Acute Medicine Ultrasound and Echo (AMUSE) Accreditation Programme Overview

Introduction:

The Acute Medicine Ultrasound and Echo (AMUSE) is a point of care ultrasound and echo accreditation programme under Acute and Critical Care Physicians' Foundation Bangladesh (ACCPFB).

The accreditation aims to provide a streamlined pathway to accreditation in the following:

Point of Care Echocardiogram (AMUSE Heart)
Point of Care Lung Ultrasound (AMUSE Lung)
Point of Care Abdomen Ultrasound (AMUSE Abdomen)
Point of Care Vascular Ultrasound (AMUSE Vascular)

This document outlines the curriculum for the above and the accreditation pathway in greater details.

AMUSE Heart:

The curriculum will aim to cover the following:

Basic Principles behind Point of Care Echocardiogram
How to do a point of care echocardiogram assessment
Left Ventricular Size
Left Ventricular Gross Function
Right Ventricular Size
Right Ventricular Gross Function
Size and Effect of Pericardial Effusion including any signs of Pericardial Tamponade
Inferior Vena Cava Size and its variation with respiration
Size of Internal Jugular vein and its variation with respiration

Through accreditation in AMUSE Heart curriculum, a healthcare provider will be able to demonstrate proficiency in the following:

i. Technique of doing point of care echo

ii. What constitutes ‘normal’ findings associated with point of care echo
iii. How to identify the following pathological conditions on point of care echo: Left Ventricular impairment, Left Ventricular dilation, Right Ventricular impairment, Right Ventricular dilation, Pericardial effusion and signs suggestive of Pericardial Tamponade, Severe Hypovolemia, signs of raised central venous pressures
Iv. How to inform clinical practice via findings obtained from point of care echo

Accreditation pathway in AMUSE Heart:

Accreditation in AMUSE Heart involves the following mandatory components, which must be done in the exact order as mentioned below:

A. Attending an official ACCFB AMUSE course
B. Registering for the AMUSE Heart Programme with ACCPFB. This will cost 1000 BD Taka.
C. Doing 40 scans with or without direct supervision, all signed off by an official AMUSE supervisor. If not done without direct supervision, clips must be saved and reviewed at a later time by an official AMUSE supervisor.
Maximum 10 scans per supervisor is allowed
Scans can only count in the logbook after the candidate has registered for the AMUSE Heart Programme
D. Completing a Logbook for the 40 scans and having that signed by an official AMUSE Supervisor
Maximum 10 scans per supervisor is allowed
Scans can only count in the logbook after the candidate has registered for the AMUSE Heart Programme
E. Sitting for a final AMUSE Heart Completion of Training Assessment (CTA) under an official AMUSE Supervisor, passing the assessment and signing off the CTA report sheet for AMUSE Heart
F. Paying for the AMUSE Heart Accreditation worth 1000 BD Taka
G. Submitting the following documents to the AMUSE working group of ACCPFB at amuse.accpfb@gmail.com for review:
Proof of attending an AMUSE Course
All signed off AMUSE Heart reporting sheets
The Signed off Logbook for AMUSE heart
Signed off CTA Report Sheet
Proof of payment for AMUSE heart programme registration (B) and AMUSE heart accreditation (F)

If successful in all of the above, a healthcare provider will be provided with official AMUSE Heart accreditation by ACCPFB.

AMUSE Lungs

The curriculum will aim to cover the following:

Basic Principles behind Point of Care Lung Ultrasound
How to do a point of care lung ultrasound assessment
Presence/Absence of lung sliding over the six lung zones
Presence/Absence of A lines over the six lung zones
Presence/Absence of B lines over the six lung zones
Presence/Absence of consolidation/Collapse over the six lung zones
Presence/Absence of effusion over the six lung zones
Any site to safely tap for pleural effusion

Through accreditation in AMUSE Lung curriculum, a healthcare provider will be able to demonstrate proficiency in the following:

i. Technique of doing point of care lung ultrasound
ii. What constitutes 'normal' findings associated with point of care lung ultrasound
iii. How to identify the following pathological conditions on point of care lung ultrasound: pneumothorax, pulmonary oedema, pleural effusion, collapse, and consolidation
iv. How to develop the skills and knowledge to inform clinical practice via findings obtained from point of care lung ultrasound.

