

Workplace–Based Assessment (WPBA) Workshop

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Department of Medical Education
Faculty of Medicine, UKM

Workplace–Based Assessment (WPBA) Workshop
Kuliyah of Medicine, IIUM
17th August 2023

WORKSHOP OUTCOMES

- 1 To identify characteristic of WPBA
- 2 To describe the nature of DOPS, Mini-CEX and CBD
- 3 To give effective feedback
- 4 To incorporate Mini-CEX and CBD in current TLA and or assessment

INTRODUCTION: WORKPLACE-BASED ASSESSMENT (WPBA)

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CONTENTS

- 1 What?
- 2 Why?
- 3 Type of WPBA
- 4 Characteristic of WPBA
- 5 How to improve Reliability and Validity in WPBA



Performance assessment: Consensus statement and recommendations from the 2020 Ottawa Conference

Katharine Boursicot , Sandra Kemp , Tim Wilkinson , Ardi Findyartini , Claire Canning , Francois Cilliers & Richard Fuller

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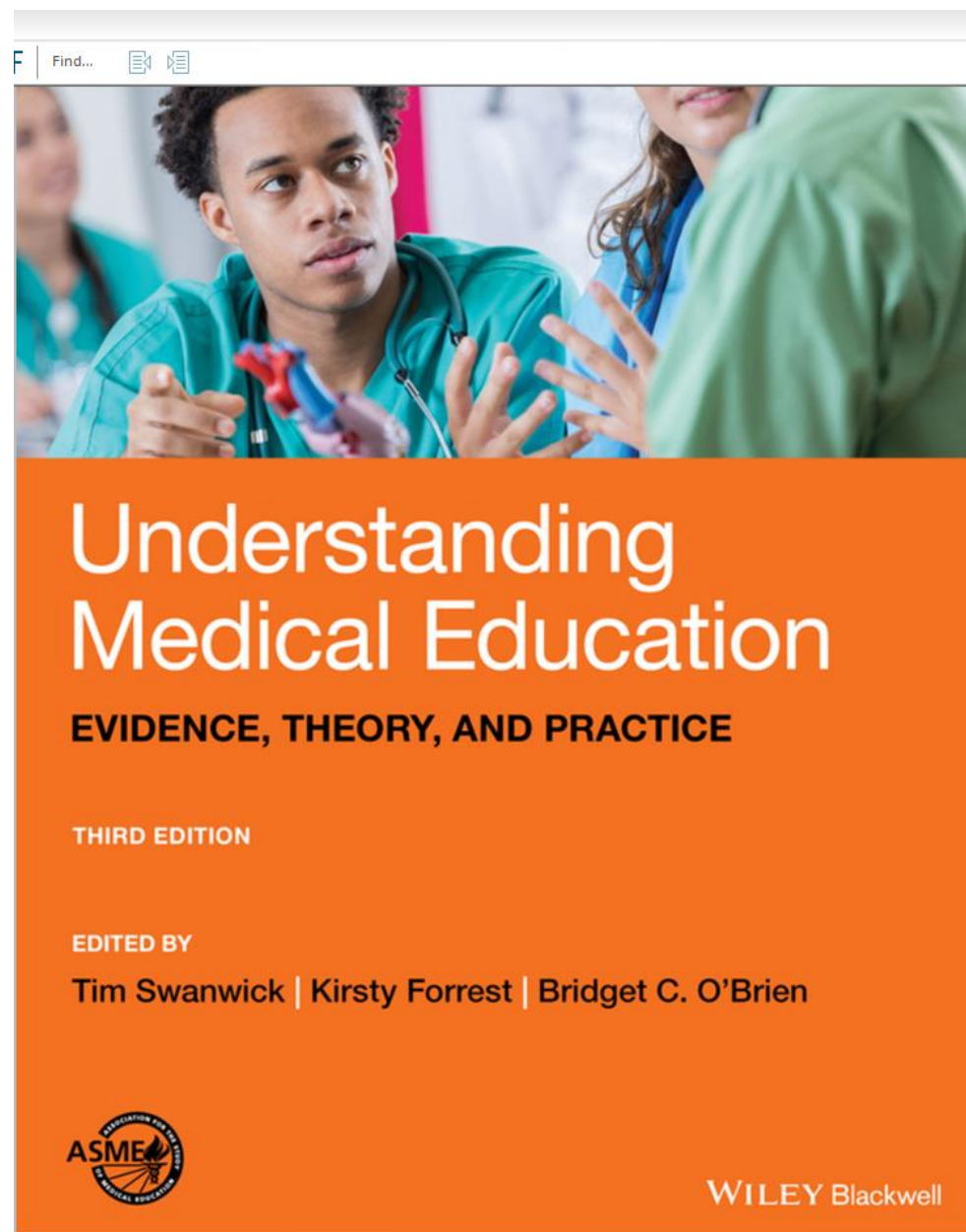
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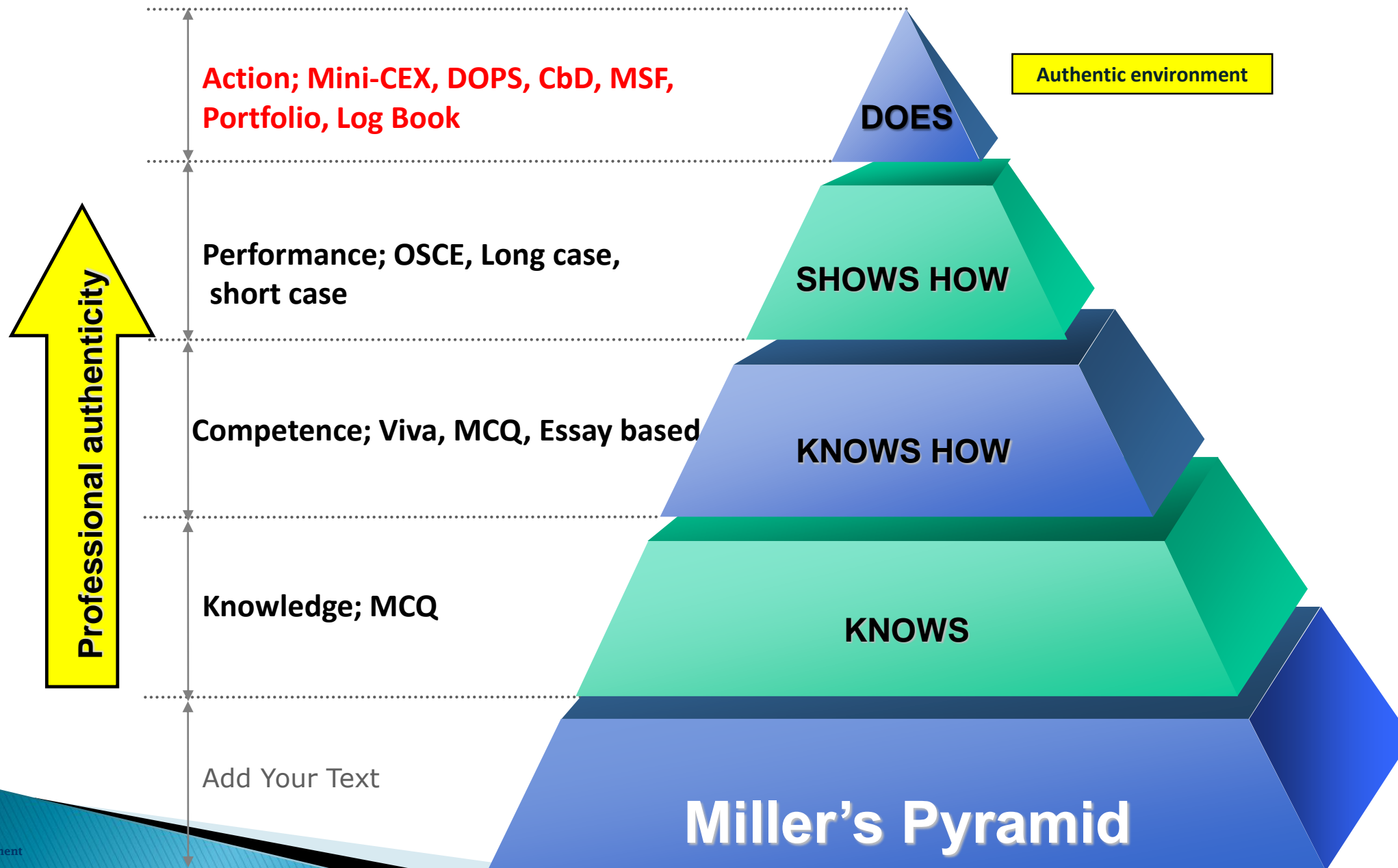
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What?

Definition of WPBA

- “assessment of what doctors actually do in practice and is predominantly carried out in the workplace itself”. (McKimm and Swanwick (2013, p.103)



Term in literature

- ▶ WPBA– WORKPLACE–BASED ASSESSMENT
- ▶ WBA– WORKBASED ASSESSMENT
- ▶ WPA– WORKPLACE ASSESSMENT

Why WPBA?

- ▶ “assessment methods that are based on observation of routine encounters are **most feasible** in the setting of clinical training. In addition,they offer the opportunity for **formative feedback** and the development of a plan for remediation when it is needed.”

John Norcini (2019)

Why WPBA?

Definition of “COMPETENCE”

“the **habitual** and **judicious** use of communication, knowledge, technical skills, clinical reasoning, emotions, values, and reflection **in daily practice** for the benefit of the individual and the community being served” (Epstein et al. 2002)

Why WPBA? Educational Impact

- ▶ Assessing competence (what doctors do in controlled representations of practice) does not reliably predict performance (what doctors do in real life). (Rethans et al. 2002)

Why WPBA?

