T Level Technical Qualification in Healthcare Science

Occupational specialism assessment (OSA)

Assisting with Healthcare Science

Assignment 4

Mark scheme

v1.1: Additional sample material
21 November 2023
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Contents

About this document

This mark scheme has been written by the assessment writer and refined, alongside the relevant questions, by a panel of subject experts through the external assessment writing process and at standardisation meetings.

The purpose of this mark scheme is to give you:

- examples and criteria of the types of response expected from a student
- information on how individual marks are to be awarded
- the allocated performance outcomes (POs) and total marks for each question

Marking guidelines

General guidelines

You must apply the following marking guidelines to all marking undertaken throughout the extended written response assessment. This is to ensure fairness to all students, who must receive the same treatment. You must mark the first student in exactly the same way as you mark the last.

The mark scheme must be referred to throughout the marking period and applied consistently. Do not change your approach to marking once you have been standardised.

Reward students positively giving credit for what content they have included within their extended written response, rather than what they might have omitted.

Utilise the whole mark range and always award full marks when the response merits them.

Be prepared to award 0 marks if the student's response has no creditworthy material.

Do not credit irrelevant material that does not answer the question, no matter how impressive the response might be.

If you are in any doubt about the application of the mark scheme, you must consult with your team leader or the chief examiner.

Guidelines for using extended response marking grids

Extended response marking grids have been designed to award a student's response holistically and should follow a best-fit approach. The grids are broken down into bands, with each band having an associated descriptor indicating the performance at that band. You should determine the band before determining the mark.

When determining a band, you should use a bottom-up approach. If the response meets all the descriptors in the lowest band, you should move to the next one, and so on, until the response matches the band descriptor. Remember to look at the overall quality of the response and reward students positively, rather than focussing on small omissions. If the response covers aspects at different levels, you should use a best-fit approach at this stage and use the available marks within the band to credit the response appropriately.

When determining a mark, your decision should be based on the quality of the response in relation to the descriptors. You must also consider the relative weightings of the assessment objectives (AOs), so as not to over/under credit a response. Standardisation materials, marked by the chief examiner, will help you with determining a mark. You will be able to use exemplar student responses to compare to live responses, to decide if it is the same, better or worse.

You are reminded that the indicative content provided under the marking grid is there as a guide, and therefore you must credit any other suitable responses a student may produce. It is not a requirement either, that students must cover all the indicative content to be awarded full marks.

Extended written assessment

This assessment requires students to complete the following tasks:

Extended written task 1: maintenance of complex medical equipment

Extended written task 2: testing equipment calibration

Extended written task 3: escalation of issues related to equipment

Extended written task 4: research and innovation

	Extended written task 1	Extended written task 2	Extended written task 3	Extended written task 4	Total marks	% weightings
Performance outcome 1	20	8	16	6	50	62.5%
Performance outcome 2	0	4	4	0	8	10%
Performance outcome 3	0	8	0	14	22	27.5%
Totals	**20**	**20**	**20**	**20**	**80**	**100%**

Total duration: 2 hours

Extended written task 1: maintenance of complex medical equipment

Scenario

You are working as a healthcare science assistant (HCSA) within the medical physics and clinical engineering department.

Your role is to support the healthcare scientists / clinical scientists whilst they perform routine maintenance and checks on diagnostic ultrasound. The ultrasound machine maintenance is performed by an external engineering contractor. Your team are responsible for daily routine checks of the ultrasound machine and must ensure they follow all health and safety associated with it.

Task

Discuss the importance of adhering to an ultrasound machine maintenance schedule. You should consider how medical ultrasound operates when being used on patients and the risks associated with both patients and clinical staff working in this environment when maintenance schedules are not maintained.

Give some examples of how regular maintenance of complex medical equipment can limit risk. Consider the frequency of maintenance and the elements of the equipment requiring checks as well as how you would react to an issue or concern.