<u>Accreditation pathway in AMUSE Lung:</u>

Accreditation in AMUSE Lung involves the following mandatory components, which must be done in the exact order as described:

A. Attending an official ACCFB AMUSE course
B. Registering for the AMUSE Lungs Programme with ACCPFB. This will cost 1000 BD Taka.
C. Doing 40 scans done with or without direct supervision, but then if done without direct supervision, then reviewed at a later time with an official AMUSE Supervisor
Maximum 10 scans per supervisor is allowed
Scans can only count in the logbook after the candidate has registered for the AMUSE Heart Programme
D. Completing a Logbook for the 40 scans and having that signed by an official AMUSE Supervisor
Maximum 10 scans per supervisor is allowed
Scans can only count in the logbook after the candidate has registered for the AMUSE Heart Programme

E. Sitting for a final AMUSE Lungs Completion of Training Assessment (CTA) under an official AMUSE Supervisor, passing the assessment and signing off the CTA report sheet for AMUSE Heart
F. Paying for the AMUSE Lungs Accreditation worth 1000 BD Taka
G. Submitting the following documents to the AMUSE working group of ACCPFB at amuse.accpfb@gmail.com for review:
Proof of attending an AMUSE Course
All signed off AMUSE Lungs reporting sheets
The Signed off Logbook for AMUSE Lungs
Signed off CTA Report Sheet
Proof of payment for AMUSE Lungs programme registration (B) and AMUSE Lungs accreditation (F)

If successful in all of the above, a healthcare provider will be provided with official AMUSE Lung accreditation by ACCPFB.

AMUSE Abdomen

The curriculum will aim to cover the following:

Basic Principles behind Point of Care Abdomen Ultrasound
How to do a point of care Abdomen ultrasound assessment
Presence/Absence of intra abdominal free fluid including Ascites
Presence/Absence of Any hepatomegaly
Any obvious liver parenchymal abnormality needing further formal Ultrasound characterisation?
Presence/Absence of Any splenomegaly
Any site safe for ascitic fluid sampling
Presence/Absence of hydronephrosis
Grade of any hydronephrosis if present
Presence/Absence of Distended Bladder

Through accreditation in AMUSE Abdomen curriculum, a healthcare provider will be able to demonstrate proficiency in the following:

i. Technique of doing point of care abdomen ultrasound
ii. What constitutes ‘normal findings’ associated with point of care abdomen ultrasound
iii. How to identify the following pathological conditions on point of care abdomen ultrasound: Intraabdominal free fluid (e.g. ascites), hepatomegaly, splenomegaly, hydronephrosis and its grade, distended bladder.
iv. How to develop the skills and knowledge to inform clinical practice via findings obtained from

point of care abdomen ultrasound.

Accreditation pathway in AMUSE Abdomen:

Accreditation in AMUSE Abdomen involves the following mandatory components, which must be done in the exact order as described:

A. Attending an official ACCFB AMUSE course
B. Registering for the AMUSE Abdomen Programme with ACCPFB. This will cost 1000 BD Taka.
C. Doing 40 scans done with or without direct supervision, but then if done without direct supervision, then reviewed at any time with an official AMUSE mentor
Maximum 10 scans per supervisor is allowed
Scans can only count in the logbook after the candidate has registered for the AMUSE Heart Programme
D. Completing a Logbook for the 40 scans and having that signed by an official AMUSE Supervisor
Maximum 10 scans per supervisor is allowed
Scans can only count in the logbook after the candidate has registered for the AMUSE Heart Programme
E. Sitting for a final AMUSE Abdomen Completion of Training Assessment (CTA) under an official AMUSE Supervisor, passing the assessment and signing off the CTA report sheet for AMUSE Abdomen
F. Paying for the AMUSE Abdomen Accreditation worth 1000 BD Taka
G. Submitting the following documents to the AMUSE working group of ACCPFB at amuse.accpfb@gmail.com for review:
Proof of attending an AMUSE Course
All signed off AMUSE Abdomen reporting sheets
The Signed off Logbook for AMUSE Abdomen
Signed off CTA Report Sheet
Proof of payment for AMUSE Abdomen programme registration (B) and AMUSE Abdomen accreditation (F)

If successful in all of the above, a healthcare provider will be provided with official AMUSE Abdomen accreditation by ACCPFB.