Example of KKM Logbook

CONTENTS

1. Glossary	Page 3
2. Introduction	Page 4
3. Objectives	Page 5
4. Guidelines on the Use of This Log Book	Page 6
5. House Officer Curriculum	Page 7-10
5.1 Mandatory Topics	
5.2 Other essential topics	
5.3 Guide to assessing a good presentation	
5.4 Procedures	
6. Assessment Tools	Page 11
7. Table of Assessment Tools	Page 12
8. Directly Observed Procedural Skills (DOPS)	Page 13-19
9. Compulsory Performed Procedures (CPP)	Page 20-21
10. Guide to a good medical discharge summary	Page 22
11. Compulsory Observed of Assisted Procedures (CO-AP)	Page 23-27
12. Case-Based Discussion (CBD)	Page 28-32
13. Mini Clinical Evaluation Exercise (mini-Cex)	Page 33-38
14. Performance Appraisal	Page 39-41
15. Basic Life Support (BLS) Skills	Page 42-43
16. MCQs	Page 44
17. Multisource Feedback (MSF)	Page 45-50
18. Continuing Professional Development	Page 51-52
19. Indications of Extension	Page 53
20. Certification of Completion of Training	Page 55
21. Component & Weightage For Certificate Completion Of Posting	Page 59
22. Certificate Completion Of Posting	Page 61

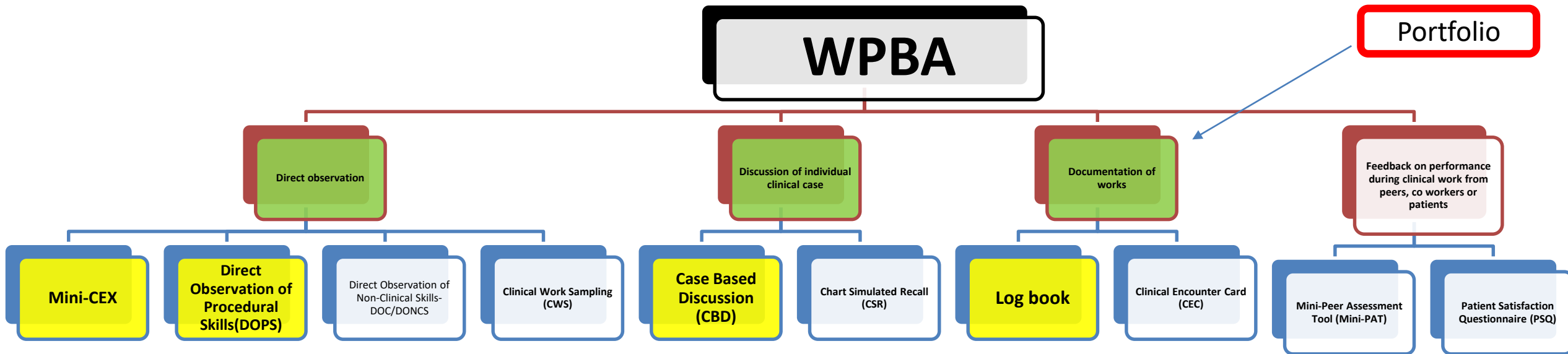
8.1 VENEPUNCTURE (FOR LAB ANALYSIS)	
VENEPUNCTURE	The purpose of this assessment is to ensure that the HO can safely take a venous blood sample and provide advice on how to improve his (or her) technique.
PATIENT	The patient must be haemo-dynamically stable, well perfused, and have a readily identifiable vein suitable for venepuncture and need to have blood samples taken.
HYGIENE	The HO must have clean hands and wear gloves for this procedure. The patient's skin must be cleaned. Washing of hands after the procedure.
EQUIPMENT AND VEIN	The HO must demonstrate familiarity with appropriate needles for adults and appropriate sampling tubes and select a suitable vein for venepuncture.
PROCEDURE	<p>The HO must perform the following skills</p> <p><input type="checkbox"/> The HO must check that the blood is being collected from the correct patient.</p> <p><input type="checkbox"/> The HO must wash hands and wear gloves for this procedure.</p> <p><input type="checkbox"/> The HO must clean the patient's skin for the procedure.</p> <p><input type="checkbox"/> The HO must successfully collect the blood samples within two attempts.</p> <p><input type="checkbox"/> The patient must experience minimum discomfort.</p> <p><input type="checkbox"/> The HO must ensure that there is no uncontrolled bleeding after the procedure.</p> <p><input type="checkbox"/> The HO must personally dispose of the "sharps", tidy up and wash hands.</p> <p><input type="checkbox"/> The HO must correctly complete the details on the sample tubes.</p>
<p>(Please TICK boxes to ensure the procedure has been completed correctly before completing the DOPS assessment form.)</p>	
<p>SCORING AND FEEDBACK: Grade A (Good)..... Grade B (Satisfactory)..... Grade C (Poor).....</p>	
Signature of Assessor	Feedback:
Date:	Fail mark : A HO who scores grade C is deemed to have failed. He/she must come back for another assessment at a later date.
Stamp:	

CASE-BASED DISCUSSION (CBD) FOR HOUSE OFFICERS					
CBD NUMBER: 1 2 3 4 5					Focus of Clinical Encounter
CLINICAL CATEGORY/PROBLEM:.....					<input type="checkbox"/> Documentation
Please grade the following areas using the scales					<input type="checkbox"/> Clinical Assessment
	Good	Satisfactory	Poor	Not applicable	<input type="checkbox"/> Management
	A	B	C		<input type="checkbox"/> Professionalism
1. History Taking					<p>Signature of Assessor:</p> <p>.....</p> <p>Stamp:</p> <p>.....</p> <p>Date:</p>
2. Examination					
3. Diagnosis					
4. Management					
5. Documentation					
OVERALL GRADE					
Anything especially good?	Suggestion for development				Signature of House Officer:
Agreed Action:				
					Stamp:

MINI CLINICAL EVALUATION EXERCISE (MINI-CEX) FOR HOUSE OFFICERS					
MINI-CEX NUMBER: 1 2 3 4 5					
CLINICAL CATEGORY/ PROBLEM:.....					
Please grade the following areas using the scales	Good	Satisfactory	Poor	Not applicable	<p>Focus of Clinical Encounter</p> <p><input type="checkbox"/> History</p> <p><input type="checkbox"/> Diagnosis</p> <p><input type="checkbox"/> Management</p> <p><input type="checkbox"/> Explanation</p>
	A	B	C		
1. History Taking					<p>Signature of Assessor:</p> <p>.....</p> <p>Stamp:</p> <p>.....</p> <p>Date:</p>
2. Examination					
3. Clinical Judgement					
4. Management					
5. Communication Skills					
OVERALL GRADE					
Anything especially good?	Suggestion for development				<p>Signature of House Officer:</p> <p>.....</p> <p>Stamp:</p> <p>.....</p>
Agreed Action:					

Examples: KKM log book

Type and List of WPBA methods



Other WPBA methods

- 1. Multisource Feedback - MSF**
- 2. Procedure Based Assessment – PBA**
- 3. Observation of Teaching – OoT**
- 4. Assessment of Audit – AoA**
- 5. Non-Technical Skills for Surgeons – NOTSS**
- 6. Acute Care Assessment Tool (ACAT)**
- 7. Clinical Encounter Cards (CEC)**
- 8. Clinical Work Sampling (CWS)**
- 9. Blinded Patient Encounters (BPE)**

