



Higher National Unit specification

General information for centres

Unit title: Procedures for Pharmacy Aseptic Checking Technicians

Unit code: F6JA 34

Unit purpose: This Unit is designed to enable candidates to develop the competences required to carry out the role of pharmacy aseptic checking technician. It is primarily intended for candidates who expect to take up a final accuracy checking role within a pharmacy aseptic facility. It prepares them for this role by providing the underpinning knowledge they require.

On completion of the Unit the candidate should be able to:

- 1 Explain the role of the pharmacy aseptic checking technician in ensuring the safe and effective aseptic preparation and dispensing of medicines.
- 2 Perform checks for potential problems in prescriptions for aseptically prepared and dispensed medicines.
- 3 Describe the appropriate procedures for the safe aseptic preparation and dispensing of medicines.
- 4 Describe the procedures necessary to rectify errors and avoid errors in the safe aseptic preparation and dispensing of medicines.
- 5 Perform final accuracy checks to ensure the safe aseptic preparation and dispensing of medicines.

Credit points and level: 2 HN credits at SCQF level 7: (16 SCQF credit points at SCQF level 7*)

**SCQF credit points are used to allocate credit to qualifications in the Scottish Credit and Qualifications Framework (SCQF). Each qualification in the Framework is allocated a number of SCQF credit points at an SCQF level. There are 12 SCQF levels, ranging from Access 1 to Doctorates.*

Recommended prior knowledge and skills: Entry is at the discretion of the centre; although it is highly recommended that candidates have a qualification recognised by the regulating body for pharmacy practice, eg SVQ Pharmacy Services level 3 and/or NC Pharmaceutical Sciences. It is beneficial that candidates have relevant work experience as a pharmacy technician within an aseptic facility as this would allow them to appreciate the responsibility achievement of this Unit will provide, and also opportunities to reflect on this responsibility. Candidates should also have good numeracy and communication skills as well as problem solving abilities.

Core Skills: There may be opportunities to gather evidence towards Core Skills in this Unit, although there is no automatic certification of Core Skills or Core Skills components.

Context for delivery: If this Unit is delivered as part of a Group Award, it is recommended that it should be taught and assessed within the subject area of the Group Award to which it contributes.

General information for centres (cont)

Assessment: This Unit could be assessed by three separate assessments. It is anticipated that Outcome 1 will be assessed by a single instrument of assessment, such as a written or verbal report based on the role of the pharmacy aseptic checking technician, relevant to the workplace.

The assessment of Outcomes 2–4 may be done on an Outcome to Outcome basis; however it is highly recommended that assessment is combined. Evidence for the assessment of Outcome 5 will be generated in the workplace and assessed by the centre.

It is the responsibility of the centre to ensure authenticity of the candidate's work if the assessment is a work based assignment.

Candidates must achieve all of the minimum evidence specified for each Outcome, combination of Outcomes, or for the Unit as a whole to pass the Unit.

Higher National Unit specification: statement of standards

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The sections of the Unit stating the Outcomes, Knowledge and/or Skills, and Evidence Requirements are mandatory.

Where evidence for Outcomes is assessed on a sample basis, the whole of the content listed in the Knowledge and/or Skills section must be taught and available for assessment. Candidates should not know in advance the items on which they will be assessed and different items should be sampled on each assessment occasion.

Outcome 1

Explain the role of the pharmacy aseptic checking technician in ensuring the safe and effective aseptic preparation and dispensing of medicines

Knowledge and/or Skills

- ◆ Professional check
- ◆ Transcription check
- ◆ Formulation and calculation check
- ◆ In-process check
- ◆ Final accuracy check
- ◆ Roles and responsibilities of the Pharmacy Aseptic Checking Technician
- ◆ Documentation
- ◆ Operational and monitoring requirements of an aseptic facility
- ◆ Quality management systems

Evidence Requirements

Candidates are required to provide evidence to demonstrate their Knowledge and/or Skills by producing a report showing they can provide an accurate and clear explanation of:

- ◆ professional check and the role of the pharmacist in carrying this out
- ◆ transcription, formulation and calculation check
- ◆ in-process check
- ◆ final accuracy check
- ◆ roles, responsibilities and limitations of the pharmacy aseptic checking technician in relation to the responsible pharmacist's role in ensuring the safe and effective aseptic preparation and dispensing of medicines, and when to refer to the responsible pharmacist
- ◆ application and control of documentation
- ◆ operational and monitoring requirements of the aseptic facility where they are employed
- ◆ quality management systems required including skill mix and capacity planning

Assessment Guidelines

The report will be undertaken in open-book conditions and will be completed in the candidates' own time. It is recommended that the report should be approximately 2,000 words. A checklist may be used to assess candidate's work.