AMUSE Vascular:

The curriculum will aim to cover the following:

Basic Principles behind Point of Care Vascular Ultrasound
How to do a point of care Vascular ultrasound assessment of the lower limbs
How to obtain Ultrasound guided vascular access
Presence (but not absence) of DVT

Through accreditation in AMUSE Vascular curriculum, a healthcare provider will be able to demonstrate proficiency in the following:

i. Technique of doing point of care leg vessel ultrasound
ii. What constitutes 'normal' findings associated with point of care leg vessel ultrasound
iii. How to 'rule in' DVT (but not rule out)
iv. How to inform clinical practice via findings on point of care leg vessel ultrasound
v. USG guided peripheral vascular access

Accreditation pathway in AMUSE Vascular:

Accreditation in AMUSE Abdomen involves the following mandatory components, which must be done in the exact order as described:

A. Attending an official ACCFB AMUSE course
B. Registering for the AMUSE Vascular Programme with ACCPFB. This will cost 1000 BD Taka.
C. Doing 20 scans done with or without direct supervision, but then if done without direct supervision, then reviewed at any time with an official AMUSE mentor
Maximum 10 scans per supervisor is allowed
Scans can only count in the logbook after the candidate has registered for the AMUSE Heart Programme
D. Doing 5 ultrasound guided vascular access (central or peripheral) - this can be self-reported
E. Completing a Logbook for the 20 scans for DVT and 5 USG guided vascular access and having that signed by an official AMUSE Supervisor
Maximum 10 scans per supervisor is allowed
Scans can only count in the logbook after the candidate has registered for the AMUSE Heart Programme
F. Paying for the AMUSE Vascular Accreditation worth 1000 BD Taka
G. Sitting for a final AMUSE DVT Completion of Training Assessment (CTA) under an official AMUSE Supervisor, passing the assessment and signing off the CTA report sheet for AMUSE Heart
F. Submitting the following documents to the AMUSE working group of ACCPFB at amuse.accpfb@gmail.com for review:
Proof of attending an AMUSE Course

All signed off AMUSE Heart reporting sheets
The Signed off Logbook for AMUSE DVT and Vascular Access
Signed off CTA Report Sheet
Proof of payment for AMUSE Abdomen programme registration (B) and AMUSE Abdomen accreditation (F)

If successful in all of the above, a healthcare provider will be provided with official AMUSE Vascular accreditation by ACCPFB.

Summary of the Accreditation Programme:

a. Candidates can choose to try to get accredited in any of the individual AMUSE modules (heart/lungs/abdomen/vascular) or can try to get accredited in all of the modules together. If they successfully get accredited in all AMUSE modules, they will get complete AMUSE accreditation certification.
b. The first step in the accreditation process in any module is to attend a complete AMUSE course. List of AMUSE courses can be found in ACCPFB's official website www.ACCPFB.com
c. After the above, candidates must identify one or more AMUSE supervisors who can supervise their scans. The list of AMUSE mentors will be found in the ACCPFB official website: www.ACCPFB.com
d. For each module, candidates will have to register for that module with ACCPFB by paying 1000 BD Taka, have to perform a certain number of scans (only those scans done after registration will count), as specified for that module, and get these scans signed off by their AMUSE supervisors and also get a logbook signed off for all these scans for each module (i.e. one logbook for one module).
e. After all the scans are signed off for a module and the logbook completed and signed off, candidates need to sit for a final accreditation exam under an AMUSE supervisor (Completion of Training Assessment, CTA).
f. Upon passing the CTA, candidates need to have their CTA report signed off, then need to pay an accreditation fee for that module (1000 BD taka), and then submit a record of their signed off scans, evidenced through a logbook, as well as the CTA report and their AMUSE course certificate to ACCPFB for review.
h. If all of the above is done in the appropriate manner, ACCPFB will then issue a certificate of accreditation in that particular module.

For candidates who complete accreditation in all modules, they can then apply for complete AMUSE certification by ACCPFB.

For Complete AMUSE certification, candidates must submit the following to the ACCPFB committee:
AMUSE certificates for all 4 modules
A Training Record Summary (TRS) report, signed off by an AMUSE Supervisor

Maintenance of Accreditation:

AMUSE accreditation once obtained must be renewed every 3 years otherwise will be come invalid. Hence all AMUSE accreditation must be renewed every 3 years by submitting an official logbook which contains at least 10 scans in each of the AMUSE modules per year.

Official AMUSE Course:

As explained above in the accreditation pathways of the different AMUSE modules, a prerequisite for accreditation would be attending an official ACCPFB AMUSE course.

Any organisation can run an official ACCPFB AMUSE course as long as they fulfill the following prerequisites:

A. Strictly stick to the AMUSE curriculum described above and course format depicted below
B. All the mentors teaching in that course must be official AMUSE mentors, registered in the ACCPFB database
C. At least one mentor in that course must be from ACCPFB council
D. The organisation running the AMUSE course must have applied for and be successful in getting ACCPFB approval in running the AMUSE course

The format of the official AMUSE course must meet all of the below criteria:

A. Have theoretical training on the following:
POCUS heart
POCUS lungs
POCUS abdomen
POCUS DVT Leg

B. Have practical training on the following:
Ultrasound and echocardiogram machine use demonstration
POCUS heart
POCUS lungs
POCUS abdomen
POCUS DVT Leg
POCUS guided vascular access

AMUSE Supervisor:

As described above, an important part of the AMUSE accreditation is doing scans under supervision of official AMUSE Supervisors.