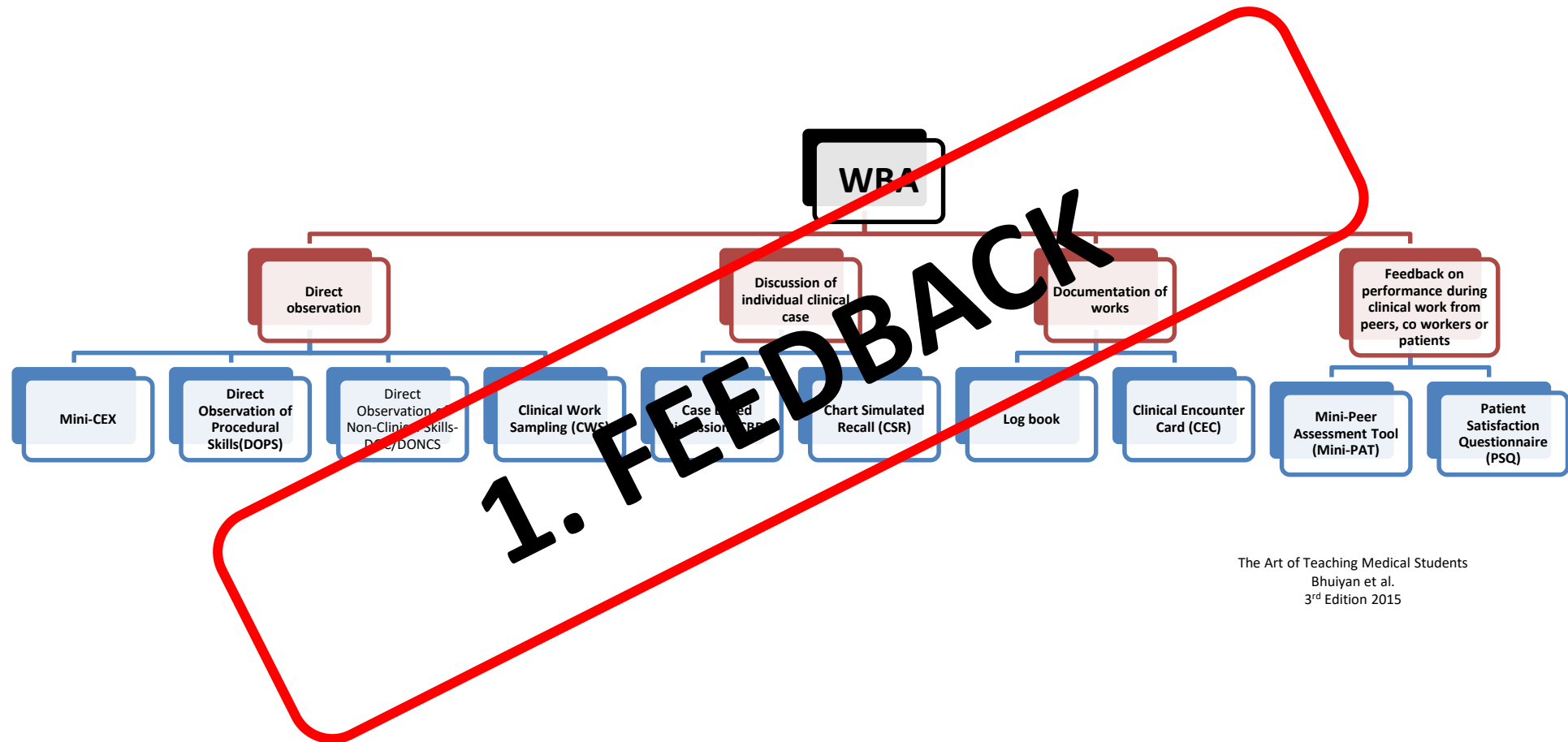


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Characteristic of WPBA

FOUR Characteristic of WPBA



The Art of Teaching Medical Students
Bhuiyan et al.
3rd Edition 2015

Verbal or written feedback or both

- “The implications for performance assessment are that **narrative feedback, and action on that feedback**, needs to be designed into a culture of learning. Both **immediate** and **longitudinal approaches** to feedback are important...”

(Boursicot et al 2020)

- Toale et al (2021) analyzed 500 WPBA assessment (Supervised Structured Assessments of Operative Performance -SSAOPs)
 - 72.4%: utilized written feedback
 - “Gap” and “Action” approach- Low

Please refer to curriculum at www.mmc.nhs.uk for details of expected competencies for F1 and F2

Case-based Discussion (CbD) – F2 Version

Please complete the question using a cross: ☒

Please use black ink and CAPITAL LETTERS

Doctor's Surname	<input type="text"/>																			
Forename	<input type="text"/>																			
GMC Number:	<input type="text"/>						GMC NUMBER MUST BE COMPLETED													
Clinical setting:	A&E <input type="checkbox"/>	OPD <input type="checkbox"/>				In-patient <input type="checkbox"/>				Acute Admission <input type="checkbox"/>				GP Surgery <input type="checkbox"/>						
Clinical problem category:	Pain <input type="checkbox"/>	Airway/ Breathing <input type="checkbox"/>	CVS/ Circulation <input type="checkbox"/>	Psych/ Behav <input type="checkbox"/>	Neuro <input type="checkbox"/>	Gastro <input type="checkbox"/>	<input type="text"/>													
Focus of clinical encounter:	Medical Record Keeping <input type="checkbox"/>				Clinical Assessment <input type="checkbox"/>				Management <input type="checkbox"/>				Professionalism <input type="checkbox"/>							
Complexity of case:	Low <input type="checkbox"/>	Average <input type="checkbox"/>		High <input type="checkbox"/>		Assessor's position:				Consultant <input type="checkbox"/>		SpR <input type="checkbox"/>		GP <input type="checkbox"/>						

Please grade the following areas using the scale below:	Below expectations for F2 completion		Borderline for F2 completion	Meets expectations for F2 completion	Above expectations for F2 completion		U/C *
	1	2	3	4	5	6	
1 Medical record keeping	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2 Clinical assessment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3 Investigation and referrals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4 Treatment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5 Follow-up and future planning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6 Professionalism	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7 Overall clinical judgement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*U/C Please mark this if you have not observed the behaviour and therefore feel unable to comment

Anything especially good?

Suggestions for development

Agreed action:

1

Name: _____ Date: _____

Matric Number: _____

Place of assessment: ☐ Ward ☐ Clinic ☐ Others

Name of Patient: _____ R/N: _____

Patient's age: _____ Gender: Male ☐ Female ☐

Patient's problem list / Diagnosis: _____

New ☐ Follow-up ☐ Problem / Case Complexity: Low ☐ Average ☐ High ☐

3

Checklist on candidate's overall performance (Please circle)

A = Very Good B = Good C = Acceptable D = Poor E = Not done

2

Activities		A	B	C	D	E	Not applicable	Weightage (10)	Score
History taking skills		A	B	C	D	E		5	
Physical Examination skills		A	B	C	D	E			
Diagnosis/Problem List		A	B	C	D	E			
Clinical Judgment	Investigations - Requesting	A	B	C	D	E			
	-Interpreting	A	B	C	D	E			
	Discussion	A	B	C	D	E			
	Management	A	B	C	D	E			
Professional qualities / Communication skills		A	B	C	D	E			
Counseling skills		A	B	C	D	E			
Organization /Efficiency		A	B	C	D	E			
Examiner signature: _____								Total score	/10
Name: _____									
Global rating (Please circle)		Poor	Borderline	Good	Very Good				

Please return this page to main office

2a. FLEXIBILITY:
Customize to your needs !!!

WRITTEN FEEDBACK 4

Strengths and weaknesses:

Plan for improvement:

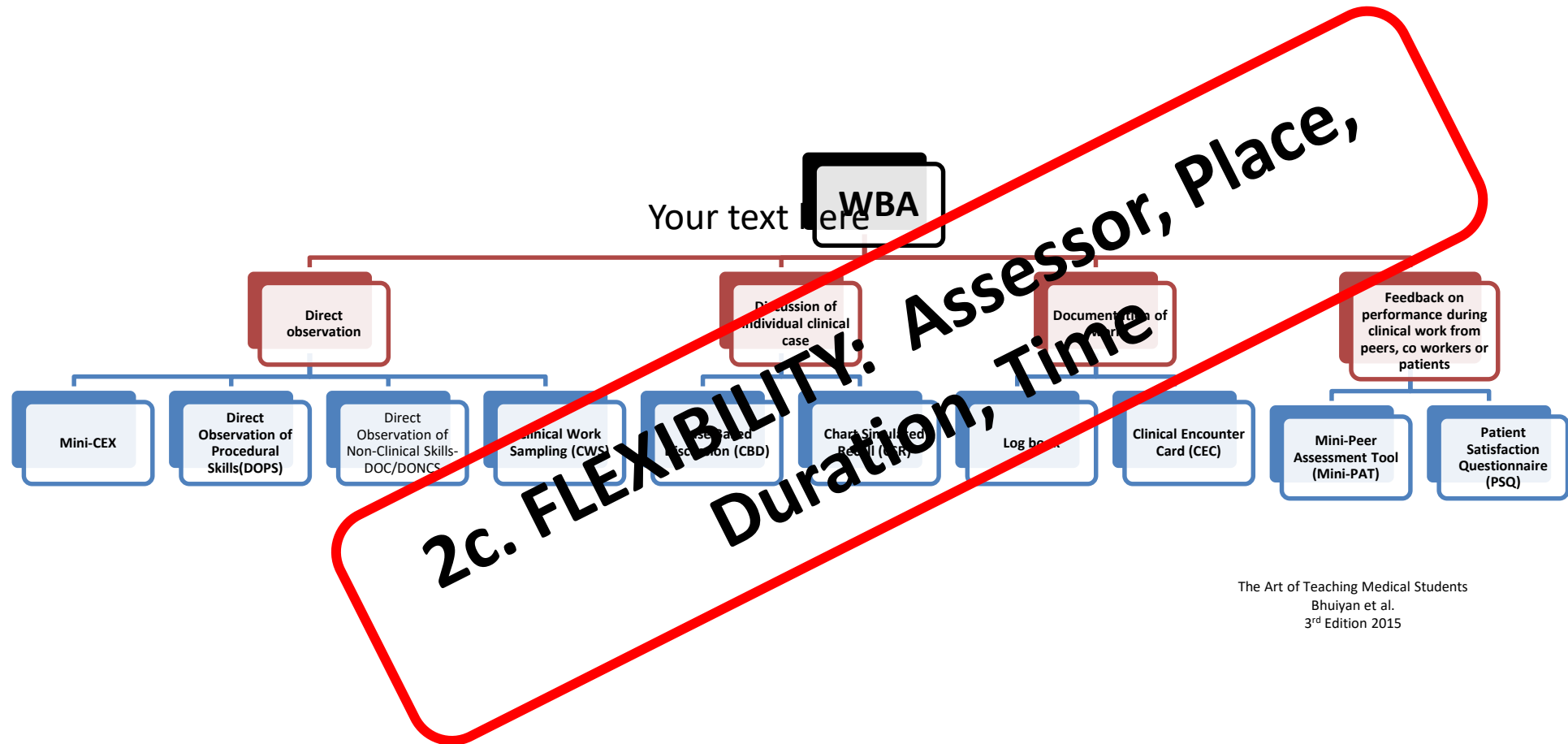
Agreed action:

VERBAL FEEDBACK

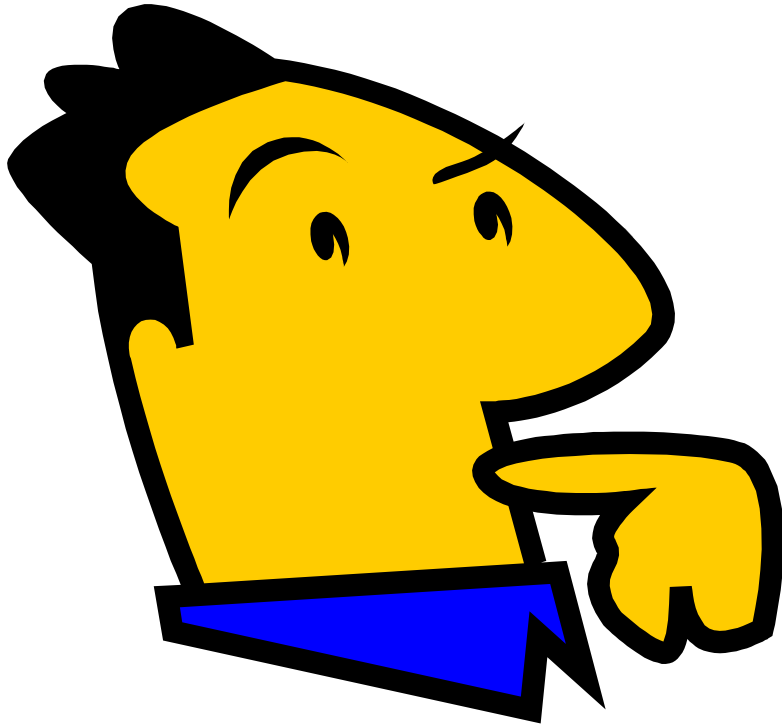
Tips for verbal feedback: 1) Allow student to reflect on their performance prior to lecturer's feedback (Open-ended self-reflection)
2) Lecturer's feedback should focus on each item
3) Student's score should not be discussed in feedback



Characteristic of WPBA



Who can assess? (Flexible)

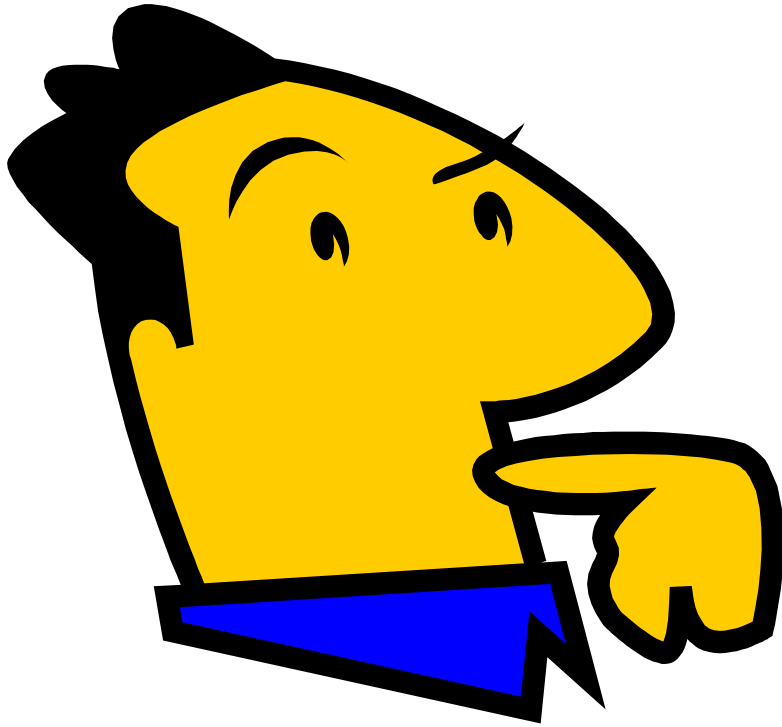


Examiners

- Full time lecturers
- Part time lecturers
- Master student
- Others (eg: nurses)

* different examiner (including supervisor)

Where can be assessed? (Flexible)



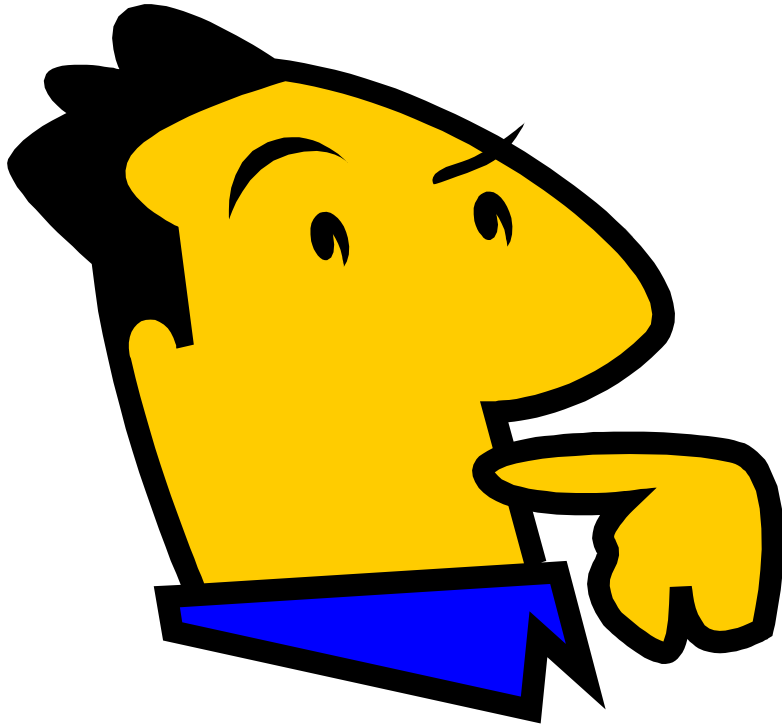
Workplace (F2F)

- inpatient,
- outpatient,
- emergency department settings.

Online

- synchronous (CBD)
- Mini-CEX (history taking)
- DOPS (simulation based)

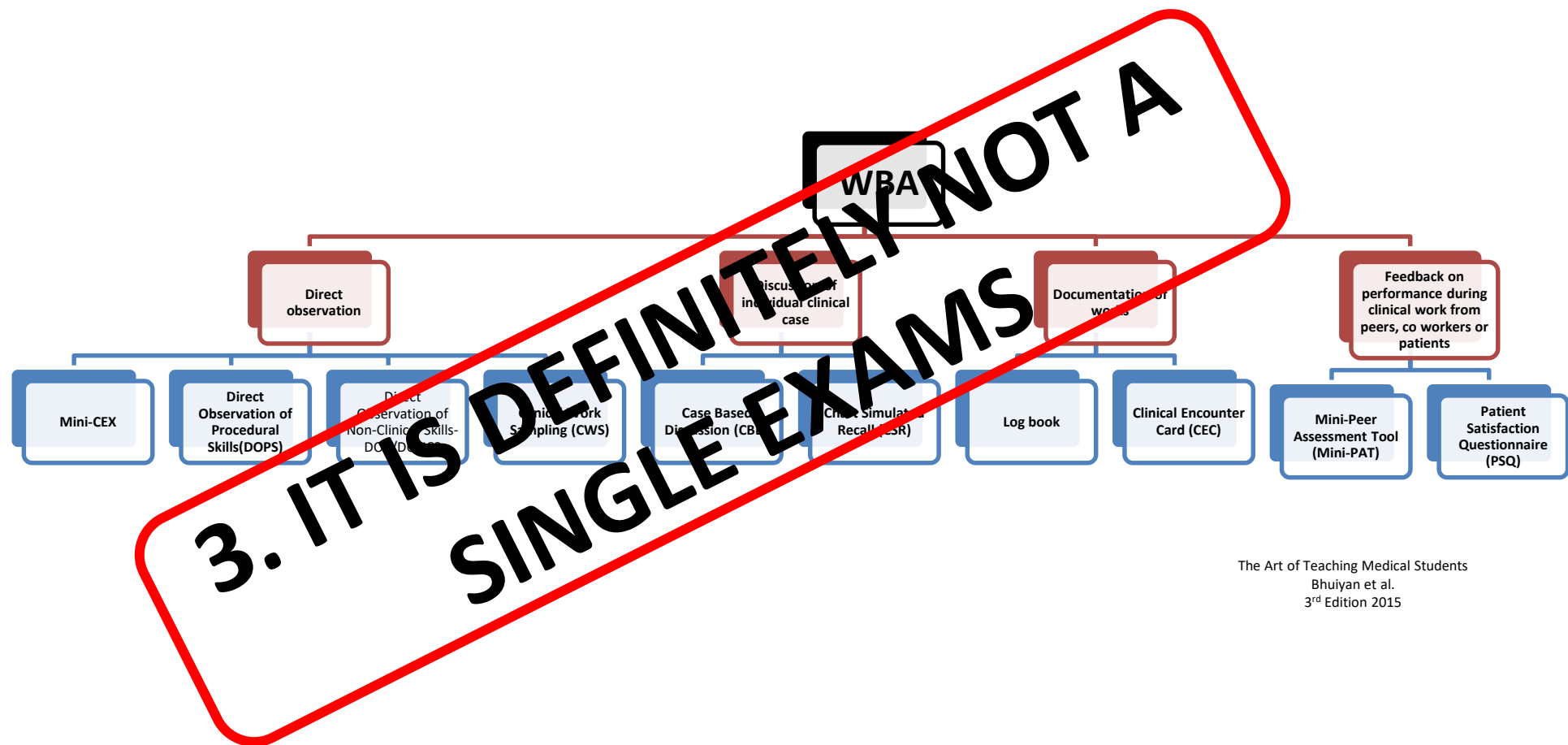
When can be assessed? (Flexible)