Higher National Unit specification: statement of standards (cont)

Unit title: Procedures for Pharmacy Aseptic Checking Technicians

Outcome 2

Perform checks for potential problems in prescriptions for aseptically prepared and dispensed medicines

Knowledge and/or Skills

- ◆ Inappropriate dosage regimes
- ◆ Inappropriate drug concentrations
- ◆ Inappropriate administration routes
- ◆ Stability problems
- ◆ Medicines
- ◆ Patients

Evidence Requirements

Candidates will be assessed by an open-book assessment under controlled conditions and must cover all of the Knowledge and/or Skills.

Candidates will need to provide evidence to show that they can perform checks to identify potential:

- ◆ inappropriate dosage regimes in prescriptions for a child and adult patient
- ◆ inappropriate drug concentrations in prescriptions for a child and adult patient
- ◆ inappropriate administration routes in prescriptions for a child and adult patient
- ◆ stability problems in prescriptions for a child and adult patient

Candidates must identify all inappropriate dosage regimes, drug concentrations, administration routes and stability problems for a child and adult patient covering ten specimen prescriptions for a diverse range of aseptically prepared and dispensed medicines.

Candidates will have access to relevant reference materials determined by the centre, although no other materials will be allowed during the assessment.

Assessment Guidelines

Outcome 2 could be assessed by an open-book, supervised assessment combined with Outcomes 3 and 4. The assessment documentation provided should cover simulated examples of aseptically prepared and dispensed medicines encountered in a pharmacy aseptic facility such as a cytotoxic, IV additive or Parenteral Nutrition (PN). Candidates will have access to relevant reference materials determined by the centre, although no other materials will be allowed during the assessment. A checklist may be used to assess the candidate's work.

Higher National Unit specification: statement of standards (cont)

Unit title: Procedures for Pharmacy Aseptic Checking Technicians

Outcome 3

Describe the appropriate procedures for the safe aseptic preparation and dispensing of medicines

Knowledge and/or Skills

- ◆ Formulation and stability
- ◆ Calculations
- ◆ COSHH requirements
- ◆ Preparation method
- ◆ Labelling requirements
- ◆ Packaging requirements
- ◆ Storage and transport requirements
- ◆ Medicines
- ◆ Patients

Evidence Requirements

Candidates will be assessed by an open-book assessment under controlled conditions and must cover all of the Knowledge and/or Skills.

Candidates will need to provide evidence to demonstrate their Knowledge and/or Skills by generating three worksheets for a diverse range of aseptically prepared and dispensed medicines for a child and adult patient showing they can:

- ◆ identify the correct formulation and stability for each preparation
- ◆ calculate the correct quantities required for each preparation
- ◆ describe the correct preparation method including COSHH requirements
- ◆ provide evidence of labelling and packaging requirements including administration directions and patient details
- ◆ identify the correct storage and transport requirements

Candidates will have access to a calculator and all relevant reference materials determined by the centre, although no other materials will be allowed during the assessment.

Assessment Guidelines

The assessment documentation provided should cover examples of aseptically prepared and dispensed medicines encountered in a pharmacy aseptic facility such as a cytotoxic, IV additive and Parenteral Nutrition (PN). Outcome 3 could be assessed by an open-book, supervised assessment combined with Outcomes 2 and 4. A checklist may be used to assess the candidate's work.

Higher National Unit specification: statement of standards (cont)

Unit title: Procedures for Pharmacy Aseptic Checking Technicians

Outcome 4

Describe the procedures necessary to avoid errors and rectify errors in the aseptic preparation and dispensing of medicines

Knowledge and/or Skills

- ◆ Incorrect transcription
- ◆ Incorrect formulation and calculation
- ◆ Incorrect assembly of starting materials
- ◆ Incorrect quantities and volumes
- ◆ Incorrect label and packaging
- ◆ Incorrect reconciliation of materials and labels
- ◆ Incorrect completeness of documentation.

Evidence Requirements

Outcome 4 will be assessed by an open-book assessment under controlled conditions and must cover all of the Knowledge and/or Skills.

Candidates will need to provide evidence to demonstrate their Knowledge and/or Skills by correctly identifying a minimum of ten errors/potential errors in a minimum of ten examples of aseptically prepared and dispensed medicines, showing they can identify the incorrect:

- ◆ transcription of information from the prescription/order to the worksheet
- ◆ formulation and calculation of medicine
- ◆ assembly of starting materials
- ◆ quantities and volumes
- ◆ label including patients details, form, strength, administration details, expiry date and storage requirements and inappropriate packaging
- ◆ reconciliation of materials and labels
- ◆ completeness of the prescription including legality and professional check

Candidates will also be required to identify the procedures necessary to avoid all errors/rectify potential errors within the same examples of aseptically prepared and dispensed medicines.