Upon inception, a certain number of individuals will be designated as the ‘Founder AMUSE

Supervisor' status by the ACCPFB council, recognising their already existing expertise in point of care ultrasound and echocardiogram.

For future mentors, they would have to go through a mentor accreditation pathway as mentioned below.

Eligibility Criteria for AMUSE Supervisor:
In order to be an AMUSE Supervisor, a healthcare provider must meet the following criteria:
A. Attended the AMUSE course
B. Achieved the AMUSE accreditation certification
C. Be an ACCPFB member
D. Evidence of ongoing practice in AMUSE (through a logbook)
E. A satisfactory statement of interest as deemed so by the ACCPFB committee

At the onset of the launch of the AMUSE accreditation curriculum, the ACCPFB council will grant 'Founder AMUSE Supervisor status' to a few healthcare providers recognising their prior extensive skillset in POCUS.

Call for Acute Medicine and Ultraosound Echo (AMUSE) Supervisor:

With the launch of AMUSE accreditation programme nationally, ACCPFB is now calling for interested and eligible clinicians to join the pool of recognised AMUSE Supervisors.
This document lists the eligibility criteria and responsibilities of AMUSE supervisors and also details how one can apply to become an AMUSE supervisor. This document also outlines the advantages of becoming an AMUSE supervisor.

Eligibility Criteria:

In order to be an AMUSE mentor, a healthcare provider must meet the following criteria:
A. Attended the AMUSE course
B. Achieved the AMUSE accreditation certification
C. Be an ACCPFB Member
D. Evidence of ongoing practice in AMUSE (through a logbook)
E. A satisfactory statement of interest as deemed so by the ACCPFB committee

At the onset of the launch of the AMUSE accreditation curriculum, the ACCPFB council will grant 'Founder AMUSE supervisor status' to a few healthcare providers recognising their prior extensive skillset in POCUS.

Responsibilities of AMUSE Supervisor:

a. Be very well acquainted with the AMUSE curriculum
b. Train interested AMUSE candidates on point of care ultrasound and echo on the model defined in the AMUSE accreditation curriculum
c. If possible, do directly supervised scans with interested AMUSE candidates, give feedback on these and sign these scans off.
d. Review and sign off scans done by AMUSE candidates themselves and give feedback on these
e. Take steps to arrange AMUSE courses in their own workplace
f. Attend AMUSE courses to refresh their knowledge and skills every 3 years
g. Submit a report to ACCPFB council every 3 years reporting their activities as an AMUSE mentor every 3 years

Advantages of becoming an AMUSE Supervisor:

A. Receive a formal certificate from ACCPFB recognising their status as a recognised AMUSE mentor
B. Serves as a privileged recognition
C. Ability to improve their knowledge and skills on POCUS through regularly teaching others
D. Access to ACCPFB's exclusive AMUSE resources
E. Ability to attend AMUSE courses for free

How to Apply to Become an AMUSE Supervisor:

If a healthcare provider believes they meet the eligibility criteria, they will have to fill up the following form below:

They will also have to send the following documents via email to ACCPFB amuse.accpfb@gmail.com
A.Their Name, Job Role, BMDC Registration Number
B. Evidence of attending an AMUSE course and their AMUSE accreditation certification
C. Evidence of their regular practice and teaching in ultrasound/echo (for e.g. through a logbook)
D. Evidence of their ACCPFB membership
E. Statement of Interest

The above will be reviewed by the ACCPFB committee who will give a final verdict on the application outcome.

If successful, an AMUSE Supervisor will receive a certificate from ACCPFB formally recognising their status as an AMUSE Supervisor

Appendix 1:

AMUSE Heart Reporting Sheet

Patient & Scan Details

Patient's clinical details: _____

Date of Scan: _____

Hospital / Unit: _____

Operator: _____

Supervisor / Reviewer: _____

Indication for Scan: _____

Clinical Context

Heart Rate: _____ bpm

Blood Pressure: _____

Respiratory Status: _____

Inotropes / Vasopressors: _____

ECG Available: Yes / No

Views Obtained

PLAX: Good / Acceptable / Poor

PSAX: Good / Acceptable / Poor

Apical 4-Chamber: Good / Acceptable / Poor

Subcostal / IVC: Good / Acceptable / Poor

Other Views: _____

Left Ventricle

LV Size: Normal / Dilated / Unable to assess

LV Gross Function: Normal / Impaired / Severely Impaired/Unable to assess

MAPSE (if measured): _____ cm

Right Ventricle

RV Size: Normal / Enlarged / Unable to assess

RV Gross Function: Normal / Impaired / Severely Impaired/Unable to assess

TAPSE (if measured): _____ cm

Pericardial Assessment

Pericardial Effusion: Yes / No / UA

Effusion Size: Small / Moderate / Large/NA

Signs of Tamponade: Yes / No / UA

IVC & Jugular Veins

IVC Diameter (end-expiration): _____ cm

IVC Respiratory Variation: Collapsing / Fixed / Plethoric

IJV size: Distended/Normal/Collapsed

IJV Respiratory Variation: Present / Absent / U/A

Summary & Impression

Summary of Findings:

Clinical Impression:

Limitations

Actions / Recommendations

Signatures

Operator Signature: _____ Date: _____

Supervisor Signature: _____ Date: _____

Appendix 2:

AMUSE Lung Reporting Sheet

Patient & Scan Details

Patient's Clinical Details: _____

Date of Scan: _____

Hospital / Unit: _____

Operator: _____

Supervisor / Reviewer: _____

Indication for Scan: _____

Clinical Context

Respiratory Rate: _____ /min

Oxygen Requirement: _____

Ventilatory Support (if any): _____

Clinical Question: _____

Lung Zones Assessed (6-zone model)

Right Anterior: ☐ Assessed Image quality: Good / Acceptable / Poor

Right Lateral: ☐ Assessed Image quality: Good / Acceptable / Poor

Right Posterior: ☐ Assessed Image quality: Good / Acceptable / Poor

Left Anterior: ☐ Assessed Image quality: Good / Acceptable / Poor

Left Lateral: ☐ Assessed Image quality: Good / Acceptable / Poor

Left Posterior: ☐ Assessed Image quality: Good / Acceptable / Poor

Tabulation of Findings:

Zone	Lung Sliding?	A lines	B lines	Collapse/Consolidation	Pleural Effusion	Other Findings
Right Upper anterior						
Left Upper Anterior						
Right Lower Anterior						
Left Lower Anterior						
Right Lower zone (Right PLAPS)						
Left Lower Zone Left PLAPS)						

Any site for Pleural Effusion Sampling Found? (If so, please mention where):

Summary & Interpretation

Overall Impression:

Likely Diagnosis:

Limitations

Actions / Recommendations

Signatures

Operator Signature: _____ Date: _____

Supervisor Signature: _____ Date: _____

Appendix 3:

AMUSE Abdominal Ultrasound Reporting Sheet

Patient & Scan Details

Patient's Clinical Details: _____

Date of Scan: _____

Hospital / Unit: _____

Operator: _____

Supervisor / Reviewer: _____

Indication for Scan: _____

Clinical Context

Presenting Complaint: _____

Known Liver Disease: Yes / No

Known Renal Disease: Yes / No

Urinary Symptoms: _____

Free Fluid / Ascites

Intra-abdominal free fluid present: Yes / No / U/A

If present, distribution:

☐ Between liver and diaphragm ☐ Between spleen and diaphragm ☐ Hepatorenal pouch

☐ Splenorenal pouch ☐ Around the Bladder

Estimated volume: Small / Moderate / Large

Liver Assessment

Hepatomegaly present: Yes / No / U/A

Any gross liver parenchymal abnormality needing further formal USG characterisation?

Comments: _____

Spleen Assessment

Splenomegaly present: Yes / No / U/A

Comments: _____

Ascitic Fluid Sampling Safety

Safe site for ascitic tap identified: Yes / No / N/A

Suggested site (Quadrant / ICS / line): _____

Depth of fluid: _____ cm

Underlying bowel visualised: Yes / No

Renal Assessment

Right Kidney – Hydronephrosis: Present / Absent / U/A

If present, grade: Mild / Moderate / Severe

Left Kidney – Hydronephrosis: Present / Absent / U/A

If present, grade: Mild / Moderate / Severe

Bladder Assessment

Bladder visualised: Yes / No / U/A

Distended bladder present: Yes / No / U/A

Summary & Interpretation

Overall Impression:

_____

Likely Clinical Correlation:

_____

Limitations

_____

Actions / Recommendations

_____

Signatures

Operator Signature: _____ Date: _____

Supervisor Signature: _____ Date: _____

Appendix 4:

AMUSE Vascular (DVT) Ultrasound Reporting Sheet

Patient & Scan Details

Patient's Clinical Details: _____

Date of Scan: _____

Hospital / Unit: _____

Operator: _____

Supervisor / Reviewer: _____

Indication for Scan (e.g. suspected DVT): _____

Clinical Context

Side Examined: Right / Left / Bilateral

Presenting Symptoms (pain, swelling, redness):

Veins Assessed – Compression Ultrasound

Tick compressibility at each site

Common Femoral Vein (CFV)

Compressible: Yes / No / U/A

Intraluminal thrombus visualised: Yes / No / U/A

Femoral Vein (Proximal / Mid / Distal)

Proximal Femoral Vein compressible: Yes / No / U/A
Intraluminal thrombus visualised: Yes / No / U/A

Mid Femoral Vein compressible: Yes / No / U/A
Intraluminal thrombus visualised: Yes / No / U/A

Distal Femoral Vein compressible: Yes / No / U/A
Intraluminal thrombus visualised: Yes / No / U/A

Popliteal Vein

Compressible: Yes / No / U/A
Intraluminal thrombus visualised: Yes / No / U/A

Extension into trifurcation assessed: Yes / No / U/A
Intraluminal thrombus visualised: Yes / No / U/A

Additional Findings

Overall Scan Result

Proximal DVT identified: Yes / No / Indeterminate

If yes, location: _____

Scan Adequacy & Limitations

All required segments visualised: Yes / No

If no, specify limitations (body habitus, pain, dressings, etc.):

Clinical Interpretation & Plan

Summary Interpretation:

Recommended Action (e.g. anticoagulation, formal duplex, repeat scan):

Signatures

Operator Signature: _____ Date: _____

Supervisor Signature: _____ Date: _____

Appendix 5:

ACCPFB
Acute & Critical Care Physicians Foundation Bangladesh

AMUSE Heart Logbook:

Scan Number	Scan Identifier	Mentor Name	Mentor Signature

Scan Number	Scan identifier	Mentor Name	Mentor Signature

Scan Number	Scan Identifier	Mentor Name	Mentor Signature

Appendix 6:

AMUSE Lungs Logbook:

Scan Number	Scan Identifier	Mentor Name	Mentor Signature

Scan Number	Scan identifier	Mentor Name	Mentor Signature

Scan Number	Scan Identifier	Mentor Name	Mentor Signature

Appendix 7:

AMUSE Abdomen Logbook

Scan Number	Scan Identifier	Mentor Name	Mentor Signature

Scan Number	Scan identifier	Mentor Name	Mentor Signature

Scan Number	Scan Identifier	Mentor Name	Mentor Signature

Appendix 8:

AMUSE Vascular Logbook (DVT scans and Vascular Access):

Scan Number	Scan Identifier	Mentor Name	Mentor Signature

Scan Number	Scan identifier	Mentor Name	Mentor Signature

Scan Number	Scan Identifier	Mentor Name	Mentor Signature

Appendix 9:

AMUSE Heart Module – Completion of Training Assessment (CTA)

Trainee Details

Trainee Name	
BMDC Number	
Current Role / Grade	
Organisation	

Supervisor Details

Supervisor Name	
Please Tick To Confirm that you are an Official AMUSE Supervisor	
Current Role/Grade	
Organisation	
Email	

ACT Assessment Details

Date of ACT assessment: _____

Location: _____

1. Professionalism, Safety & Governance

- Patient dignity, consent and professionalism
- Understanding of indications & limitations
- Works within AMUSE Heart scope
- Escalation to formal echocardiography
- Infection control & machine safety

2. Machine Use & Image Optimisation

- Correct probe selection (phased array)
- Patient and machine positioning
- Optimisation of depth, gain, focus
- Stable probe control and orientation

3. Image Acquisition – Core Cardiac Views

- Parasternal Long Axis (PLAX)
- Parasternal Short Axis (PSAX)
- Apical Four Chamber (A4C)
- Subcostal Four Chamber
- Subcostal IVC

4. Interpretation & Clinical Integration

- Global LV systolic function
- Gross LV size
- Gross RV size and function

• Pericardial effusion

• Tamponade features (within scope)

• Volume status using IVC

• Clinical integration

5. Reporting, Documentation & Image Storage

• Image and cine loop storage

• Correct labelling

• Structured AMUSE Heart report

• Communicating to the patient

6. Logbook & Evidence Review

• Required number of scans completed

• Range of pathology demonstrated

• Logbook satisfactory

7. Theoretical Knowledge

• Attendance at an AMUSE Course and completion of the pre course resource materials

• Confirmation that the candidate demonstrates the required theoretical knowledge on AMUSE Heart

8. Overall Outcome

Outcome:

☐ Competent – Module completed

☐ Further evidence required

☐ Deferred

Assessor Declaration

Assessor signature:

Date:

Candidate Declaration

Candidate signature:

Date:

Appendix 10:

AMUSE Lungs – Completion of Training Assessment (CTA)

This Completion of Training Assessment (CTA) confirms that the trainee has demonstrated the required knowledge, skills, and professional behaviours to safely perform and interpret focused lung ultrasound in acute medicine practice, in line with the AMUSE (Acute Medicine Ultrasound and Echo) Lungs curriculum.

