T Level Technical Qualification in Healthcare Science

Occupational specialism assessment (OSA)

Assisting with Healthcare Science

Assignment 2 - Pass

Guide standard exemplification materials

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T Level Technical Qualification in Healthcare Science
Occupational specialism assessment

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Assisting with Healthcare Science

Assignment 2

Contents

Introduction

The material within this document relates to the Assisting with Healthcare Science occupational specialism sample assessment. These exemplification materials are designed to give providers and students an indication of what would be expected for the lowest level of attainment required to achieve a pass or distinction grade.

The examiner commentary is provided to detail the judgements examiners will undertake when examining the student work. This is not intended to replace the information within the qualification specification and providers must refer to this for the content.

In assignment 2, the student must assist with point of care testing.

After each live assessment series, authentic student evidence will be published with examiner commentary across the range of achievement.

Task 1: assist with specimen collection and point of care test (POCT)

Brief

You are based within an outpatient clinic in the local community hospital working as a healthcare science assistant as part of the multi-disciplinary team.

A patient has been referred to you, who has been requested by the clinician to submit a mid-stream urine sample for investigation of infection.

Task

You must assist by carrying out the following stages:

1(a) Prepare for urine mid-stream specimen collection.

1(b)(i) Complete urine mid-stream specimen collection to include:

- label and register patient samples

1(b)(ii) Complete a urine dipstick test on the collected sample and send another sample for microbiology testing, to include:

- using the sample in the plain sterile container, carry out a POCT and check the sample for protein, haematuria, glucose, ketones and pH
- discussing findings with a senior colleague and record findings in patient details form
- prepare the second collected sample (red topped boric acid container) for transportation to the microbiology department requesting culture and sensitivity testing on the patient's mid-stream urine sample
- carry out an electronic request to the microbiology department for the patient's mid-stream culture and sensitivity before the sample is dispatched

1(c) Record and report the results and carry out post-examination cleaning and storage of equipment.

(58 marks)

Conditions of the assessment

- task 1 must be completed in supervised conditions
- you will only have access to materials permitted by your tutor and available in the designated assessment area

  you will have a maximum of 30 minutes to complete this task

Task 2: carry out point of care test (POCT)

Brief

You are working as a healthcare science assistant in a busy multidisciplinary general outpatient department and you need to check the blood sugar of a patient with type 1 diabetes before further tests and examinations can be carried out.

You are based within a diabetic outpatient clinic working as a healthcare science assistant as part of a multi-disciplinary team. Your task at the start of the clinic is to check the blood sugar measurement of a new patient.

Task

Use a blood glucose meter to perform a blood glucose measurement on the patient.

You must assist by carrying out the following stages:

2(a) Prepare for blood glucose test including explaining the procedure to the patient.

2(b) Carry out the blood glucose test including carrying out quality control (QC) on the device.

2(c) Record and report the results and carry out post-examination cleaning and storage of equipment.

(42 marks)

Conditions of the assessment

- task 2 must be completed in supervised conditions
- you will only have access to materials permitted by your tutor and available in the designated assessment area
- you will have a maximum of 25 minutes to complete this task

Student evidence

Observation record form

Descriptive information and evidence of student's skills during the practical assignment. Even though evidence of the quality of skills demonstrated should support decisions against the mark scheme, the notes should follow the flow of the tasks and how students are expected to complete them, rather than attempting to assign evidence against the criteria at this stage.

To be completed by the provider appointed assessor:

Task 1: assist with specimen collection and point of care test (POCT)

Area/objective: the following areas/objective can cover a broad range of skills or actions which should be considered when adding notes. The text below each area/objective is an example of what should be observed and is not exhaustive.	Comments: identifying student's areas of strengths and weaknesses through the use of thorough and precise notes that differentiate between a range of students' practical skills are required. This will be used to support accurate and consistent allocation of marks once all evidence has been generated.
Hand Hygiene: describe how well the student prepares for and maintains hand hygiene to include techniques and any risks to hygiene.	The student washed their hands then dried their hands on paper towels.
Infection control: describe how well the student prepares the equipment, resources and working environment, both before and after the test.	**Post examination** The student disposed of the clinical waste in a waste container and disposed of the remaining urine sample from the collection vessel in the toilet. Then they put the container in the clinical waste later. The student briefly wiped down the workstation. The student returned the equipment to the correct place. The student disposed of their PPE into the clinical waste; gloves and apron were put into the clinical waste and glasses were cleaned and returned. The student washed their hands and dried them.
Personal protective equipment (PPE): describe how the student uses appropriate PPE.	The student selected the correct PPE for the task, including an apron, goggles and gloves.
Preparation: describe how well the student collects appropriate equipment, such as different universal containers and urine dipsticks.	The student set up the equipment they require for the POCT urine dipstick task and set up a workstation; they select the correct urine dipstick strips; before returning to the cupboard for a white topped universal container and a red topped universal container. They had to return again for a timer, the student then remembered the cleaning supplies and returned for some paper towels, detergent wipes and a clinical waste container.