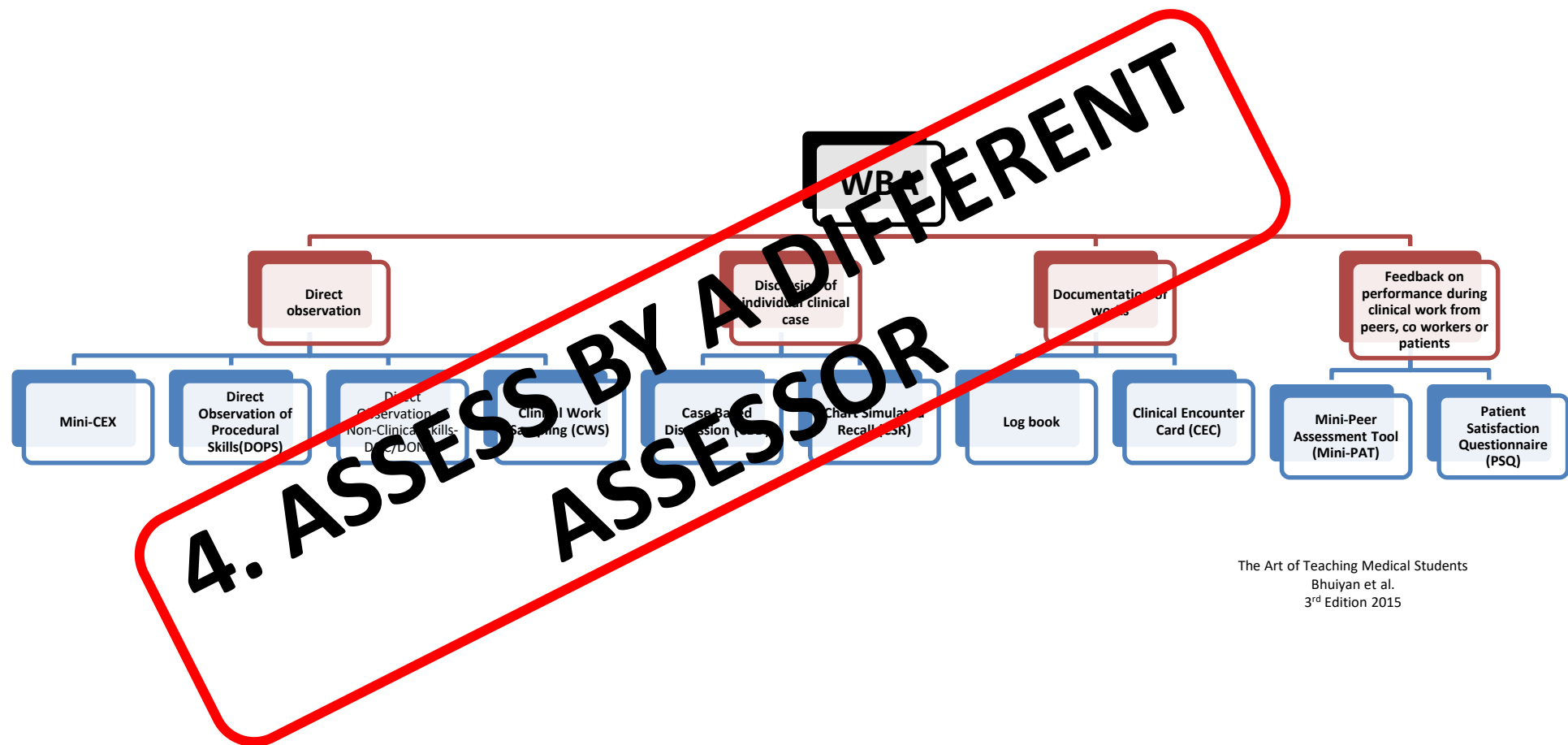


- Dedicated time/ Anytime
- At the clinic
- During bedside teaching
- During on call
- During ward round
- After ward round

When can be assessed? (Flexible)

- **Structured approach** (Formal assessment)
 - Set a number of WPBA per candidate
 - Lecturer set the case place, date and time
- **Unstructured approach** (Informal assessment)
 - Set a MINIMUM number of WPBA per candidate
 - Both the assessor and the patient are selected by the trainee, but the assessor must agree that the encounter is appropriate.



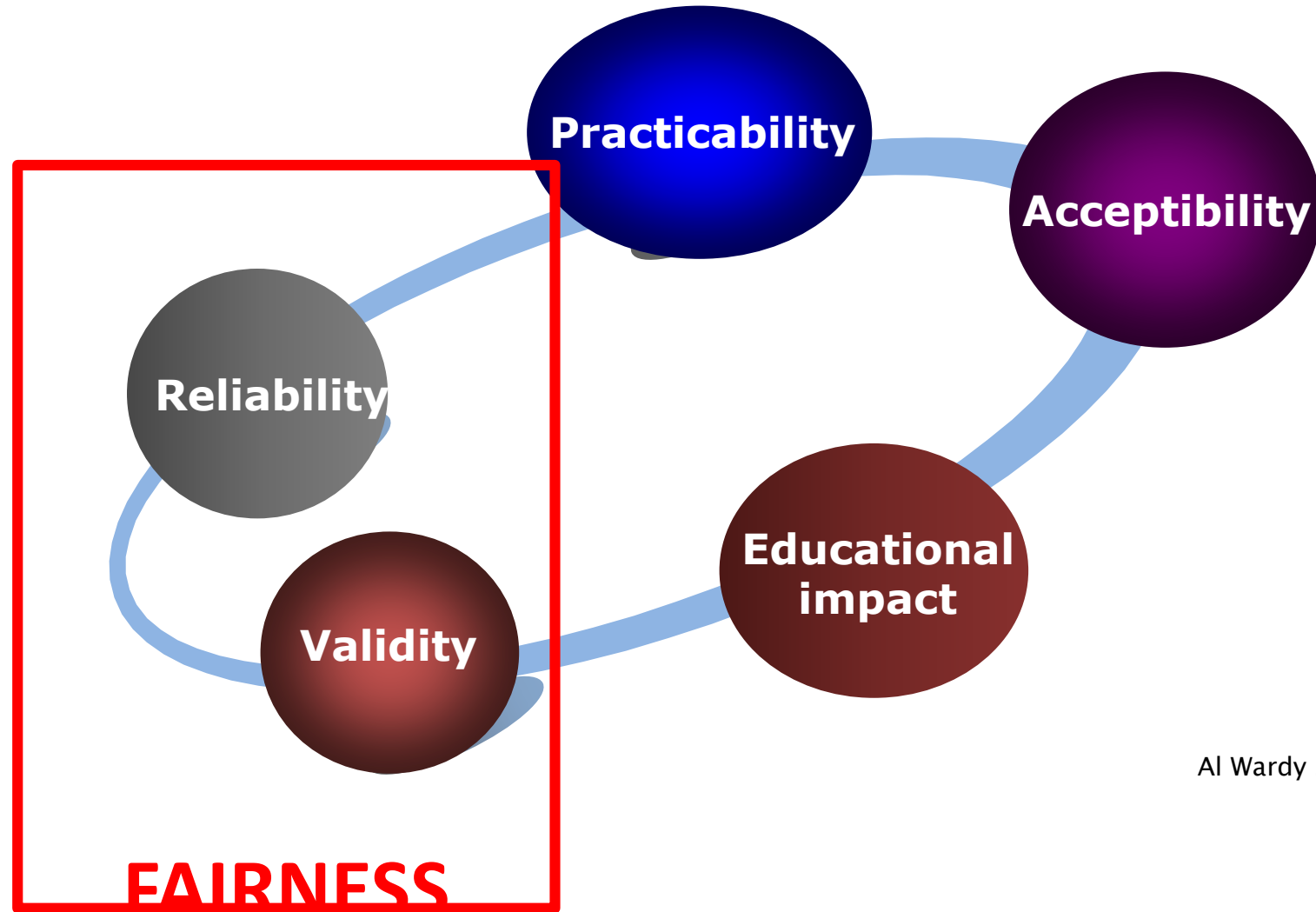


Q&A session....