(20 marks)

Band	Mark	Descriptor
		The student's response
5	17–20	Shows a **full and comprehensive** understanding of the importance of equipment maintenance with an excellent ability to consider both the potential direct and indirect risks to the patient and operator associated with the use of the device, including **highly relevant** and well explained examples of how regular maintenance can limit risks. Shows an **excellent** understanding of the underlying principles of the operation of the device (system) and a thorough knowledge of the different parts of the system that need to be included in the maintenance checks. Shows an **excellent** understanding of how legislation and regulations support patients and healthcare staff safety through device maintenance requirements. It also shows a **comprehensive** understanding of what the regulations expect of healthcare professionals, in relation to adhering to maintenance schedules of complex medical systems. Is **fully** relevant to the task and is structured in a way that addresses the specific scenario extremely well.
5	13–16	Shows a **well-developed** understanding of the importance of equipment maintenance with a **very good** level of consideration of both the potential direct and indirect risks to the patient and operator associated with the use of the device, including relevant examples of how regular maintenance can limit risks. Shows **very good** understanding of the underlying principles of the operation of the device (system) and a **very good** level of knowledge of the different parts of the system that would need to be included in the maintenance checks. Shows **very good** understanding of how the regulations support patients and healthcare staff safety through device maintenance requirements. It also shows **very good** understanding of what the regulations expect of healthcare professionals, in relation to adhering to maintenance schedules of complex medical systems. Is **highly** relevant to the task and is structured in a way that addresses the specific scenario to a degree that shows **very good** understanding.

Band	Mark	Descriptor
		The student's response
3	9–12	Shows a **developed** understanding of the importance of equipment maintenance with a **good** consideration of both the potential direct and indirect risks to the patient and operator associated with the use of the device, including examples of how regular maintenance can limit risks. Shows a **good** understanding of the underlying principles of the operation of the device (system) and a **good** level of knowledge of different parts of the system that would be included in the maintenance checks. Shows a **good** understanding of how the regulations support patients and healthcare staff safety through device maintenance requirements. It also shows a **good** understanding of what the regulations expect of healthcare professionals, in relation to adhering to maintenance schedules of complex medical systems. Is **clearly** relevant to the task and is structured in a way that addresses the specific scenario to a degree that shows **good** understanding.
2	5–8	Shows a **reasonable** understanding of equipment maintenance with **adequate** consideration of both the potential direct and indirect risks to the patient and operator associated with the use of the device, including at least one example of how regular maintenance can limit risks. Shows a **reasonable** understanding of the underlying principles of the operation of the device (system) and a **reasonable** level of knowledge of different parts of the system that would be included in the maintenance checks. Shows a **reasonable** understanding of how the regulations support patients and healthcare staff safety through device maintenance requirements. It also shows a **reasonable** understanding of what the regulations expect of healthcare professionals, in relation to adhering to maintenance schedules of complex medical systems. Is **mostly** relevant to the task and is structured in a way that addresses the specific scenario to a degree that shows **reasonable** understanding.

Band	Mark	Descriptor
		The student's response
1	1–4	Shows a **basic** understanding of equipment maintenance with **minimal** consideration of both the potential direct and indirect risks to the patient and operator associated with the use of the device and **no**, **or poor**, examples of how regular maintenance can limit risks. Shows a **basic** understanding of the underlying principles of the operation of the device (system) and a **basic** level of knowledge of different parts of the system that would be included in the maintenance checks. Shows a **basic** understanding of how the regulations support patients and healthcare staff safety through device maintenance requirements. It also shows a **basic** understanding of what the regulations expect of healthcare professionals, in relation to adhering to maintenance schedules of complex medical systems. Contains **some** relevance to the task and is structured in a way that addresses the specific scenario to a degree that shows limited understanding.
0	**0**	No creditworthy material.

