- Ease of use.
- Issues identified.

Learning outcome 5: Be able to work in partnership with an individual and others to review provision of assistive technology

Review the provision of assistive technology with an individual and others

- Feedback from an individual and others.
- Assessed risk.
- Suitability.
- Ease of use.
- Maintenance cycle.
- Cost implications.
- Application.

Record review process and outcomes according to agreed ways of working

- Policy and practice.
- Use of designated process and forms.
- Boundaries of confidentiality.
- Methods of recording.

Information for tutors

Suggested resources

Books

Cook A M and Miller Polgar J – *Cook and Hussey's Assistive Technologies: Principles and Practice* (Mosby, 2007) ISBN 9780323039079

Cook A M and Miller Polgar J – *Assistive Technologies: Principles and Practice*, 4th edition (Mosby, 2015) ISBN 9780323096317

Edyburn D – *Efficacy of Assistive Technology Interventions: 1 (Advances in Special Education Technology)* (Emerald Group Publishing Limited, 2015) ISBN 9781784416423

Lancioni G E and Sigafoos J – *Assistive Technology: Interventions for Individuals with Severe/Profound and Multiple Disabilities* (Springer SBM, 2013) ISBN 9781461442288

Oishi M M K – *Design and Use of Assistive Technology: Social, Technical, Ethical, and Economic Challenges* (Springer, 2010) ISBN 9781489989802

O'Neill B and Gillespie A – *Assistive Technology for Cognition: A handbook for clinicians and developers (Current Issues in Neuropsychology)* (Psychology Press, 2014) ISBN 9781848724020

Journal

Journal of Assistive Technologies – enabling technologies for inclusion in health, support, care and education

Websites

www.atdementia.org.uk

Alzheimer's Society – advice and support on dementia care, including assistive technology.

www.gov.uk/government/publications/assistive-technology-definition-and-safe-use

Information on safe use of assistive technology.

Assessment

This guidance should be read in conjunction with the associated qualification specification for this unit.

This unit is internally assessed. To pass this unit, the evidence that the learner presents for assessment must demonstrate that they have met the required standard specified in the learning outcomes and assessment criteria, and the requirements of the assessment strategy.

To ensure that the assessment tasks and activities enable learners to produce valid, sufficient, authentic and appropriate evidence that meets the assessment criteria, centres should follow the guidance given in *Section 8 Assessment* of the associated qualification specification and meet the requirements from the assessment strategy given below.

Wherever possible, centres should adopt an holistic approach to assessing the units in the qualification. This gives the assessment process greater rigour and minimises repetition, time and the burden of assessment on all parties involved in the process.

Unit assessment requirements

This unit must be assessed in accordance with the assessment strategy (principles) in *Annexe A* of the associated qualification specification.

Assessment decisions for learning outcomes 3, 4 and 5 (competence) must be made based on evidence generated during the learner's normal work activity. Any knowledge evidence integral to these learning outcomes may be generated outside of the work environment, but the final assessment decision must be within the real work environment. Simulation cannot be used as an assessment method for learning outcomes 3, 4 and 5.

Assessment of learning outcomes 1 and 2 (knowledge) may take place in or outside of a real work environment.