Challenges in Workplace-based Assessment

Criteria of choosing assessment methods

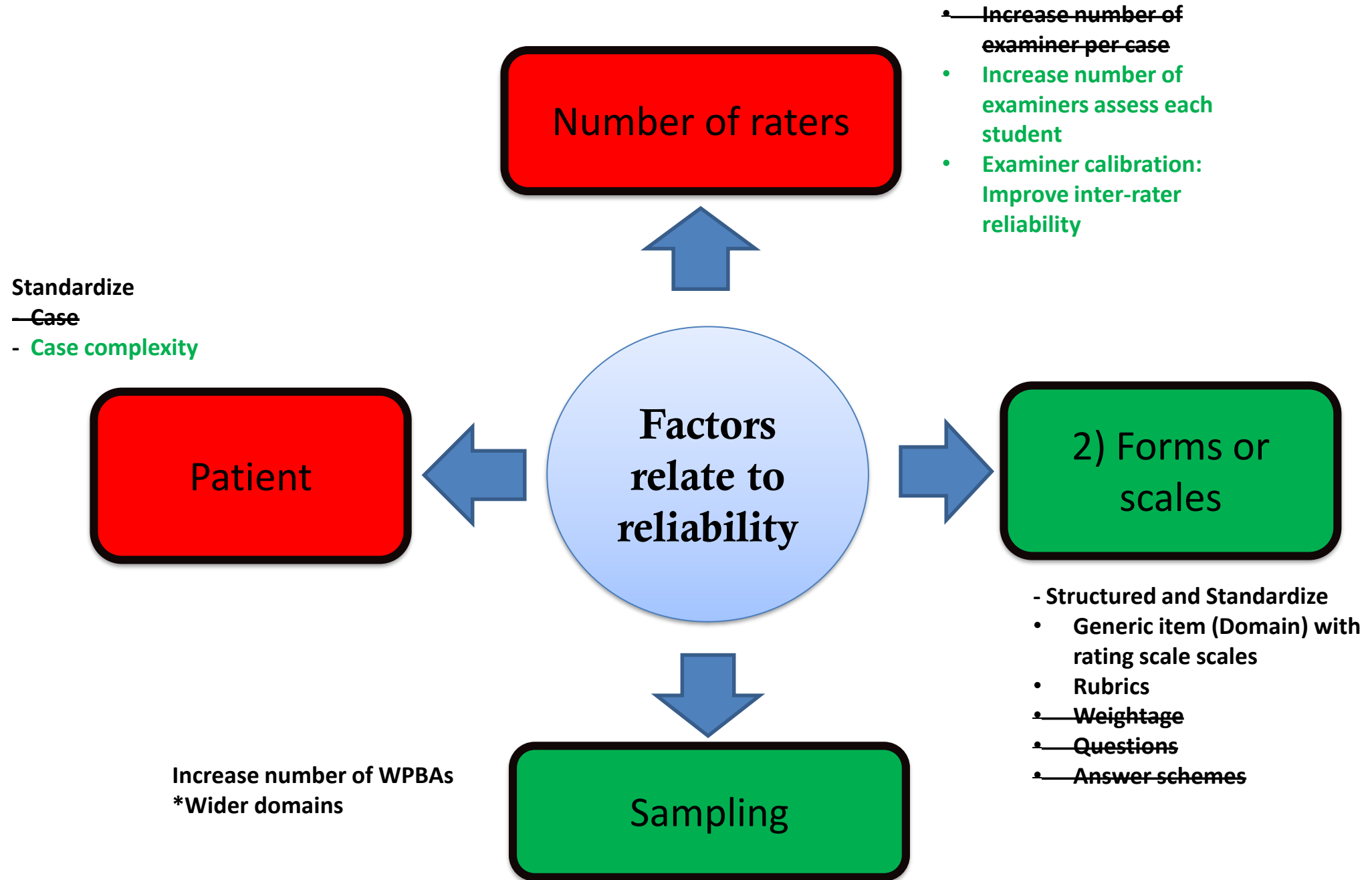


Al Wardy 2010

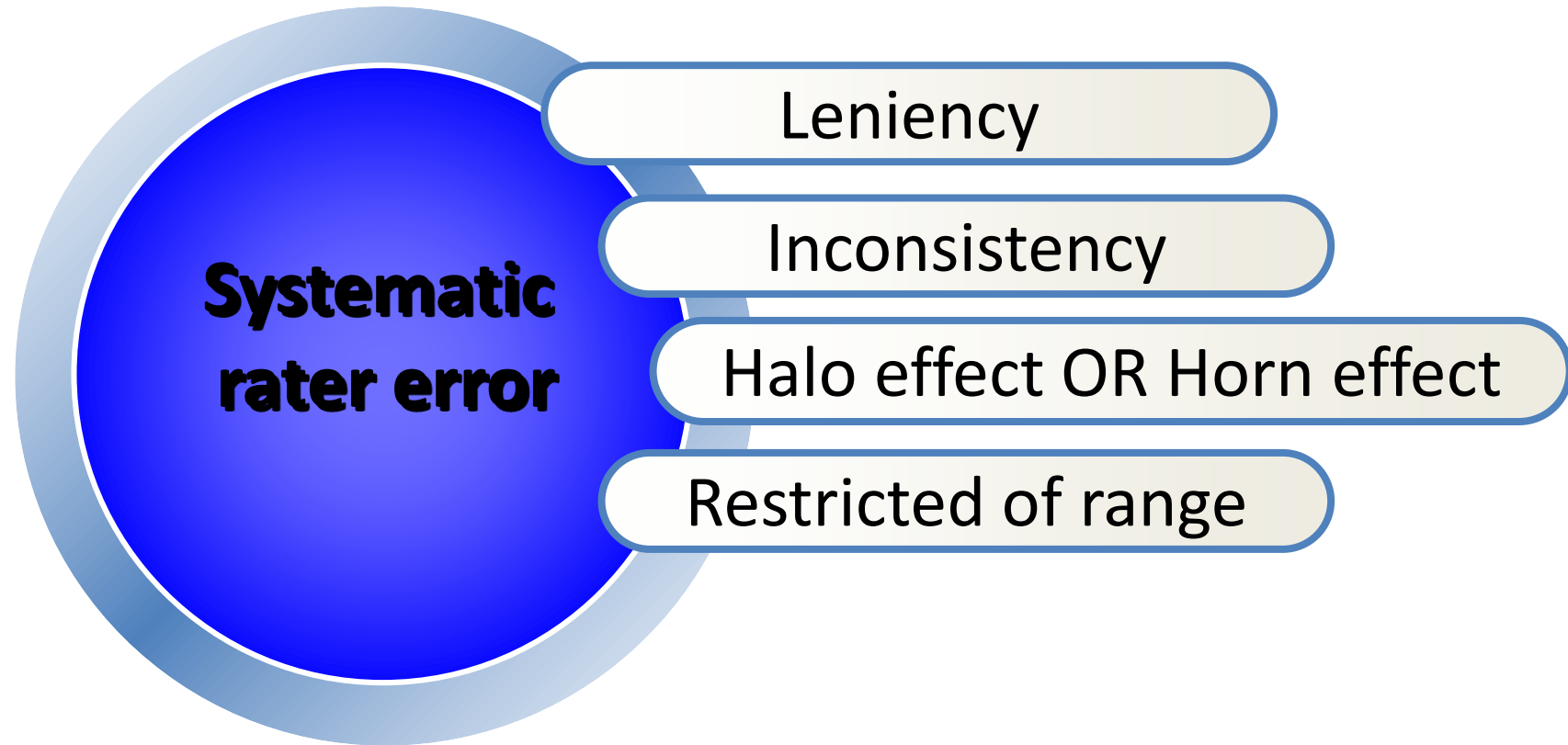
HOW TO IMPROVE RELIABILITY IN WPBA?

Reliability

- Reliability refers to the precision of measurement or the **reproducibility** of the scores obtained with the examination
- **‘CONSISTENCY’** of assessment result.



1) Raters



Iramaneerat and Yudkowsky (2007)



**In most studies, the
variance of raters is the
largest variance
component, typically in
the 80-90% range.**

(Downing, 2005)

EXAMINER CALIBRATION

- Aims:
 - To parallel the level of expectation based on candidate's performance

2) WPBA Forms

- Task description
 - difficulty, new/f/up, clinical setting, system, diagnosis,
- Rating scales
- Items/ Domains
- Written feedback

Case-based Discussion (CbD) – F2 Version

Please complete the question using a cross: ☒

Please use black ink and CAPITAL LETTERS

Doctor's Surname	<div></div>																							
Forename	<div></div>																							
GMC Number:	<div></div>								GMC NUMBER MUST BE COMPLETED															
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Complexity of case:	Low <input type="checkbox"/>	Average <input type="checkbox"/>	High <input type="checkbox"/>	Assessor's position:																				
				Consultant <input type="checkbox"/>				SpR <input type="checkbox"/>				GP <input type="checkbox"/>												

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*U/C Please mark this if you have not observed the behaviour and therefore feel unable to comment

Rubrics in WPBA

Medical record keeping	Legible; signed; dated; appropriate to the problem; understandable in relation to and in sequence with other entries; helps the next clinician give effective and appropriate care.
Clinical assessment	Understands the patient's story; clinical assessments are based on appropriate questioning and examination.
Investigation and referral	Discusses the rationale for investigations and necessary referrals; understands why diagnostic studies were ordered or performed, risks and benefits were relevant to the differential diagnosis.
Treatment	Discusses the rationale for the treatment, including the risks and benefits.
Follow-up and future planning	Discusses the rationale for the formulation of the management plan including follow-up.
Professionalism	Discusses the care of this patient as recorded, demonstrated respect, compassion, empathy and established trust; discusses the patient's needs for comfort, respect, confidentiality were addressed; record demonstrated an ethical approach, and awareness of any relevant legal frameworks; has insight into own limitations.

3) Number of WPBAs

- Number of WPBAs
 - Related to purpose of exams
 - Related to feasibility
-
- The assessments **should be made by different assessors** and cover a wide range of procedures