Indicative content

- consideration of the direct risk of no maintenance to the patient's health when using the ultrasound machine (such as, machine being unsteady, cables or probe sheaths that are damaged, poor infection control with probe incorrectly sanitised between patients)
- consideration of the indirect risk of no maintenance to the patient's health when using the ultrasound machine (such as, misdiagnosis due to poor resolution/missing image, artefacts incorrectly identified as tissue)
- elements of the medical system that require routine inspection and servicing:
  - hardware
  - mechanical checks
  - electrical checks
  - software

  - network compatibility/inoperability
- reasons behind the legal requirement for employers to ensure robust maintenance process of complex medical systems are put in place to guarantee patient and healthcare staff safety
- patient and staff health and safety
- regulatory requirement for performance checks on medical devices, including user checks
- frequency of routine checks (daily/weekly/annually)
- requirement to report any damage or faults of equipment to the relevant team
- requirement to report missed maintenance checks

Extended written task 2: testing equipment calibration

Scenario

You work with a biomedical scientist (BMS) in the biochemistry laboratory that works closely with the urology department laboratory in the testing of urine samples. One of the tests is a pH test using a pH meter for the diagnosis and assessment of urinary conditions, such as kidney stones and other kidney-related conditions. The biochemistry department is responsible for the calibration of this equipment.

Produce a report outlining the calibration process of the pH meter. In this report you should include the actions to be taken as a result of the calibration and the reasons why these actions would be taken.

Task

Analyse the importance of calibrating a pH meter appropriately.

In your answer you should use your knowledge to discuss the steps in calibrating a pH meter. You should also discuss the need for calibration in the laboratory, the need for timely calibration of equipment and the consequences that could occur when calibration is not completed appropriately.

(20 marks)

Band	Mark	Descriptor
		The student's response
5	17–20	Shows an **excellent** understanding of the calibration process used on a pH meter, including the steps of the process and the role safety and personal protection equipment (PPE) has within the calibration of equipment. Shows a **fully comprehensive** appreciation for the need to calibrate equipment accurately, timely and according to the standard operating procedure (SOP). Shows an **excellent** understanding of why calibration is necessary with equipment and why individuals must follow the SOP to complete this to ensure continued accuracy of the equipment being used in diagnosis. It also shows an **excellent** and **accurate** understanding of why calibration of equipment is necessary, and an **excellent** level of understanding of what timely calibration is, and its importance. Shows an **excellent and convincing appreciation** of the consequences that occur when calibration does not happen appropriately. It also shows an excellent understanding of the need for timely calibration and accurate calibration, according to the SOP. Is **fully relevant** to the task and is structured in a way that addresses the specific scenario to a degree that shows **excellent** understanding.
4	13–16	Shows a **very good** understanding of the calibration process used on a pH meter, including the steps of the process and the role safety and PPE has within the calibration of equipment. Shows a **very good** appreciation for the need to calibrate equipment accurately, timely and according to the SOP. Shows a **very good** understanding of why calibration is necessary with equipment and why individuals must follow the SOP to complete this to ensure continued accuracy of the equipment being used in diagnosis. It also shows a **very good** understanding of why calibration of equipment is necessary, and understanding of what timely calibration is, and its importance. Shows a **very good appreciation** of the consequences that occur when calibration does not happen appropriately. It also shows a **very good** understanding of the need for timely calibration and accurate calibration, according to the SOP. Is **highly relevant** to the task and is structured in a way that addresses the specific scenario to a degree that shows **very good** understanding.

