Introduction to the new Computer Based Test

12 November 2020

Linda Everet
Assistant Director, Professional Regulation
Housekeeping

- Everyone, except the presenters, are automatically muted
- The “raise your hand” feature will not be used today
- Use the “?” feature or speech bubble to submit any questions or comments at any time
- Audio-only participants can email questions and comments to ToC@nmc-uk.org
- We may not be able to address individual points but everything is being noted for consideration
- You can download the slides using the resource function
- The session will be recorded
<table>
<thead>
<tr>
<th>Time</th>
<th>Session Description</th>
<th>Speaker(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00 am</td>
<td>Welcome, scene setting and latest NMC updates</td>
<td>Linda Everet, Assistant Director, NMC</td>
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<tr>
<td>9:05 am</td>
<td>Structure of the CBT</td>
<td>Sarah Maughan, Director, AlphaPlus</td>
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<tr>
<td>9:15 am</td>
<td>Examples of content</td>
<td>Sarah Maughan, Director, AlphaPlus</td>
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<tr>
<td>9:35 am</td>
<td>Support Materials</td>
<td>Sarah Maughan, Director, AlphaPlus</td>
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<td>9:40 am</td>
<td>Q&amp;A session</td>
<td>Jack Bland, Senior International Registration Manager, NMC</td>
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<td></td>
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<td>Jane Greaves, Senior Lecturer, Nursing Midwifery and Health, School of</td>
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<td></td>
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<td>Health and Life Sciences, University of Northumbria</td>
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<td></td>
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<td>Linda Everet, Assistant Director, NMC</td>
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<td>Sarah Maughan, Director, AlphaPlus</td>
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<tr>
<td>9:55 am</td>
<td>Next steps and closing</td>
<td>Linda Everet, Assistant Director, NMC</td>
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</tbody>
</table>
Demand for our test of competence

- Test of competence was introduced in November 2014
- OSCE and CBT taken since we introduced the Test of competence
What we’ve been doing

• In 2018 we launched the overseas programme where we listened to your feedback, including lessons learnt from complaints and appeals
• We also set new standards for future nurses, midwives and our test needs to reflect these
• We wanted to strengthen test development and decided to split test delivery from development, and appointed AlphaPlus as our TOC design partner
• We’ve also strengthened our internal and external governance and appointed ACER as our independent quality assurance partner
• We are also in the process of inducting our new group members to join our assurance advisory group. They will be responsible for monitoring the new test in the new year
Quality
We manage projects effectively and to the highest quality, freeing up experts to concentrate on their specialism, but ensuring that activities are managed to meet expectations. This means only making promises that we know we can keep, and remembering the promises we have made to make sure we deliver.

Expertise
We ensure our teams consist of genuine sector experts with understanding in breadth and depth of both the theory and the practical complex everyday challenges faced by education providers.

Development
We are committed to the improvement of our staff, both to promote the long-term development of our business and as an end in itself: we believe in the value of education for all.

Partnership
We work in partnership with our clients. This is more than a cliché for us: we care about the services we provide and the impact they have on learners. Experience has shown us that the best impact our work can have is when it is undertaken alongside our clients so we make partnership a key feature of our project approach and management method.

Educationalists
We are educationalists with a strong commitment to improving teaching, learning and assessment, based on intellectual integrity, sound evidence and innovative approaches.

NMC Test of Competence: The computer based test
AlphaPlus Consultancy Ltd.
Structure
CBT overview

Two parts awarded separately – both must be passed

Part A - Numeracy
- 15 questions – one mark each
- 30 minutes
- Answers:
  - Are one number answers
  - Some will require units
- A calculator can be used if desired
- Applied numeracy set in nursing/midwifery/nursing associate context

Part B – Clinical
- 100 questions – one mark each
- 2 hours 30 minutes
- Answers are one of four multiple choice options
- Cover full range of Standards and all levels of Bloom’s taxonomy
- All nursing tests are 90% generic and 10% field specific
The development process

NMC OSCE Development Process Flow

Authors + QA

- Authoring and QA
- Amendments

CAG

- CAG review
- Amendments

Trialling

- Trials and analysis
- Amendments

NMC QA Partner

- Amendments
- Amendments
- Amendments
- Amendments
- Review / Sign-off

CWG

- Planning for introduction
- Delivery

Delivery Partners

- Review
- Delivery
Test Design

• Multiple test forms:
  • For first use and resits
  • Additional forms for test security
• Overlapping questions between tests for a single nursing field or midwifery test forms
• Overlapping generic questions for different fields of nursing
• Variable pass mark based on test usage and professional judgement
## Content and Skills Coverage - Numeracy

<table>
<thead>
<tr>
<th>Activity</th>
<th>Apply and Analyse</th>
<th>Number of Questions</th>
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</thead>
<tbody>
<tr>
<td>Measuring the correct dose</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Metric units</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Oral medications</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Injections</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Intra-venous infusions</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Fluid balance</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
<td><strong>15</strong></td>
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</table>
## Content and Skills Coverage - Clinical

<table>
<thead>
<tr>
<th>Platform</th>
<th>Remember and understand</th>
<th>Apply and analyse</th>
<th>Evaluate and create</th>
<th>Number of Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Platform 1: Being an accountable professional</td>
<td>6</td>
<td>6</td>
<td>5</td>
<td>17</td>
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<tr>
<td>Platform 2: Promoting health and preventing ill health</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>10</td>
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<tr>
<td>Platform 3: Assessing needs and planning care</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>Platform 4: Providing and evaluating care</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>15</td>
</tr>
<tr>
<td>Platform 5: Leading and managing nursing care and working in teams</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>Platform 6: Improving safety and quality of care</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>Platform 7: Coordinating care</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>Annex A</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>7</td>
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<tr>
<td>Annex B</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>38</strong></td>
<td><strong>32</strong></td>
<td><strong>30</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>
Content
Example Part A: numeracy question – Measuring the correct dose

What is the volume that has been drawn up into the syringe?