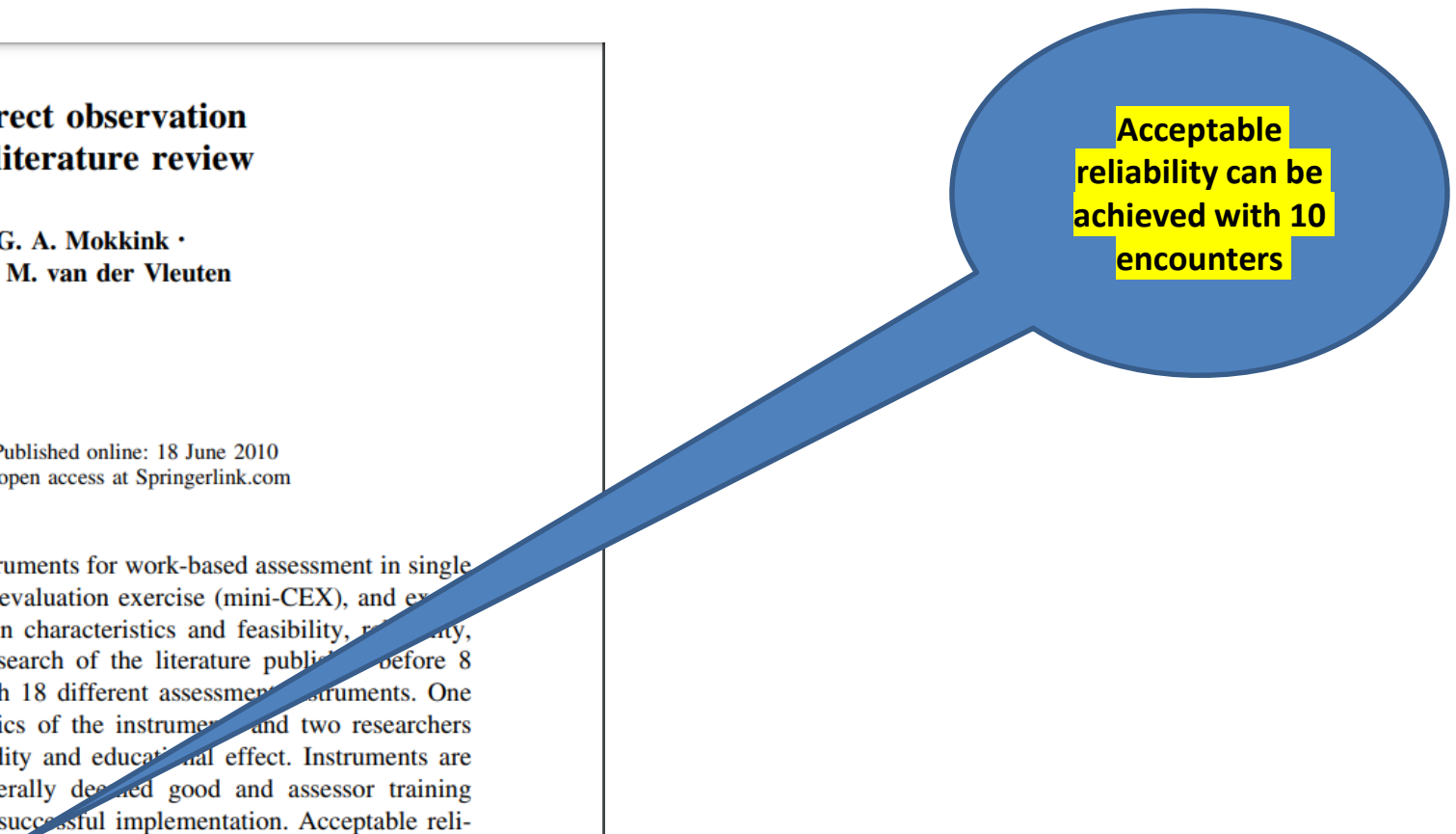
In-training assessment using direct observation of single-patient encounters: a literature review

E. A. M. Pelgrim · A. W. M. Kramer · H. G. A. Mekkink ·
L. van den Elsen · R. P. T. M. Grol · C. P. M. van der Vleuten

Received: 1 October 2009 / Accepted: 12 May 2010 / Published online: 18 June 2010
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Abstract We reviewed the literature on instruments for work-based assessment in single clinical encounters, such as the mini-clinical evaluation exercise (mini-CEX), and examined differences between these instruments in characteristics and feasibility, reliability, validity and educational effect. A PubMed search of the literature published before 8 January 2009 yielded 39 articles dealing with 18 different assessment instruments. One researcher extracted data on the characteristics of the instruments and two researchers extracted data on feasibility, reliability, validity and educational effect. Instruments are predominantly formative. Feasibility is generally deemed good and assessor training occurs sparsely but is considered crucial for successful implementation. Acceptable reliability can be achieved with 10 encounters. The validity of many instruments is not investigated, but the validity of the mini-CEX and the 'clinical evaluation exercise' is supported by strong and significant correlations with other valid assessment instruments. The evidence from the few studies on educational effects is not very convincing. The reports on clinical assessment instruments for single work-based encounters are generally positive, but supporting evidence is sparse. Feasibility of instruments seems to be good and reliability requires a minimum of 10 encounters, but no clear conclusions emerge on other aspects. Studies on assessor and learner training and studies examining effects beyond 'happiness data' are badly needed.

Keywords Educational effects · Feasibility · Mini-CEX · Reliability · Validity · Work-based assessment instruments



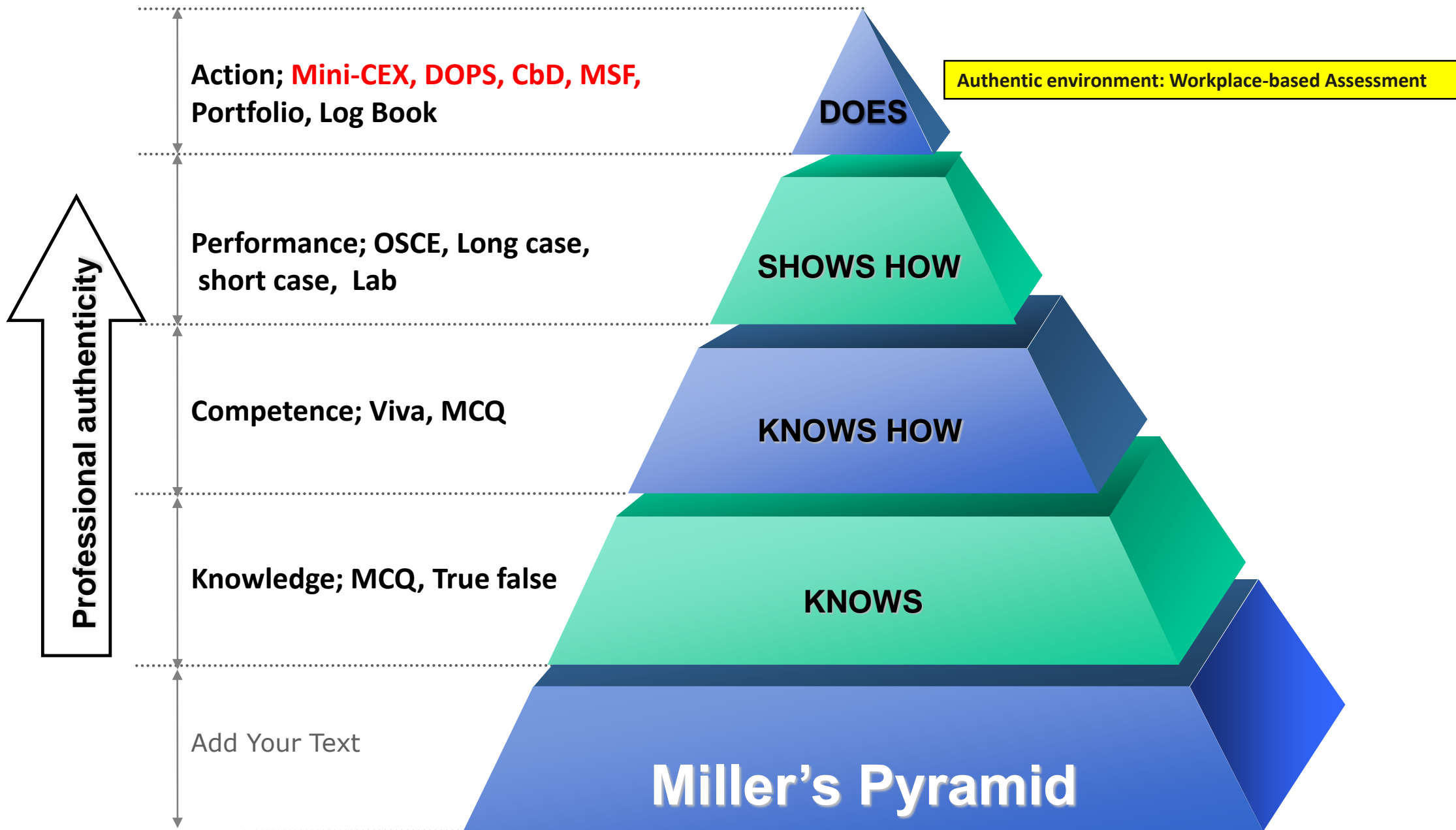
Acceptable
reliability can be
achieved with 10
encounters

(Pelgrim 2011).

HOW TO IMPROVE VALIDITY IN WPBA?

Validity

- It measure what it is supposed to be measuring **CONSTANT**
- Is the extent to which the scores actually represent the variable they are intended to
- **ACCURACY**
- **Whether a test actually succeeds in testing the competencies that it is designed to test**
- **Select appropriate test formats for the competencies to be tested** (Wass et al 2001)



- Difficult to include WPBA in assessment blueprint since “opportunistic case” was selected at the workplace- **Low content validity**
- The item in the Mini-CEX/CBD or other WPBA form is not focus as display in OSCE which lead to high subjectivity in assessment and cause **poor inter-rater reliability**
- **Threats to validity** (e.g. differences between doctors in case mix and the severity of illness of their patients)

(Norcini 2005)

WPBA is not suitable for summative

Case-based Discussion (CbD) – F2 Version

Please complete the question using a cross: ☒

Please use black ink and CAPITAL LETTERS

Doctor's Surname	<table border="1"><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>																																														
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Complexity of case:	Low <input type="checkbox"/>		Average <input type="checkbox"/>		High <input type="checkbox"/>		Assessor's position:		Consultant <input type="checkbox"/>				SpR <input type="checkbox"/>				GP <input type="checkbox"/>																														

Please grade the following areas using the scale below:		Below expectations for F2 completion		Borderline for F2 completion	Meets expectations for F2 completion	Above expectations for F2 completion		U/C *
1	Medical record keeping	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>	<input type="checkbox"/>
2	Clinical assessment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Investigation and referrals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Treatment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Follow-up and future planning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	Professionalism	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	Overall clinical judgement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

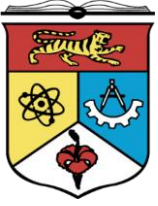
*U/C Please mark this if you have not observed the behaviour and therefore feel unable to comment

Comparing type of WPBA

WBA	Competencies	Examples of Assessors	Setting	UNIQUE
Mini-CEX	Cognitive, Psychomotor, Affective domain	Educational/ Clinical Supervisors, senior trainee	In patient & Outpatient	<ul style="list-style-type: none"> • Must observe • More flexible
CBD	Cognitive, Affective domain			<ul style="list-style-type: none"> • No observation (Does not require patient) • Examiner are require to read the student's case note prior to CBD and the discussion are based on candidate's case note
DOPS/PBA	Technical skills, procedures and protocols. (*Cognitive, Psychomotor, Affective domain)	Multi professional team (MPT)	In patient (including OT) & Outpatient	<ul style="list-style-type: none"> • Must observe • Can use simulation lab • *Includes pre and post procedure

Thank you





Directly-Observed Procedural Skills

Dr Mohd Nasri Awang Besar
Department of Medical Education
Faculty of Medicine, UKM

Workplace-Based Assessment (WPBA) Workshop
Kuliyyah of Medicine, IIUM
17th August 2023

Content

1. What
2. *Who
3. *Where
4. What can be assessed?
5. Mini-CEX form
6. How to implement at your workplace

Term in literature

- Direct observation of practical skills
- Directly-Observed Procedural Skills

DIRECT OBSERVATION OF PROCEDURAL SKILLS (DOPS)

- Designed by Royal College of Physicians
- The DOPS assessment is similar in principle to the mini-CEX (Observed + Feedback)
- variation on the mini-CEX
- **conducting procedures**

Wragg et al. (2003).