Band	Mark	Descriptor
		The student's response
3	9–12	Shows a **good** understanding of the calibration process used on a pH meter, including the steps of the process and the role safety and PPE has within the calibration of equipment. Shows a **good** appreciation for the need to calibrate equipment accurately, timely and according to the SOP. Shows a **good** understanding of why calibration is necessary with equipment and why individuals must follow the SOP to complete this to ensure continued accuracy of the equipment being used in diagnosis. It also shows a **good** understanding of why calibration of equipment is necessary, and understanding of what timely calibration is, and its importance. Shows a **good appreciation** of the consequences that occur when calibration does not happen appropriately. It also shows a **good** understanding of the need for timely calibration and accurate calibration, according to the SOP. Is **clearly relevant** to the task and is structured in a way that addresses the specific scenario to a degree that shows **good** understanding.
2	5–8	Shows a **reasonable** understanding of the calibration process used on a pH meter, including the steps of the process and the role safety and PPE has within the calibration of equipment. Shows a **reasonable** appreciation for the need to calibrate equipment accurately, timely and according to the SOP. Shows a **reasonable** understanding of why calibration is necessary with equipment and why individuals must follow the SOP to complete this to ensure continued accuracy of the equipment being used in diagnosis. It also shows a **reasonable** understanding of why calibration of equipment is necessary, and understanding of what timely calibration is, and its importance. Shows a **reasonable appreciation** of the consequences that occur when calibration does not happen appropriately. It also shows a **reasonable** understanding of the need for timely calibration and accurate calibration, according to the SOP. Is **mostly relevant** to the task and is structured in a way that addresses the specific scenario to a degree that shows **reasonable** understanding.

Band	Mark	Descriptor
		The student's response
1	1–4	Shows a **limited** understanding of the calibration process used on a pH meter, including the steps of the process and the role safety and PPE has within the calibration of equipment. Shows a **limited** appreciation for the need to calibrate equipment accurately, timely and according to the SOP. Shows a **limited** understanding of why calibration is necessary with equipment and why individuals must follow the SOP to complete this to ensure continued accuracy of the equipment being used in diagnosis. It also shows a **limited** understanding of why calibration of equipment is necessary, and understanding of what timely calibration is, and its importance. Shows a **limited appreciation** of the consequences that occur when calibration does not happen appropriately. It also shows a **limited** understanding of the need for timely calibration and accurate calibration, according to the SOP. Has **some relevance** to the task and is structured in a way that addresses the specific scenario to a degree that shows **limited** understanding.
0	**0**	No creditworthy material.

Indicative content

Calibration of a pH meter:

- correct PPE used (for example, gloves, goggles, protective clothing/lab coat, close-toed shoes)
- correct cleaning of work surface to avoid cross-contamination
- checking machine/probe for damage or faults (for example, crack/chip within probe, need for battery change, wire replacement)
- production of pH buffers 4, 7 (others could be outlined such as, basic control at pH9/pH10)
- following the SOP to ensure accuracy
- correctly adjusting the pH meter when using the buffers (for example, when using buffer 4, adjust the pH meter to read this as pH4)

- correct use of SOP to reduce cross-contamination (for example, cleaning probe between samples with distilled water)
- replacing the cap/storage bottle ensuring a sample of pH3 potassium chloride solution (KCl) is used for storage to prolong probe life

Recording calibration results:

- correctly recording datum from calibration
- recording results in the correct format dependant on the hospital SOP (for example, logbook or a spreadsheet available to staff)
- notes of maintenance checks and checks for faults to be recorded as well

Need for calibration:

- to ensure accuracy and precision of equipment
- ensure equipment works correctly and performs accurately
- prolonging lifecycle of equipment

Timely calibration:

- student discusses timely calibration of equipment following SOP
- calibration to be done according to SOP
- annual calibration on most equipment regardless of SOP calibration
- understanding when to calibrate and using expertise (discuss with BMS)

Consequences of no calibration:

- student shows they understand the need for calibration and can analyse this
- not following SOP
- loss of consistency within laboratory
- lack of safety for individuals and colleagues
- chance of cross-contamination
- lifecycle of equipment reduced and increased costs
- incorrect results obtained

- incorrect diagnosis for patient whose sample was tested
- incorrect treatment options outlined to patient

Extended written task 3: escalation of issues related to equipment

Scenario

You are a healthcare science assistant (HCSA) working on point of care testing. Your team are working within a cancer ward collecting urine samples from all patients currently staying overnight.

