

CLINICAL PORTFOLIO (LOG BOOK)

BSc (Hons) Healthcare Science
Practitioner Training Programme
(PTP)

Tuesday 31st October 2023

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Learning Objectives for Session



Understanding requirements of a WBA and Training Portfolio



Sharing Best Practice



Overview of years 2 and 3 and requirements



What markers are looking for

What is your Role in Portfolio Completion

- To support trainees getting in the areas required for their evidence
- Be an advisor it not your portfolio
- To ensure you complete assessments/competency documentation correctly
- Understand difference between learning outcomes competencies DOP's and Observed clinical events
- Ensure you are carrying out competencies at the right level

Clinical Placement Portfolio



Work based
observation
sessions



Evidence based
practice



Evidence of
teaching sessions
(CPD etc)



Work based practice



Reflective practice



Patient feedback
forms

Students will be required to submit the portfolio at the end of the work-based placement in years 3 but after the first part of placement in year 2



The Training Portfolio

Logbook/portfolio submission

- Second years will submit log-book in the spring, between placements. Not expected to be fully complete.
- Second and third year portfolio is submitted together in the summer semester
- Apprentices may submit earlier than full time students due to the End Point Assessment (EPA)
- Evidence for this can be collected anytime over the 2 years, however: There are specifics that are need completing for year 2 submission

Cardiac





Year 2 Cardiac Requirements for Submission

- 30 ECG's with proforma's completed for a range of ECG's
- 14 manual or automatic BP's
- 20 Ambulatory hook up
- 20 Ambulatory analysis with reports by trainee not work place

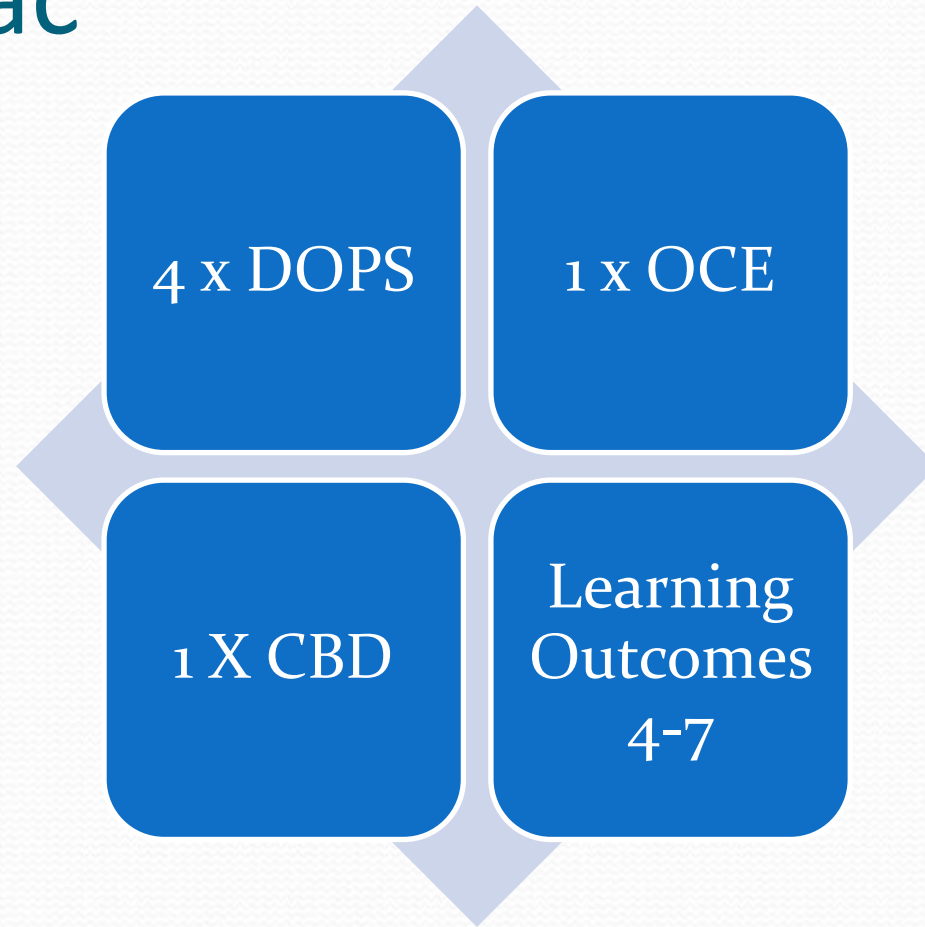


Cardiac ECG Evidence

- 5 Sinus Rhythm
- 10 Bundle Branch Blocks
- 10 Atrial Fibrillation/Flutter
- 5 Hypertrophies
- 5 Myocardial Infarction
- 5 Heart Blocks
- 10 Miscellaneous – must not include any from the above categories