	The student collected the suitable equipment to complete the test, although in some cases had to return for these. When their workstation was set up, the student selected a white topped universal container and handed it to the patient, asking them to urinate into the container and bring it back to the student. The student received the urine sample from the patient.
Patient-centred care: describe how the student interacts with the patient, including confirming specific patient details.	The student asked the patient to confirm their name, hospital number and date of birth. The student checked and verified the name and date of birth against the details on their medical record. The student briefly explained and provided limited information and guidance to the patient regarding what they would need to do for the task: 'Can you take the urine sample container to the toilet and provide a mid-stream urine sample using this container and return to me'. The student identified where the toilets were to the patient and asked if this is ok.
Patient comfort: describe how the student ensures the patient has access to toilet facilities and can communicate a full understanding of the process pre and post collection.	**Post examination** The student explained to the patient that they had finished doing the test and a sample had been sent to microbiology; the student advised the patient that they were free to go.
Urine dipstick: describe how well the student carries out urine dipstick POCT.	The student asked the patient to urinate directly into the white topped tube. The student labelled the white topped tube with the mandatory requirements of date, patient's full name, hospital number, requesting location and consultant and tests required were included but some details were incomplete. The student dipped the dipstick into the urine and ensured all the pads were immersed - the student removed the dipstick. The student compared the test pads to the side of the tube and interpreted the results. The student recorded the results for all the tests onto the patient's record, and discussed these with a senior colleague to confirm they were appropriately recorded, and there was no requirement to escalate any abnormal results. The results were written in the patient's record.

	The used dipstick was disposed of in the clinical waste. The workstation was cleaned quickly and adequately with a detergent wipe and this was then disposed of in the clinical waste. The student transferred the urine sample into a red topped boric acid tube. The student ensured any spills were wiped and the waste was disposed of in the clinical waste.
Prepare for transport: describe how the student labels and prepares specimens for transport.	The student labelled the red topped tube with the patient's name and some other details. The minimum number of correct patient identifiers were added to the sample to ensure that the sample was accepted and processed by microbiology. The student selected the microbiology culture and sensitivity (MCS) test - limited details including name were noted. The student placed the samples into a sample bag and attached them to the form. The student placed the sample ready to go to the microbiology lab.
Recording/reporting: describe how the student updates the relevant logs.	The student completed the microbiology request form; the student checked that the patient's name, hospital number and DOB are the same on the tube as on the form. The student dated and signed the form.

Task 2: carry out point of care test (POCT)

Area/objective: the following areas/objective can cover a broad range of skills or actions which should be considered when adding notes. The text below each area/objective is an example of what should be observed and is not exhaustive.	Comments: identifying student's areas of strengths and weaknesses through the use of thorough and precise notes that differentiate between a range of students' practical skills are required. This will be used to support accurate and consistent allocation of marks once all evidence has been generated.
Hand hygiene: describe how well the student prepares for and maintains hand hygiene to include techniques and any risks to hygiene.	The student washed their hands thoroughly following standard handwashing procedure, the student then dried their hands on paper towels.
Infection control: describe how well the student prepares the equipment, resources and working environment.	The student checked, cleaned and returned the equipment. The student cleaned their workstation and disposed of

	the contaminated material in the clinical waste. The student removed their PPE and disposed of it in the clinical waste. The student correctly washed and dried their hands. The student disposed of contaminated material and quickly wiped down workstation.
Preparation: describe how well the student collects appropriate equipment.	The student selected a glucose meter and some strips. They returned to select additional equipment, including quality control, record book and calibrator stick. They returned several times to select further equipment, such as the lancet, sharps bin, cotton wool and clinical waste and set up their workstation. They selected the items they need in random order. They completed and recorded the quality control check adequately to ensure the meter was in good working order. They checked the quality control results were within the acceptance limits. The order in which these tasks were performed was different to those set out in the SOP but sufficient to ensure that the meter is working correctly. The student disposed of the contaminated strips in the clinical waste, put the lancet in the sharps bin and cleaned their workstation down with detergent wipes.
PPE: describe how the student uses appropriate PPE.	The student selected the correct PPE for the task; gloves, apron and glasses in line with the current government guidelines.
Patient-centred care: describe how the student interacts with the patient, including confirming specific patient details.	The student checked patient details quickly against their records, asking them to confirm name, DOB and address. They then gave a brief explanation of what they were going to do before asking if this was ok. They did not give the patient a chance to ask questions and took a brief nod as consent to complete the procedure.
Patient comfort: describe how the student makes adjustments to ensure the patient is comfortable.	The student returned to the patient and checked that the bleeding had stopped. The student explained to the patient that they have finished doing the test and they are free to go.
POCT: describe how the student carries out the POCT.	The student selected a finger to lance and cleaned the finger adequately. They lanced the finger and squeezed the finger directly to increase the amount of blood available. They applied the strip to the meter and tested the blood, placing the meter on a flat surface whilst the test was performed. The student squeezed the patient’s finger

	inappropriately milking the site rather than allowing 20 to 30 seconds for the blood to pool and they did not appear to understand the implications of doing this. The used lancet was disposed of in the sharps bin. Once a result was generated, the student recorded it in the patient's record and disposed of the used glucose strip in the sharps bin. The student handed a clean cotton wool ball to the patient and asked them to apply pressure to stem the bleeding.
Recording/reporting: describe how the student updates the relevant logs.	The student recorded the result in the patient record as a POCT glucose test - the result and test name were clear and correct.