Your colleagues bring you the samples they collect, and your role is to organise them according to their labels. You need to check that the samples are accurately labelled, meet labelling requirements and show patient details and the testing required.

One of the samples that arrives to you for labelling shows evidence of needing further investigation within a clinical laboratory. This is because the sample has an unexpected colour and appears to be cloudy. However, the sample is in the incorrect container and does not meet the standard expected for labelling within the hospital.

Task

Discuss the steps taken to escalate this issue.

In your answer you should discuss what you would do with the sample, and what you would do to escalate this issue.

(20 marks)

Band	Mark	Descriptor
		The student's response
5	17–20	Shows an **excellent** understanding of factors and situations that should be escalated to senior colleagues in relation to an issue with a collected sample from a patient, with an **excellent** consideration of the role of the HCSA. Shows an **excellent** understanding of the role of an HCSA and the scope of the role with handling and taking of samples. It also shows excellent consideration of the correct labelling procedures and the need to label samples with identified issues. Shows an **excellent** consideration of information that should be communicated when reporting an issue/emergency. Shows they can provide **excellent** recommendations of immediate safety actions to protect people in this environment. Is **fully** relevant to the task and is structured in a way that addresses the specific scenario to a degree that shows **excellent** understanding.
4	13–16	Shows a **very good** understanding of factors and situations that should be escalated to senior colleagues in relation to an issue with a collected sample from a patient, with a **very good** consideration of the role of the HCSA. Shows a **very good** understanding of the role of an HCSA and the scope of the role with handling and taking of samples. It also shows very good consideration of the correct labelling procedures and the need to label samples with identified issues. Shows a **very good** consideration of information that should be communicated when reporting an issue/emergency. Shows they can provide **highly** refined recommendations of immediate safety actions to protect people in this environment. Is **highly** relevant to the task and is structured in a way that addresses the specific scenario to a degree that shows **very good** understanding.

Band	Mark	Descriptor
		The student's response
3	9–12	Shows a **good** understanding of factors and situations that should be escalated to senior colleagues in relation to an issue with a collected sample from a patient, with a **good** consideration of the role of the HCSA. Shows a **good** understanding of the role of an HCSA and the scope of the role with handling and taking of samples. It also shows good consideration of the correct labelling procedures and the need to label samples with identified issues. Shows **good** consideration of information that should be communicated when reporting an issue/emergency. Shows they can provide **good** recommendations of immediate safety actions to protect people in this environment. Is **clearly** relevant to the task and is structured in a way that addresses the specific scenario to a degree that shows **good** understanding.
2	5–8	Shows a **reasonable** understanding of factors and situations that should be escalated to senior colleagues in relation to an issue with a collected sample from a patient, with a **reasonable** consideration of the role of the HCSA. Shows a **reasonable** understanding of the role of an HCSA and the scope of the role with handling and taking of samples. It also shows reasonable consideration of the correct labelling procedures and the need to label samples with identified issues. Shows a **reasonable** consideration of information that should be communicated when reporting an issue/emergency. Shows they can provide **reasonable** recommendations of immediate safety actions to protect people in this environment. Is **mostly** relevant to the task and is structured in a way that addresses the specific scenario to a **reasonable** degree.

Band	Mark	Descriptor
		The student's response
1	1–4	Shows a **limited** understanding of factors and situations that should be escalated to senior colleagues in relation to an issue with a collected sample from a patient, with a **limited** consideration of the role of the HCSA. Shows a **limited** understanding of the role of an HCSA and the scope of the role with handling and taking of samples. It also shows limited consideration of the correct labelling procedures and the need to label samples with identified issues. Shows a **limited** consideration of information that should be communicated when reporting an issue/emergency. Shows they can provide **limited** recommendations of immediate safety actions to protect people in this environment. Contains **limited** relevance to the task and is structured in a way that has **very limited** relevance to the details in the brief and insert.
0	0	No creditworthy material.