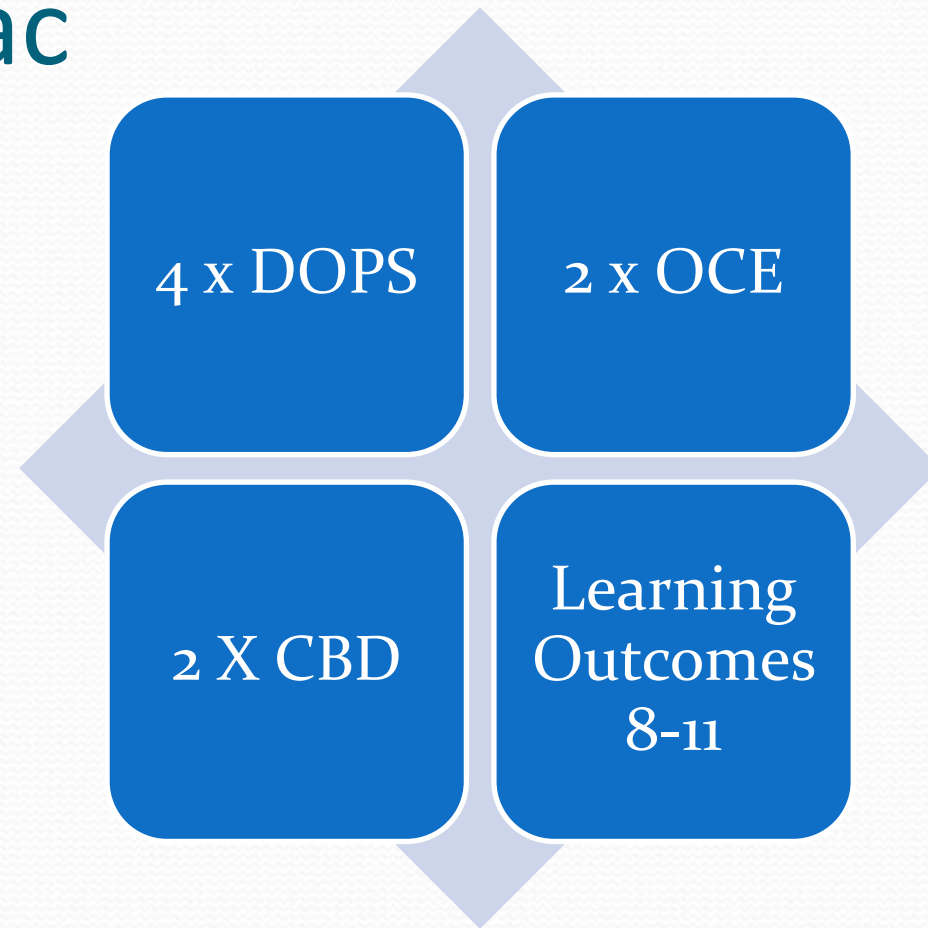


Year 2 Cardiac





Year 3 Cardiac





Cardiac Year 3 evidence

Cardiology

30 assist in Exercise tolerance testing

- Minimum of 15 exercise stress tests. Can make up the remaining evidence with stress echocardiography

20 Cardiac Catheterisation Procedures (angiograms)

20 Pacemaker implants

- At least 10 procedures must be new implants u
Remaining evidence can be battery changes, ICD or CRT