Trainee Details

Trainee Name	
BMDC Number	
Current Role / Grade	
Organisation	

Supervisor Details

Supervisor Name	
Please Tick To Confirm that you are an Official AMUSE Supervisor	
Current Role/Grade	
Organisation	
Email	

ACT Assessment Details

Date of ACT assessment: _____

Location: _____

1. Logbook Review (Mandatory)

The trainee has completed the minimum required number of lung ultrasound scans, with adequate exposure to normal anatomy and core lung pathologies.

☐ Logbook reviewed and meets AMUSE Lungs requirements

Comments: _____

2. Pre-scan Preparation and Safety

The trainee demonstrates the ability to:

☐ Confirm patient identity and obtain appropriate consent

☐ Apply infection prevention and probe hygiene measures

☐ Select appropriate probe and machine settings

☐ Position patient appropriately for lung ultrasound

3. Image Acquisition and Technique

The trainee is able to:

☐ Identify and scan standard lung zones bilaterally

☐ Optimise depth, gain, and focus for pleural imaging

☐ Demonstrate correct probe orientation and movement

☐ Acquire interpretable images consistently

4. Image Interpretation and Pathology Recognition

The trainee can correctly identify and interpret:

☐ Lung sliding (presence or absence)

☐ A-lines and B-lines

☐ Pleural effusion

☐ Lung consolidation / collapse

☐ Sonographic features suggestive of pneumothorax

5. Clinical Integration and Decision-Making

The trainee demonstrates the ability to:

☐ Integrate lung ultrasound findings with clinical assessment

☐ Recognise limitations of lung ultrasound

☐ Escalate findings appropriately and seek senior support when required

6. Professionalism and Governance

☐ Maintains patient dignity and comfort during scanning

☐ Works within scope of practice and local governance frameworks

☐ Understands image storage, documentation, and data protection principles

7. Theoretical Knowledge

• Attendance at an AMUSE Course and completion of the pre course resource materials

• Confirmation that the candidate demonstrates the required theoretical knowledge on AMUSE Lungs

8. Overall ACT Outcome

Based on the above assessment, the trainee is deemed:

☐ Competent – AMUSE Lungs ACT successfully completed

☐ Not yet competent – further training required

Areas for development (if applicable):

_____

_____

9. Signatures

Trainee name	Signature:	Date:
Assessor name:	Signature:	Date:

Appendix 11:

AMUSE – Abdomen

Completion of Training Assessment (CTA)

This Completion of Training Assessment (CTA) confirms that the trainee has met the required knowledge, practical skills, and professional standards to independently perform and interpret abdominal ultrasound within the AMUSE (Acute Medicine Ultrasound and Echo) programme.

This assessment mirrors the structure, scope, and intent of the FAMUS Abdominal/Renal ACT.

Trainee Details

Trainee Name	
BMDC Number	
Current Role / Grade	
Organisation	

Supervisor Details

Supervisor Name	
Please Tick To Confirm that you are an Official AMUSE Supervisor	
Current Role/Grade	
Organisation	
Email	

ACT Assessment Details

Date of ACT assessment: _____

Location: _____

Section 1: Pre-scan Preparation & Governance

☐ Confirms patient identity and indication
☐ Gains appropriate verbal consent
☐ Applies infection control and probe hygiene

☐ Selects appropriate probe and preset
☐ Optimises depth, gain, and image settings
☐ Recognises own limitations and escalates appropriately

Section 2: Practical Abdominal Ultrasound Skills (Observed)

The trainee performs a structured abdominal ultrasound examination:

☐ Appropriate patient positioning
☐ Systematic survey of abdomen
☐ Image acquisition of diagnostic quality
☐ Correct probe orientation and optimisation
☐ Appropriate image labelling and documentation
☐ Maintains patient comfort and dignity

Section 3: Core Abdominal & Renal Structures

☐ Free intra-abdominal fluid (including ascites)
☐ Liver – size and gross structure
☐ Spleen – size and visual assessment
☐ Right kidney visualised
☐ Left kidney visualised
☐ Bladder visualised (distended where appropriate)
☐ Liver Diaphragm Interface visualised
☐ Spleen Diaphragm Interface visualised
☐ Hepato-renal pouch visualised
☐ Spleno-renal pouch visualised