Indicative content

Consideration of own role and the need to escalate:

- the student shows understanding of the role of an HCSA with handling samples and reporting to further healthcare professionals
- they show understanding of the scope of an HCSA and when practice falls outside of their scope
- consideration for following the SOP correctly, carrying out infection control
- recognising the need to escalate an issue when the issue is a patient specimen
- consideration for the test procedure (for example, checking of testing equipment for fault or damage)

Knowledge of the correct labelling process of the sample:

- label contains accurate details
- patient name

- date of birth (DOB)
- NHS/hospital details
- date and time of collection
- label completed so the sample can be securely passed onto a clinical colleague if necessary

The steps to be taken next with the sample:

- show an understanding of:
  - the need to seek support/advice from a senior colleague and when to seek immediate support for a patient referral
  - consideration for the sample being of a high-risk nature (for example, potential unknown infection)
  - checking the patient notes for other symptoms of communicable disease
  - the impact disease might have on a collected sample
  - how to correctly dispose of the sample when directed to
- consideration of patient taken into account for contraindications and consideration for status of the sample (for example, dehydration, patient age, health status)
- consideration of whether the sample was taken correctly and, therefore, fit for purpose
- being able to recommend immediate actions that are within an HCSA's scope of practice especially relating to health and safety and risk management
- discussion of the need to adhere to regulatory framework following health and safety and SOP framework to collect and manage samples

Extended written task 4: research and innovation

Scenario

You are a healthcare science assistant (HCSA) working in a team on preventative research. Your team have undertaken the first stages of a research study on the effectiveness of 2 different hand soaps (A and B). The study's aim is to identify which hand soap most effectively reduces infections so it can be used on all wards within the hospital. Both samples of hand soap are authorised and branded to use within hospitals and have been tested to reduce levels of Methicillin-resistant Staphylococcus aureus (MRSA).

The results of the first stages of the research are shown below.

Figure 1: Results table to show a comparison between the MRSA cases in the wards with Hand soap A and Hand soap B.

Hand soap A		
Ward Number	Number of patients admitted (over 3 days)	Number of MRSA cases that arose (within the same 3 days)
1	28	6
2	4	0
3	162	14

Hand soap B		
Ward	Number of patients admitted (over 3 days)	Number of MRSA cases that arose (within the same 3 days)
1	62	2
2	18	1
3	14	0

Two members of staff working on these wards have given statements about the research.

Staff member 1 – ward 2 using hand soap A, and wards 2 and 3 using hand soap B at different times during the research and is involved with the research project: 'I feel the project is working as I have seen barely any patients presenting MRSA symptoms since we started using the hand soaps on the wards.'

Staff member 2 – ward 3 using hand soap A only: 'My colleagues on my ward have said that they are not sure if the hand soap being used is any better than the one we used before the research project was started.'

Task

Produce a report of the research so far, to present to the nurse who is leading this piece of research. This report should summarise the initial findings and evaluate and validate the study that has been completed in this first stage. In this validation and evaluation, you should consider the data provided from the first stage of the research and the statements of the 2 nursing staff that have also been provided. This summary of the research is being given to the research project's lead nurse. The project will need re-approval from the Health Research Authority (HRA) partly based on the validation and evaluation you provide in your report.