Candidates will have access to relevant reference materials determined by the centre, although no other materials will be allowed during the assessments.

Assessment Guidelines

The assessment documentation provided should cover simulated examples of aseptically prepared and dispensed medicines encountered in a pharmacy aseptic facility. Candidates will have access to relevant reference materials determined by the centre but no other materials will be allowed. Outcome 4 could be assessed by an open-book, supervised assessment combined with Outcomes 2 and 3. A checklist may be used to assess the candidate's work.

Higher National Unit specification: statement of standards (cont)

Unit title: Procedures for Pharmacy Aseptic Checking Technicians

Outcome 5

Perform final accuracy checks to ensure the safe aseptic preparation and dispensing of medicines

Knowledge and/or Skills

- ◆ Legality and professional check
- ◆ Transcription check
- ◆ Formulation check
- ◆ Calculation check
- ◆ Assembly of starting materials
- ◆ Quantities and volumes
- ◆ Labelling requirements
- ◆ Packaging requirements
- ◆ Product identifier and expiry date check
- ◆ Reconciliation of materials and labels
- ◆ Completeness of documentation

Evidence Requirements

Evidence for Outcome 5 will be gathered in the workplace under the supervision of the responsible pharmacist and must cover all of the Knowledge and/or Skills.

Candidates will need to provide evidence to demonstrate their Knowledge and/or Skills by performing final accuracy checks in the workplace on a selection of prescriptions, covering a diverse range of a minimum of 100 aseptically prepared and dispensed medicines, over a minimum period of four weeks showing they can:

- ◆ ensure each prescription is legal and a professional check has been carried out by the responsible pharmacist
- ◆ check the information from the prescription has been transcribed correctly to the worksheet
- ◆ check the correct formulation has been used and all calculations are correct
- ◆ ensure the assembly of starting materials is correct
- ◆ ensure all quantities and volumes are correct
- ◆ check the labelling requirements are correct including patient details, form, strength, administration details, expiry date and storage requirements
- ◆ ensure all packaging requirements are correct
- ◆ ensure the completeness of the prescription
- ◆ provide feedback with respect to the occurrence of errors and use relevant inter-personal skills to ensure good working practices and relationships

Assessment Guidelines

Assessment for Outcome 5 will require the candidate to perform accuracy checks in the workplace, covering a minimum of 100 aseptically prepared and dispensed medicines which may include cytotoxics, IV additives, Parenteral Nutrition (PN) and purchased pre-filled syringes over a minimum period of four weeks. A checklist will be used to assess the candidate's work.

Higher National Unit specification: statement of standards (cont)

Unit title: Procedures for Pharmacy Aseptic Checking Technicians

Candidates should submit their evidence to the centre after completion of the first 50 items being checked. If the candidate misses an error or does not adhere to departmental standard operating procedures within the 50 items they must complete all of these items and then resume at item number 1. If the candidate does not miss any dispensing errors and continues to check items 51–100 and then misses a dispensing error then they must restart the checking process from item number 51.

Evidence of the candidate's performance must also be provided by the responsible pharmacist on a four weekly basis.

Administrative Information

Unit code: F6JA 34

Unit title: Procedures for Pharmacy Aseptic Checking Technicians

Superclass category: PE

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History of changes:

| Version | Description of change | Date |
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Higher National Unit specification: support notes

Unit title: Procedures for Pharmacy Aseptic Checking Technicians

This part of the Unit specification is offered as guidance. The support notes are not mandatory.

While the exact time allocated to this Unit is at the discretion of the centre, the notional design length is 80 hours.

Guidance on the content and context for this Unit

This Unit is primarily intended to prepare the candidate for the role of pharmacy aseptic checking technician by providing them with the knowledge and skills required. The Unit is designed to build on previous training and experience gained in the workplace. To enable candidates to do this they should be employed as a pharmacy technician and have been selected by the pharmacy manager to undertake training as a pharmacy aseptic checking technician.

Outcome 1 looks at the roles and responsibilities of the pharmacy aseptic checking technician in relation to the responsible pharmacist. Candidates should understand the different types of checks carried out and the parameters of the pharmacy aseptic checking technician's role. The Outcome also looks at the importance of following quality systems with respect to quality of service. Candidates should understand what to do in situations where errors occur and when to refer to a pharmacist as well as the operational and monitoring requirements of the pharmacy aseptic facility they are employed.