20 Percutaneous Coronary Intervention (angioplasty)



Respiratory and Sleep



Year 2 Respiratory



4 DOPS
(2 SLEEP, 2 RESP.)



1 CBD
(SLEEP OR RESP)



1 OCE
(SLEEP OR RESP)



6 LEARNING
OUTCOMES



Year 2 Respiratory evidence

Respiratory and Sleep

7 Dynamic Lung volumes

7 Lung volumes

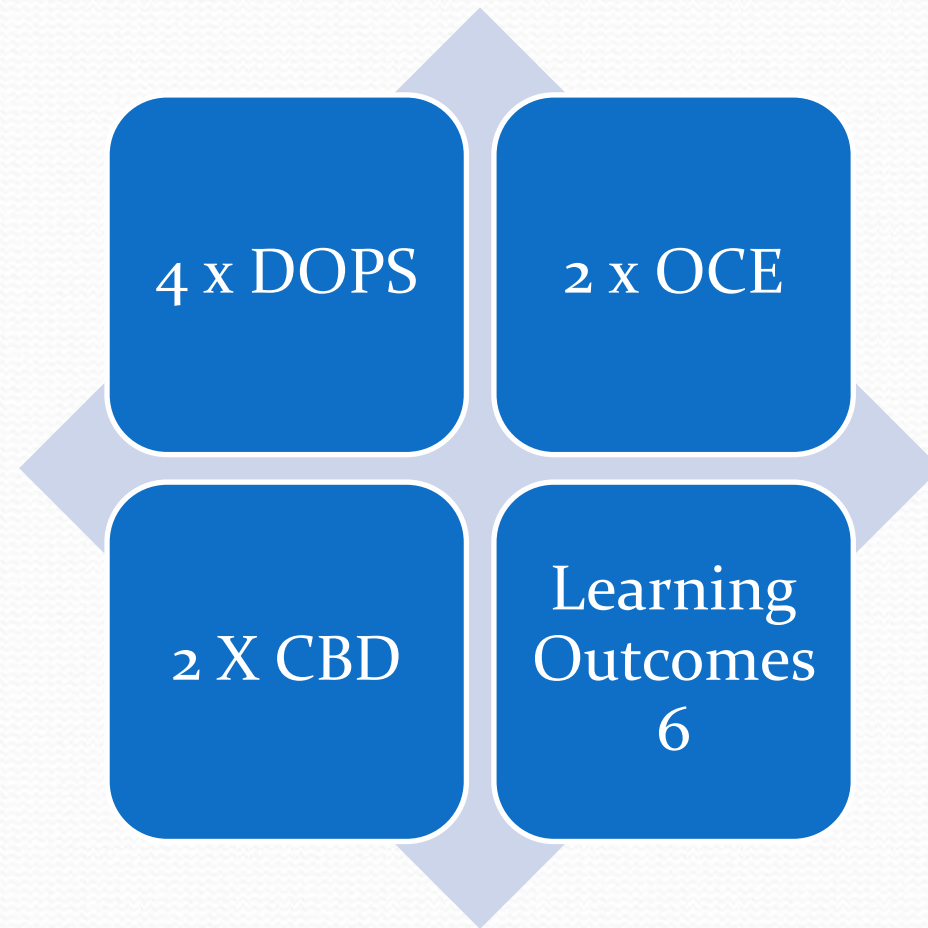
7 Gas transfer

7 Bronchodilator therapy

20 Calibration and QC data

10 Overnight oximetry – from any limited channel study.

Year 3 Respiratory



Year 3 Respiratory Evidence



Respiratory and Sleep

3 Dynamic lung volumes

3 Lung Volumes

3 Gas transfer

3 Bronchodilator therapy

10 Respiratory sleep studies

10 CPAP therapy

- Prepare, issue retrieve and store data



The Walton Centre
NHS Foundation Trust



Neuroscience



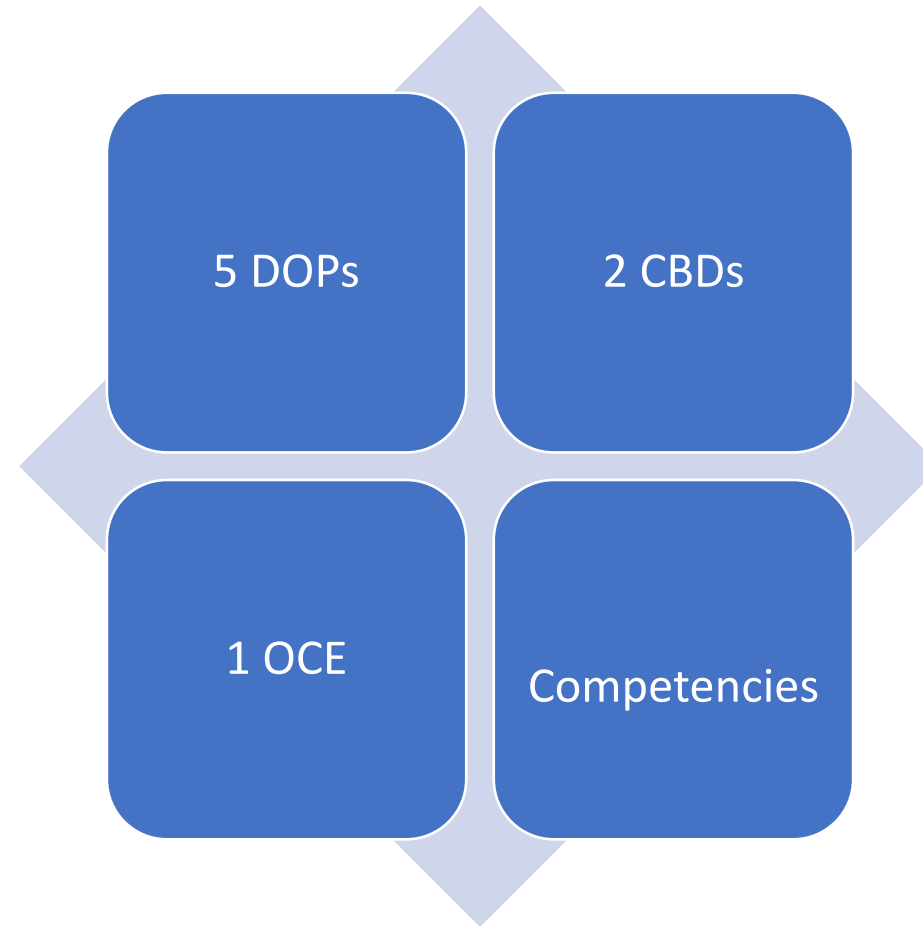
Year 2 Neuro evidence collection

Minimum evidence collection

Diagnostic Area	Patient numbers required*. (Summarise in matrix)
Routine EEG	40
Assist Sleep deprived EEG	5
Assist Portable EEG	5
VEP	10



Year 2 – Neuro assessments





Year 2 Neuro

DOP 1	DOP 2	DOP 3	DOP 4	DOP 5
<p>Accurately measure a patients head, using 10-20 system, for an adult EEG recording and apply electrodes – accurate to +/- 0.5cm</p>	<p>Accurately measure the head for an adult VEP recording – accurate to +/- 0.5cm</p>	<p>Take clinical history for a routine EEG outpatient and perform the resting EEG recording under supervision</p>	<p>Explain, obtain consent and perform hyperventilation and photic stimulation activation procedures for a routine EEG</p>	<p>Set up and calibrate EEG equipment using external generator (this should include a range of frequency response curves, CMRR, noise and linearity)</p>