Examiner commentary

Task 1

The student appeared hurried throughout their preparation of the work areas. There was some adherence to other health and safety regulations. They cleaned down the area rapidly, giving just a quick wipe over of the surfaces; this could risk cross contamination if the area is not cleaned as thoroughly as it could be; however, they cleaned the area and used correct disposal methods for waste. Disposing of waste in a timely manner in future would aid in maintaining a clean working area and minimise the risk of cross contamination. Hand washing was also carried out quickly, suggesting the student may not have been fully aware of the significance of this task. Selection and application of PPE was adequate and sufficient but with lack of attention to detail.

The selection of equipment was correct, though time could be saved by pre-planning what is required. Clinical practice skills were adequate for the task but limited with little attention to detail, and demonstrated an adequate but acceptable level of understanding of the task they were performing. The student's reporting skills were acceptable but again basic in attention to detail. Overall, the test was performed to acceptable standards and the results were clinically acceptable.

The student's communication with the patient was adequate and they confirmed basic information with the patient. The patient provided the information they required to complete the test; however, for future development, especially regarding nervous patients, a more personable approach could be effective, allowing the patient an opportunity to ask questions and seek clarification. The student was able to carry out the task in an acceptable manner but with minimal attention to detail.

Task 2

The student paid some attention to the cleaning of the work surfaces and equipment. Contaminated material was disposed of in the correct disposal containers but could have been removed more quickly in order to maintain a clean working environment. PPE was applied and used correctly and was adequate for the task at hand. The student washed their hands following standard healthcare handwashing but was rather hurried, suggesting they may not be fully aware of the significance of this task.

The student's selection of equipment was correct; however, time was wasted returning for forgotten items, reducing the efficiency of their work and again the SOP was not used to maximise efficiency. Clinical practice skills were adequate for the task but limited with little attention to detail, and demonstrated an acceptable level of understanding of the task they were performing. The student's clinical skills were not as fluid as they could have been but the task was completed successfully. Their reporting skills were acceptable but again limited in attention to detail. Overall, the test was performed to an acceptable standard and the result was clinically acceptable.

The student was accurate in their communication to the patient; however, it was basic and limited, and no opportunity was given to the patient to ask questions or to seek further information about their clinical background. The student has shown acceptable level of understanding of the task with attention to detail but lacking in some aspects.

The task was completed but there was lack of attention to detail which has the potential for error and opportunities for an incorrect result were created; however, there was an acceptable likelihood that the sample result will be correct and actioned clinically in a suitable way despite the lack of attention to detail. The overall clinical outcome for the patient was acceptable and sufficient.

Overall grade descriptors

The performance outcomes form the basis of the overall grading descriptors for pass and distinction grades.

These grading descriptors have been developed to reflect the appropriate level of demand for students of other level 3 qualifications, the threshold competence requirements of the role and have been validated with employers within the sector to describe achievement appropriate to the role.

Occupational specialism overall grade descriptors

Assisting with healthcare science occupational specialism grade descriptors.

Grade
Demonstration of attainment.

Pass

The student demonstrates good knowledge and understanding of the topics and the healthcare context in which it lies.

The student demonstrates professional practice whilst carrying out tasks/activities showing respect to safety, care and confidentiality for patients, colleagues and oneself.

The student has an appreciation of action to be taken when errors occur.

The student demonstrates a good understanding of their own development with some learning through reflective practice.

The student may not always connect learning to work in practice.

Distinction

The student demonstrates excellent knowledge and understanding of the topics and appreciation of the healthcare context in which it lies.

The student demonstrates excellent understanding of professional practice whilst carrying out tasks/activities applying them in the healthcare context.

The student shows respect for safety, care and confidentiality for patients, colleagues and oneself.

The student fully acknowledges when errors occur and the reporting process.

The student demonstrates a good insight to their own development, demonstrating significant learning through reflective practice.

The student draws on reflective practice and relates their development and learning to work in practice.

Document information

The T Level Technical Qualification is a qualification approved and managed by the Institute for Apprenticeships and Technical Education.

Owner: Head of Assessment Design

Change History Record

Version	Description of change	Approval	Date of Issue
v1.0	Published final version.		June 2021
v1.1	NCFE rebrand		September 2021