Answer = ___6.5 mL_______
Example Part A: numeracy question – metric units

A patient has been prescribed 0.6 g of ibuprofen.

What is the dose in mg?

Answer = ____600 ________ mg
Example Part A: numeracy question – oral medications

A patient has been prescribed 1 g of carbocisteine solution.

What volume should be administered?

___25 mL____
Example Part A: numeracy question - injections

A patient has been prescribed 4 mg of diamorphine hydrochloride.

What volume should be drawn up for the injection?

____0.8 mL____
Example Part A: numeracy question – intravenous infusions

<table>
<thead>
<tr>
<th>Date</th>
<th>Route</th>
<th>Infusion fluid</th>
<th>Vol. (mL)</th>
<th>Duration</th>
<th>Time start</th>
<th>Prescriber’s signature</th>
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<tbody>
<tr>
<td>26/05/20</td>
<td>I.V.</td>
<td>Blood</td>
<td>450</td>
<td>3 hours</td>
<td>0800</td>
<td>D. McCormick</td>
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</table>

At what rate would you set the infusion pump to run?

Answer = _________150_________mL per hour
Example Part A: numeracy question – fluid balance chart

Complete the following fluid balance chart to calculate if the patient has gained or lost fluid over a 24-hour period.

If the patient has gained fluid you should include ‘+’ before your balance answer, e.g. +100 mL. If the patient has lost fluid you should include ‘-’ before your balance answer, e.g. -100 mL.

Patient’s name: Jack Jones  Hospital number: 3861050  Chart number: 1
IV Fluid type and rate: 500 mL 0.9% sodium chloride 125 mLs/hour
Date: 26/03/20  Ward: G7

<table>
<thead>
<tr>
<th>Time</th>
<th>Input</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Oral (mL)</td>
<td>Intravenous infusion (mL/hour)</td>
</tr>
<tr>
<td>0100</td>
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<td>0200</td>
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<td>0300</td>
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<td>1100</td>
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</tbody>
</table>
Q10. A baby has been prescribed ceftazidime at a dose of 25 mg/kg. The baby weighs 8.4 kg.

What volume should be drawn up for the injection?

___ 2.1 mL ____
Example Part B: clinical question – generic (1)

Which of the following professions are specifically trained in smoking cessation?

Choose the correct answer.

A  Dietician
B  Chiropractor
C  Hypnotherapist
D  Pharmacist

• Primary Platform Statement = 2.8
• Field = generic
• Bloom’s level = Remember and understand
Example Part B: clinical question – generic (2)

Patients with chronic pain conditions are screened for which of the following?

Choose the correct answer.

A  Lower mood and depression
B  Coronary heart disease
C  Schizophrenia
D  Bowel cancer

• Primary Platform Statement = 3.4
• Field = generic
• Bloom’s level = Apply and analyse
Example Part B: clinical question – generic (3)

You are caring for a patient who has a stoma formation and they are ready for discharge. What advice do you give the patient?

Choose the correct answer.

A  Keep the area moist when changing the bag, advocating the use of oils to help the surrounding skin

B  Wait until the bag is full before changing it and clean with soapy water

C  Use perfumed soaps to aid odour control

D  Clean with water, trying to keep faecal fluid away from skin to minimise irritation

• Primary Platform Statement = 4.6
• Field = generic
• Bloom’s level = Evaluate and create
Example Part B: clinical question – adult

What medication is given to someone to prevent the long term disabling effects of an acute ischaemic stroke?

Choose the correct answer.

A  Antibiotics
B  Paracetamol
C  Clexane
D  Thrombolysis

• Primary Platform Statement = 4.5
• Field = adult
• Bloom’s level = Apply and analyse
Example Part B: clinical question – children’s

A Paediatric Early Warning Score of 8 receives what clinical response?
Choose the correct answer.
A  No escalation required
B  2 hourly observations
C  Immediate escalation to a senior clinician
D  4 hourly observations

- Primary Platform Statement = 4.10
- Field = children’s
- Bloom’s level = Apply and analyse
Example Part B: clinical question – mental health

A mental health nurse is supporting a patient at risk of suicide. When is the risk?
Choose the correct answer.

A  In the transition from continuous to general observation
B  At busy periods on the ward
C  After assessment by the consultant psychiatrist
D  Prior to discharge

• Primary Platform Statement = 3.9
• Field = children’s
• Bloom’s level = Apply and analyse
Example Part B: clinical question – learning disabilities

A patient is admitted to a unit for learning disability care and the health section of their hospital passport is blank. From where is this information obtained?

Choose the correct answer.

A  Next of kin/carer
B  Summary care records
C  The patient's GP
D  NEWS2 form

- Primary Platform Statement = 1.11
- Field = learning disabilities
- Bloom’s level = Remember and understand
Support materials
CBT-specific Support Materials

- CBT practice tests:
  - 1 clinical test form for each field of nursing – 50 marks (generic questions overlapping)
  - 3 adult nursing numeracy practice tests
  - 1 numeracy practice test for each of the other fields of nursing
  - 1 midwifery clinical practice test – 50 marks
  - 1 midwifery numeracy test

- CBT candidate handbook
Q&A session
Next steps
Thank you