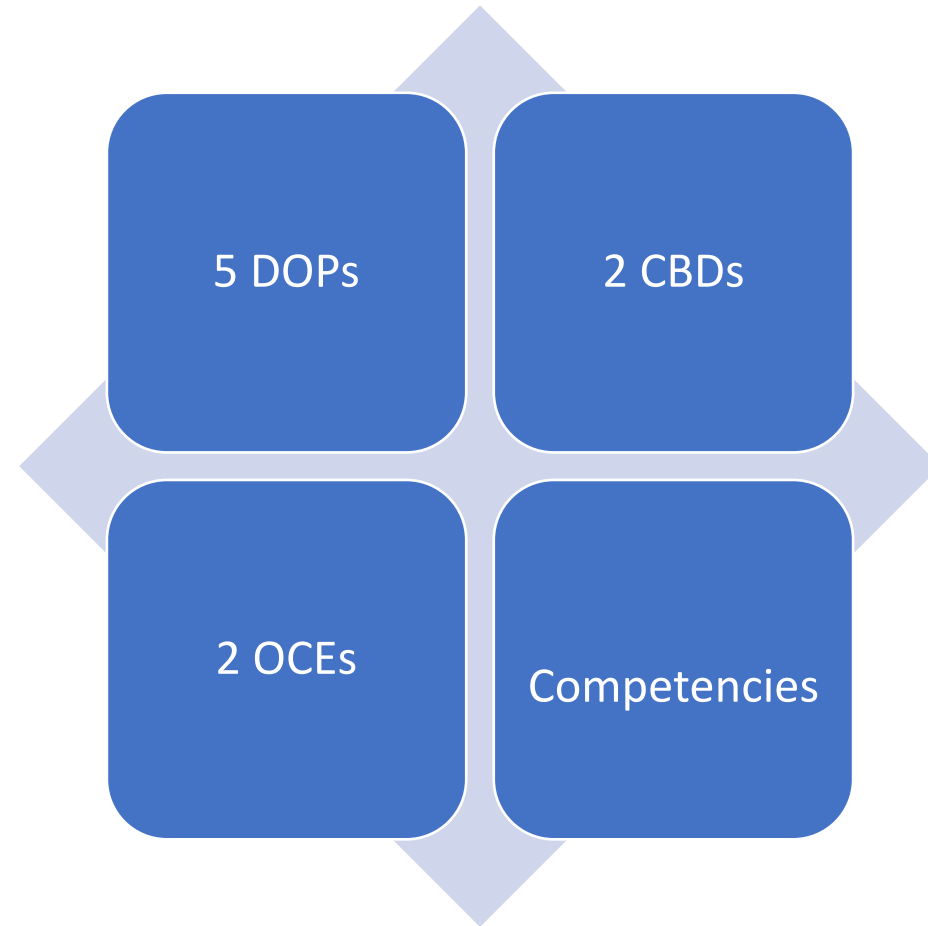
Year 3 Neuro evidence collection

Minimum evidence collection

Diagnostic Area	Patient numbers required*. (Summarise in matrix)
Routine EEG	50
Assist Sleep deprived EEG	5
Assist Portable EEG	5
VEP	12



Year 3 – Neuro assessments





Year 3 – Neuro

DOP 1	DOP 2	DOP 3	DOP 4	DOP 5
Complete the factual report for a normal EEG recording	Complete the factual report for an abnormal EEG recording	Obtain patient clinical history for routine VEP	Perform routine EEG under direct supervision (including set up, recording and report)	Perform routine VEP under direct supervision (including set up, recording and report)

Next we will look at:

- Learning outcomes
- DOPs
- Competencies
- OCE
- CBDs
- Why Portfolios fail

Learning Outcomes

- Learning outcomes are not competencies
- Learning outcomes are a log of the training the student has received
- WBA or supervisor in the department must provide training on the relevant content
- Does not need to be formal lectures or training can be practically assessed/observed
- Can be a task
- Don't have to be on the same day
- Cardiac Learning Outcome 3 (Pre-test requirements) needs completing for each area in the learning outcomes ECG/Ambulatory hook up/Analysis/Exercise etc

DOPs

- Direct Observation of Practice
- Can be performed on any procedure or part of a procedure that is relevant to the stage of training
- Supervisor watches the student perform the procedure and provide feedback on their performance
- Can be simulated
- Provide evidence of DOP if available

Competencies

- Assessment of the student's ability to complete a procedure
- Some competencies are for an assist role e.g. pacemaker implant and PCI
- Can be performed on any procedure as long as relevant to course content
- Year 1 competencies are defined
- Year 2 and 3 WBAs can use their own competencies

OCE

- Observed Clinical Event
 - Most confusion out of all assessments students undertake
 - An OCE is a real-life event
 - It is an observed interaction between the student and a patient or the student and other team members
 - OCE paperwork completed but a description of the event should also be included.

OCE Cardiac example



- Patient interaction during a test:
 - Explaining the procedure and completing pre-test check lists
 - What communication barriers were there?
 - How can you improve your communication?
 - Adverse event during a procedure.
 - How did you react?
 - How did you communicate with other team members and the patient?
 - What will you do different next time?