Section 4: Pathology Recognition & Interpretation

☐ Presence / absence of free fluid
☐ Hepatomegaly recognized
☐ Any gross liver parenchymal abnormality identified
☐ Splenomegaly recognised
☐ Hydronephrosis identified
☐ Hydronephrosis graded (mild / moderate / severe)
☐ Identification of safe site for ascitic fluid sampling (where appropriate)
☐ Integration of findings with clinical context

Section 5: Logbook & Experience Review

The trainee has completed the minimum required abdominal ultrasound scans as per AMUSE curriculum.

Supervisor comment on breadth and quality of experience:

Section 6: Theoretical Knowledge

☐ Understands indications and limitations of abdominal ultrasound
☐ Understands common artefacts and pitfalls
☐ Understands when alternative imaging is required
☐ Understands governance, documentation, and reporting standards

7. Theoretical Knowledge

• Attendance at an AMUSE Course and completion of the pre course resource materials

• Confirmation that the candidate demonstrates the required theoretical knowledge on AMUSE Abdomen

Section 8: Overall Supervisor Judgment

Based on the observed assessment, logbook review, and discussion:

☐ Competent for independent abdominal ultrasound practice within AMUSE

☐ Further training required (details below)

Areas for development (if any):

Final Sign-off

Supervisor Signature	
Date	
Trainee Signature	

Appendix 12:

AMUSE Vascular Module – Completion of Training Assessment (CTA)

Trainee Details

Trainee Name	
BMDC Number	
Current Role / Grade	
Organisation	

Supervisor Details

Supervisor Name	
Please Tick To Confirm that you are an Official AMUSE Supervisor	
Current Role/Grade	
Organisation	
Email	

ACT Assessment Details

Date of ACT assessment: _____

Location: _____

1. Pre-Procedure Preparation

- Professional approach and communication
- Informed consent
- Patient identity verification
- Patient & machine positioning

2. Scanning Skills & Image Acquisition

- Correct probe selection
- Optimised machine settings
- Identification of vascular anatomy
- Compression technique
- Differentiation of artery vs vein
- Identification of relevant pathology

3. Peripheral Vascular Procedure Skills (if applicable)

- Appropriate site identification
- Safe needle-to-vessel technique
- Sterility and safety
- Real-time needle visualization

4. Storage, Reporting & Interpretation

- Image and cine loop storage

• Correct labelling

• Interpretation and communication

• Recognition of limitations

• Equipment cleaning

5. Logbook Review & Evidence of Practice

• Completed supervised scans

• Adequate mentored cases

• Core pathology demonstrated

• Procedures logbook reviewed

6. Theoretical Training

☐ Attendance at an AMUSE Course and completion of the pre course resource materials
☐ Confirmation that the candidate demonstrates the required theoretical knowledge on AMUSE Heart
☐ Understands indications and limitations of lower limb DVT ultrasound
☐ Understands common artefacts and pitfalls
☐ Understands when alternative imaging is required
☐ Understands governance, documentation, and reporting standards

7. Overall Assessment & Sign-Off

Assessment outcome:

Supervisor signature:

Candidate signature:

Date:

Appendix 13:

AMUSE – Training Record Summary (TRS)

Acute Medicine Ultrasound & Echo (AMUSE)

Candidate Details

Candidate name:
Professional registration number (BMDC):
Supervisor name (PRINTED):

AMUSE Heart

Requirement	Date	Signature
Pre AMUSE Course Resources Completed		
AMUSE course attended		
Theory syllabus complete		
First scan		
Logbook completed		
CTA completed		

AMUSE Lungs

Requirement	Date	Signature
Pre AMUSE Course Resources Completed		
AMUSE Course attended		
Theory syllabus complete		
First scan		
Logbook completed		
CTA completed		

AMUSE Abdomen

Requirement	Date	Signature
Pre AMUSE Course Resources Completed		
AMUSE Course Attended		
Theory syllabus complete		
First scan		
Logbook completed		
CTA completed		

AMUSE Vascular – DVT

Requirement	Date	Signature
Pre AMUSE Course Resources Completed		
AMUSE Course Attended		
Theory syllabus complete		
First scan		
Logbook completed		
CTA completed		

AMUSE Vascular – Vascular Access

Requirement	Date	Signature
First scan		
Logbook completed		
CTA completed		

Final Programme Sign-off

Date of completion of final sign-off:

Signed (candidate): _____ Date: _____

Signed (supervisor): _____ Date: _____