

# Certification in Maternal Fetal Medicine (CMFM)



Hybrid In-Hospital Clinical Examination (IHCE)  
Mid-Trimester Ultrasound Assessment

## CANDIDATE DETAILS

Candidate Name	Hospital			Date of Examination	
Introduces self to patient and obtains relevant clinical details	1 No introduction or history	2	3 Minimal introduction and incomplete history	4	5 Complete introduction and history
Explain examination	1 Incomplete or misinformation	2	3 Explanation complete but brief	4	5 Full, succinct explanation with indication and limitations
Assess cervix and uterine contents including fetal number and amniotic fluid volume	1 Incomplete demonstration	2	3 Structures demonstrated by unsystematic approach	4	5 Systematic approach in both transverse and longitudinal planes
Assess placenta: - Location - Anatomy - Appearance	1 Incorrect demonstration	2	3 Structures demonstrated but unsystematic approach	4	5 Systematic approach in both transverse and longitudinal planes
Measure BPD	1 Incorrect plane and measurement	2	3 Hesitancy in image acquisition and calliper placement	4	5 Systematic image acquisition and measurement
Measure HC	1 Incorrect plane and measurement	2	3 Hesitancy in image acquisition and calliper placement	4	5 Systematic image acquisition and measurement
Measure AC	1 Incorrect plane and measurement	2	3 Hesitancy in image acquisition and calliper placement	4	5 Systematic image acquisition and measurement
Measure FL	1 Incorrect plane and measurement	2	3 Hesitancy in image acquisition and calliper placement	4	5 Systematic image acquisition and measurement
Measure HL	1 Incorrect plane and measurement	2	3 Hesitancy in image acquisition and calliper placement	4	5 Systematic image acquisition and measurement

<p>Assess fetal head and brain anatomy:</p> <ul style="list-style-type: none"> <li>- Cranium shape and ossification</li> <li>- Lateral ventricles</li> <li>- Choroid plexus</li> <li>- 3<sup>rd</sup> and 4<sup>th</sup> ventricle</li> <li>- Thalami</li> <li>- CSP</li> <li>- Corpus callosum</li> <li>- Cerebellum</li> <li>- Cisterna magna</li> </ul>	1 Incomplete demonstration	2	3 Structures demonstrated but unsystematic approach	4	5 Systematic approach in both transverse and longitudinal planes
<p>Measure nuchal fold, cerebellum and lateral ventricle</p>	1 Incorrect plane and measurement	2	3 Hesitancy in image acquisition and calliper placement	4	5 Systematic image acquisition and measurement
<p>Assess fetal face:</p> <ul style="list-style-type: none"> <li>- Orbits and lenses</li> <li>- Lip, nose, chin (mandible)</li> <li>- Palate (axial)</li> <li>- Profile</li> <li>- Nasal bone</li> </ul>	1 Incomplete demonstration	2	3 Structures demonstrated but unsystematic approach	4	5 Systematic approach in both transverse and longitudinal planes
<p>Measure nasal bone</p>	1 Incorrect plane and measurement	2	3 Hesitancy in image acquisition and caliper placement	4	5 Systematic image acquisition and measurement
<p>Assess fetal heart:</p> <ul style="list-style-type: none"> <li>- Rate and rhythm</li> </ul> <p>Axial views:</p> <ul style="list-style-type: none"> <li>- <u>Abdominal IVC and aorta</u></li> <li>- <u>4 chamber view</u></li> <li>- Situs</li> <li>- Size</li> <li>- Axis</li> <li>- Contractility, rate, ventricular size, morphology</li> <li>- Atrial size</li> <li>- AV valves, crux</li> <li>- Septum primum</li> <li>- Ventricular septum</li> <li>- <u>5 chamber heart</u></li> <li>- Left outflow tract</li> <li>- <u>Right outflow tract</u></li> <li>- Bifurcation of MPA</li> <li>- Cross-section aorta</li> <li>- Right atrium</li> <li>- <u>3 vessel view</u></li> <li>- PA, aorta, SVC</li> <li>- <u>"Arrow" view</u></li> <li>- Aortic arch</li> <li>- Ductus arteriosus</li> </ul>	1 Incomplete demonstration	2	3 Structures demonstrated but unsystematic approach	4	5 Systematic approach in both transverse and longitudinal planes
<p>Sagittal views:</p> <ul style="list-style-type: none"> <li>- Aortic arch and neck vessels</li> <li>- Ductal arch</li> <li>- Venous return: SVC, IVC</li> </ul>	1 Incomplete demonstration	2	3 Structures demonstrated but unsystematic approach	4	5 Systematic approach

Assess diaphragm	1 Incomplete demonstration	2	3 Structures demonstrated but unsystematic approach	4	5 Systematic approach in both transverse and longitudinal panes
Assess upper limbs: - Humerus - Radius, ulna - Hands, digits - Wrist position	1 Incomplete demonstration	2	3 Structures demonstrated but unsystematic approach	4	5 Systematic approach in both transverse and longitudinal planes
Assess fetal abdomen: - Stomach size, situs - Liver, gallbladder - Bowel loops - Kidneys (transverse and long or coronal plus a length), renal arteries - Bladder - Cord insertion, 3VC	1 Incomplete demonstration	2	3 Structured demonstrated but unsystematic approach	4	5 Systematic approach in both transverse and longitudinal planes
Assess lower limbs: - Femur - Tibia, fibula - Feet, toes - Ankles	1 Incomplete demonstration	2	3 Structures demonstrated but unsystematic approach	4	5 Systematic approach in both transverse and longitudinal planes
Assess fetal spine: - Axial views, skin integrity - Sagittal views, skin line - Coronal views	1 Incomplete demonstration	2	3 Structures demonstrated but unsystematic approach	4	5 Systematic approach in both transverse and longitudinal planes
Demonstrates the use of 3 and 4 D imaging to assist in completion of the mid trimester scan	1 Incomplete demonstration	2	3 Structures demonstrated but hesitatnt utilisation	4	5 Systematic approach with confidence in utilisation
Assess maternal anatomy	1 Incomplete demonstration	2	3 Structures demonstrated but unsystematic approach	4	5 Systematic approach in both transverse and longitudinal planes
Strategies when poor views	1 No strategies, accepting of poor views	2	3 Good strategies but poor implementation	4	5 Good strategies, well implemented
Systematic approach to examination	1 Incomplete or chaotic approach to examination	2	3 Good approach to examination, not always flexible whilst maintain systematic approach	4	5 Complete, systematic approach to examination, taking into account all factors
Counselling: explain findings to patient	1 Incomplete or misinformation	2	3 Explanation complete but brief	4	5 Full succinct explanation with limitations

**EXAMINER TO COMPLETE**

Number of criteria boxes assessed as '4' or more: .....

On examination the trainee has:

- Achieved Above MAPS
- Achieved MAPS required for this mid trimester Ultrasound Assessment.
  - o (MAPS: a minimum of 17 of the 25 criteria to be scored at '4' or higher)
- Not Achieved MAPS required for this mid trimester Ultrasound Assessment

Aspects performed well:

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Aspects to be improved:

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Duration of this examination: .....

**SIGNATURES**

Examiner Name

Qualification

Signature

Date