Outcome 2 looks at potential problems which can occur in prescriptions/orders for aseptically prepared and dispensed medicines. Candidates should have an awareness of inappropriate dosage regimens, drug concentrations, administration routes and stability problems. In addition they should understand how to use appropriate reference sources to access relevant information, in particular the BNF, Cytotoxic handbook, CIVA handbook, Children's BNF, etc.

Outcome 3 looks at the appropriate procedures for the aseptic preparation and dispensing of medicines. Candidates should understand how to use relevant reference sources to access information on the formulation and stability of medicines as well as preparation methods, packaging, storage and transport requirements. Candidates should also understand the relevant COSHH and Health and Safety requirements with respect to the safe aseptic preparation and dispensing of medicines.

Outcome 4 looks at the procedures necessary to carry out the final accuracy check and to avoid errors and rectify potential errors in the aseptic preparation and dispensing of medicines. Candidates should understand the systematic procedures for carrying out final accuracy checks and for dealing with errors/potential errors as well as common aseptic preparation and dispensing errors they may encounter.

Outcome 5 looks at carrying out final accuracy checks in the workplace to ensure the safe aseptic preparation and dispensing of medicines. Candidates should understand the systematic procedures for carrying out final accuracy checks and for dealing with errors/potential errors and providing feedback to staff as well as common aseptic preparation and dispensing errors they may encounter.

Higher National Unit specification: support notes

Unit title: Procedures for Pharmacy Aseptic Checking Technicians

Guidance on the delivery and assessment of this Unit

This Unit should be taught by aseptic specialists in a way which is relevant to the specific occupational area. Wherever possible, links should be drawn with situations that candidates would understand eg examples of common errors encountered within a pharmacy aseptic facility.

The candidate should agree a date when assessments will be undertaken. Outcomes 1–4 should be completed at the end of the delivery period of the Unit and before commencement of Outcome 5.

At this level, candidates should work independently. Outcomes 2–4 should be conducted in controlled conditions where arrangements have been put in place to ensure the authenticity of the candidate's work.

Opportunities for developing Core Skills

Although there is no automatic certification of Core Skills components, there may be the opportunity to gather evidence towards the following Core Skills: *Problem Solving* and *Working with Others*.

Open learning

All Outcomes are appropriate to open learning with tutor support at all stages. It is the responsibility of the delivering centre to ensure the authenticity of the candidate's work. Assessment evidence must be generated as described in the Evidence Requirements section.

Disabled candidates and/or those with additional support needs

The additional support needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments, or considering whether any reasonable adjustments may be required. Further advice can be found on our website www.sqa.org.uk/assessmentarrangements.

General information for candidates

Unit title: Procedures for Pharmacy Aseptic Checking Technicians

This Unit is designed to enable you to develop your knowledge and skills as a pharmacy aseptic checking technician. It is primarily intended to prepare you to undertake this role.

The Unit has four main areas, which will be taught by visiting lecturers who are specialists in their field from the NHS.

To begin with you will look at the role, responsibilities and limitations of the pharmacy aseptic checking technician as well as the importance of following standard operating procedures with respect to quality management systems, what to do in situations of errors occurring and when to refer to the responsible pharmacist. In addition you will examine the current legal guidelines with respect to the aseptic preparation and dispensing of medicines and the operational and monitoring requirements of the air handling Unit, *Unidirectional Airflow Cabinets and Isolators*, as well as the cleaning, maintenance and environmental monitoring requirements including training and validation.

Secondly, you will look at common aseptic preparation and dispensing errors encountered within a pharmacy aseptic facility as well the appropriate labelling requirements.

Thirdly, you will understand the use of relevant reference sources to access the appropriate information on dosage regimes, drug concentrations, administration routes and stability and incompatibility for a variety of different aseptically prepared and dispensed medicines and patient types.

Finally, you will understand the use of reference sources to access information on the formulation, compounding method, stability and labelling requirements as well as packaging, storage and transport requirements for the aseptic preparation and dispensing of medicines.

To complete the Unit successfully, you will have to achieve a satisfactory level of performance for Outcomes 1 – 5. You will be required to prepare a written or verbal report on the roles, responsibilities and limitations of the pharmacy aseptic checking technician. In addition to this you will undertake holistic assessments in controlled conditions to cover Outcomes 2–4. On completion of these Outcomes you will then be required to carry out final accuracy checks in the workplace to cover the Knowledge and/or Skills for Outcome 5.