OCE Neuro examples



YEAR 2

- Ability to provide the patient with clear instructions to ensure compliance/ attention when recording an adult VEP/EEG

YEAR 3

- Ability to deal with a clinical event as it occurs, i.e seizure/NEAD
- Ability to adapt communication and language style to meet the needs of the listener

CBDs

- Case based Discussion
- Designed to provide structured teaching and feedback in a particular area of clinical or technical practice. **How do we carry out a case-based discussion?**
- Work based assessor provides a case or student brings an interesting case forward.
- This may be a real case that the student has performed, or it may be a simulation
- Student is expected to interpret the results and talk through the findings, treatment options etc. Detailing why they acted as they did.
- Student may be asked how they would act if they were present for the case
- Student may be expected to write the case up and submit with assessment form in portfolio



CBD Neuro examples

Examples include:

- Biological and non-biological artefacts and how to eliminate them.
- Significance of results compared to reason for referral for an interesting patient.
- Importance of consent from patients
- Additional challenges associated with non-routine patients/investigations
- The importance of additional investigations in VEP recordings (e.g. Flash and half field VEPs)

Why do Portfolios fail?

- Incorrect analysis
- They need to correctly interpret results and data
- Their interpretation summary at the end is not clinical (it could be or possibly is not acceptable)
- They should write reports that a GP can understand
- Should not use abbreviations

Why Portfolios fail

Patient Data

- DOB is patient data
- Serial numbers and bar codes are patient data

Missing evidence

- Missing paper work for assessments
- Students and WBAs! forget to sign DOP's, OCE's etc
- Feedback forms check if they per annum vs total
- Incorrect assessments eg OCE is a **real life event**. An observed interaction between the student and a patient or student and other team members



Example of Bad Practice

Male / Female Age	Clinical details
Ward/ Dept (Please state the type of ward rather than just the name)	Medication (if known)
Heart Rate: $\frac{1500}{27} = 55 \text{ bpm}$ RRR 1.03 EWSK	Comment on P wave morphology: 2 square, $2 \times 40 = 80 \text{ ms}$.
Rhythm: Sinus Bradycardia	Normal morphology PR interval: 5 squares, $5 \times 40 = 200 \text{ ms}$. Boarderline 1st degree.
QRS axis: most equiphase lead = II 90° to II = aVL aVL + VE = -45° LAD	QRS duration / QRS morphology: 5 4 squares (V4) $4 \times 40 = 160 \text{ ms}$. Broad QRS. in leads V1 to V6.
QTc Calculate using Bazett's ¹ formula: $QTc = QT / \sqrt{RR}$ int (in seconds)	$QT, V3 = 13 \times 40 = 520 \text{ ms}$. $QT/QTc = 520/504$ $QT/QTc = 0.52 \div 1.03 = 0.504$
Is there evidence of ventricular hypertrophy? If 'Yes' give measurement details (Use Sokolow-Lyon ² criteria LVH: S wave in V1 + R wave in V5 or V6 > 3.5 mV or R wave in V5 or V6 > 2.6 mV RVH: R wave in V1 + S wave in lead V5 or V6 $\geq 1.1 \text{ mV}$)	LVH = S wave V1 = 2.0mv RVH = R in V1 = 0.3 R wave in V5 = 0.2 S wave in V5 = 0.7 $2.0 + 0.2 = 2.2$ 4.0 $0.3 + 0.7 = 1.0 \text{ mv}$
Comment on the ST segment	ST segment - elevated in V3, V4, could be related to left bundle branch block
T wave abnormalities	T waves seen as peaked appearance in lead V2, V3, V4, may be related to LBBB. T wave inversion in V5.
Any other significant findings?	
Conclusion	Sinus bradycardia Boarderline 1st degree AV block. Broad QRS complex indicating LBBB. LVH seen on ECG, not peaked T waves (V2-V4) and T wave inversions may be related to LBBB. ECG shows LAD, another indication for LBBB.

¹ Bazett HC. Heart 1920;7:353-370

² adapted from Sokolov M & Lyon TP. Am Heart J 1949;37:161 and Am Heart J 1949;38:273-294

RECAP



Mentorship



Training Manual



Assessment techniques



What was good what was bad!!!!

LOG BOOK SUBMISSION DATES

Year 2

Clinical portfolio submission: 1st Feb 2024

Year 3

Clinical portfolio submission: 26th April 2024

Minor corrections: "defer" new submission deadline given.

Major Corrections: "fail" re-submit work in summer resit period (TBC).