In this report you should consider:

- what information is required and is currently not provided, such as:
  - staff involvement
  - patient involvement
  - key data of the research project
- whether ethical issues have been addressed
- the language you use to summarise the report
- the formatting and sections to include in the report (for example, title, purpose)
- validation of the research based on the provided data
- evaluation of the research so far
- the staff statements and whether they provide fact, opinion or bias
- re-approval of research from the HRA

(20 marks)

Band	Mark	Descriptor
		The student's response
5	17–20	Shows an **excellent** understanding of the ethical principles of research that demonstrates the student's **excellent** level of familiarity with the HRA approval process and the factors to consider to achieve this approval. Shows an **excellent** ability to outline the research aim and findings. Shows an **excellent** consideration of the language appropriate to the audience and the report formatting. Is **fully relevant** to the task and is structured in a way that addresses the specific scenario to an excellent degree.
4	13–16	Shows a **very good** understanding of the ethical principles of research that demonstrates the student's high level of familiarity with the HRA approval process and the factors to consider to achieve this approval. Shows a **very good** ability to outline the research aim and findings. Shows **very good** consideration of the language appropriate to the audience and the report formatting. Is **highly** relevant to the task and is structured in a way that addresses the specific scenario to a degree that shows very good understanding.
3	9–12	Shows a **good** understanding of the ethical principles of research that demonstrates the student's good level of familiarity with the HRA approval process and the factors to consider to achieve this approval. Shows a **good** ability to outline the research aim and findings. Shows **good** consideration of the language appropriate to the audience and the report formatting. Is **clearly** relevant to the task and is structured in a way that addresses the specific scenario to a degree that shows good understanding.

Band	Mark	Descriptor
		The student's response
2	5–8	Shows a **reasonable** understanding of the ethical principles of research that demonstrates the student's **reasonable** level of familiarity with the HRA approval process and the factors to consider to achieve this approval. Shows a **reasonable** ability to outline the research aim and findings. Shows **reasonable** consideration of the language appropriate to the audience and the report formatting. Is **mostly** relevant to the task and is structured in a way that addresses the specific scenario to a reasonable degree.
1	1–4	Shows **limited** understanding of the ethical principles of research that demonstrates the student's limited level of familiarity with the HRA approval process and the factors to consider to achieve this approval. Shows a **limited** ability to outline the research aim and findings. Shows **limited** consideration of the language appropriate to the audience and the report formatting. Contains **minimal** relevance to the task and is structured in a way that addresses the specific scenario to a limited degree.
0	0	No creditworthy material.

Indicative content

Consideration of:

- ensuring confidentiality of patient and staff:
  - no patient details used in results/data
  - no staff details used in results/data
  - no ward specific details used in the data

- safeguards participants:
    - both hand soaps are safe and reduce the risk of MRSA as they are authorised and tested
- protects participant confidentiality
- General Data Protection Regulations (GDPR) 2018
- formatting to cover language specific to an audience comprised of senior clinical colleagues
- avoidance of jargon

Look for information covered to include:

- title of the study
- invitation to the study and summary of the study's aim

Discussion of the role of the HRA to include:

- how good clinical practice is withheld
- what risks there are to staff/patient and how have these been minimised
- what are possible benefits of the study?
- the validity of the study and its results/data
- evaluate the research thus far for areas to improve
- evaluation and validation are clearly specified/separated as distinct discussions (for example, evaluation is providing judgement on the research for positive and negative points, whereas validation is confirming what has already been stated or inferred)
- the need for these to gain approval from the HRA

Evaluation/validation of the research and staff statements could include:

- both hand soaps are viable at reducing MRSA due to previous manufacturer testing
- specific data on days/times is not provided
- number of washes is not being controlled
- the data sets given are not thorough – only providing simple patient data and MRSA data over a 3-day period
- data sets are not labelled consistently or lack uniformity

- ward size/patient number or occupancy is not being controlled or considered
- no correlation necessarily between soap use and patient number with MRSA
- no consideration for MRSA carriers that are asymptomatic or patients who display symptoms after 3 days
- no additional guidance or information given with the soaps use or constituents
- no previous data to refer to as a control – how can the hand soap use be validated?

The student can use a format of their choice but should cover the points above.

Document information

Owner: Head of Assessment Design

Change History Record

Version	Description of change	Approval	Date of issue
v1.0	Additional sample material		01 September 2023
v1.1	Sample added as a watermark	November 2023	21 November 2023