- usually less than 15 minutes, with 5 minutes for feedback (Norcini & Zaidi 2019)

OSCE (Procedural)

Checklist on candidate's overall performance (Please circle)

	A = Very Good 1	B = Good 0.75	C = Acceptable 0.5	D = Poor 0.25	E = Not done 0
ACTIVITIES	PERFORM (50%)			MENTION (35%)	
	CANDIDATE PERFORMANCE	WEIGHTAGE	CANDIDATE 'S MARKS	CANDIDATE PERFORMANCE	CANDIDATE 'S MARKS
Preparation before pap smear					
1. Label the glass slide with <ul style="list-style-type: none"> patient's RN using pencil 	A B C D E	5%			
Perform pap smear					
2. Patient in dorsal position				A B C D E	2%
3. Insert <u>cusco</u> speculum <ul style="list-style-type: none"> correct method (straight in) lubricated 	A B C D E	6%			
4. <u>Visualise</u> cervix				A B C D E	2%
5. Clean with swab if discharge present	A B C D E	2%		A B C D E	3%
<ul style="list-style-type: none"> Insertion of extended tip spatula get the sample from the ectocervix 	A B C D E	10%		A B C D E	8%
6. Both samples are smeared on labeled glass slide with one stroke	A B C D E	5%		A B C D E	8%
7. Remove <u>cusco</u> speculum	A B C D E	2%			
8. Fix with alcohol spray fixative				A B C D E	2%
9. Fill up cytology form <ul style="list-style-type: none"> Name RN Clinical history Specimen type Diagnosis 	A B C D E	10%			
10. Approach <ul style="list-style-type: none"> Systematic approach Organized in examination Convenience handling of instrument 	A B C D E	10%			
11. Presentation skills <ul style="list-style-type: none"> Systematic presentation Fluent and logical flow Purposeful 				A B C D E	10%

DOPS

Covers

- **Pre procedure** : *demonstrates understanding of indications/anatomy/technique
- Patient safety (aseptic technique)
- demonstrates appropriate preparation pre-procedure
- Operative technique (technical ability)
- Communication (obtains informed consent)
- Consideration of patient/professionalism
- Documentation
- **Post procedure** management
- *seeks help where appropriate

WORKPLACE!!!

IMMEDIATE FEEDBACK !!!!!

Example of DOPS form (Type 1)

Rating scale:
A single domain

Assessment	Significant input required from assessor			Some guidance provided from assessor			Able to manage independently			Unable to assess
Clinical knowledge	Demonstrates relevant knowledge and understanding of the procedure including indications, contraindications, anatomy, technique, side effects and complications									
	1	2	3	4	5	6	7	8	9	UTA
Consent	Explains procedure to the patient and obtains valid and adequate informed consent									
	1	2	3	4	5	6	7	8	9	UTA
Preparation	Prepares appropriately for the procedure. Ensures assisting staff are present; check equipment and prepares drugs, ensures clinically indicated monitoring; arranges workspace ergonomically									
	1	2	3	4	5	6	7	8	9	UTA
Vigilance	Demonstrates situational awareness through constant clinical and electronic monitoring. Maintains focus on the patient and avoids distraction									
	1	2	3	4	5	6	7	8	9	UTA
Infection control	Demonstrates aseptic/clean technique and standard (universal) precautions									
	1	2	3	4	5	6	7	8	9	UTA
Technical ability	Demonstrates manual dexterity and confidence; demonstrates correct procedural sequence with minimal hesitation and unnecessary actions									
	1	2	3	4	5	6	7	8	9	UTA
Patient interaction	Provides reassurance and checks for discomfort, concerns and complications									
	1	2	3	4	5	6	7	8	9	UTA
Insight	Knows when to seek assistance, abandon procedure or arrange alternative care to prevent harm to patient									
	1	2	3	4	5	6	7	8	9	UTA
Documentation/post-procedure management	Documents the episode including problems and complications; arranges and documents plans for post procedural care									
	1	2	3	4	5	6	7	8	9	UTA
Team interaction	Provides clear and concise instructions to assisting staff and conveys relevant information concerning the patient and plans to team members									
	1	2	3	4	5	6	7	8	9	UTA
Was the procedure completed satisfactorily?			<input type="checkbox"/> Yes <input type="checkbox"/> No							
Please note the focus of discussion during this assessment (refer to possible questions in introduction)										

Example of DOPS form (Type 2)

	8.1 VENEPUNCTURE (FOR LAB ANALYSIS)
VENEPUNCTURE	The purpose of this assessment is to ensure that the HO can safely take a venous blood sample and provide advice on how to improve his (or her) technique.
PATIENT	The patient must be haemo-dynamically stable, well perfused, and have a readily identifiable vein suitable for venepuncture and need to have blood samples taken.
HYGIENE	The HO must have clean hands and wear gloves for this procedure. The patient's skin must be cleaned. Washing of hands after the procedure.
EQUIPMENT AND VEIN	The HO must demonstrate familiarity with appropriate needles for adults and appropriate sampling tubes and select a suitable vein for venepuncture.
PROCEDURE (Please TICK boxes to ensure the procedure has been completed correctly before completing the DOPS assessment form.)	<p>The HO must perform the following skills</p> <ul style="list-style-type: none"> <input type="checkbox"/> The HO must check that the blood is being collected from the correct patient. <input type="checkbox"/> The HO must wash hands and wear gloves for this procedure. <input type="checkbox"/> The HO must clean the patient's skin for the procedure. <input type="checkbox"/> The HO must successfully collect the blood samples within two attempts. <input type="checkbox"/> The patient must experience minimum discomfort. <input type="checkbox"/> The HO must ensure that there is no uncontrolled bleeding after the procedure. <input type="checkbox"/> The HO must personally dispose of the "sharps", tidy up and wash hands. <input type="checkbox"/> The HO must correctly complete the details on the sample tubes.
	SCORING AND FEEDBACK: Grade A (Good)..... Grade B (Satisfactory)..... Grade C (Poor).....
Signature of Assessor Date: Stamp:	Feedback: Fail mark : A HO who scores grade C is deemed to have failed. He/she must come back for another assessment at a later date.

Checklist

Who can be assessor?

- supervising consultants
- GP principals
- *Peers (certified by educators)
- *experienced nurses or
- *Allied health professional colleagues.

What can be assess?

- urinalysis using 'dipstick'
- measurement of glucose using meter
- venepuncture
- IV line
- Nasogastric / chest tube insertion
- basic life support
- Intubation
- various injections
- electrocardiogram
- cannulation
- arterial blood sampling



STANDARDS FOR UNDERGRADUATE MEDICAL EDUCATION

Prepared by:

**UNDERGRADUATE EDUCATION SUBCOMMITTEE,
MEDICAL EDUCATION COMMITTEE, MALAYSIAN MEDICAL COUNCIL**

Adopted by The

MALAYSIAN MEDICAL COUNCIL

28th May 2019

First Edition: 2019

Second Edition: 2022

List of procedures: Level 4

SECTION 4 CORE COMPETENCIES

Clinical Skills Levels Descriptors:

Level	Descriptors
1	Able to describe the task
2	Able to apply the principles or theory of the specific task. May have seen the task being perform
3	Have experience performing the task or perform under supervision
4	Able to relate the theory and principles and indications of the specific task Able to perform the task

Investigations and Procedures

No	Investigations	Level
1	Blood culture	3
2	ECG – able to perform and interpret	4
No	Procedures	Level
1	Venepuncture	4
2	Inserting an IV cannula	4
3	Insertion of urinary catheter	3
4	Insertion of Ryles tube	3
5	Cardiopulmonary Resuscitation (bag mask, chest compression, intubation, defibrillation)	4
6	Long line insertion	2

60

List of procedures: Level 4

7	Central line insertion (jugular or subclavian)	2
8	Echocardiogram	2
9	Dialysis catheter insertion	2
10	Lumbar puncture	2
11	Joint aspiration	2
12	Joint injection	2
13	Abdominal paracentesis	2

List of procedures: KKM

Example of KKM Logbook

CONTENTS

1. Glossary	Page 3
2. Introduction	Page 4
3. Objectives	Page 5
4. Guidelines on the Use of This Log Book	Page 6
5. House Officer Curriculum	Page 7-10
5.1 Mandatory Topics	
5.2 Other essential topics	
5.3 Guide to assessing a good presentation	
5.4 Procedures	
6. Assessment Tools	Page 11
7. Table of Assessment Tools	Page 12
8. Directly Observed Procedural Skills (DOPS)	Page 13-19
9. Compulsory Performed Procedures (CPP)	Page 20-21
10. Guide to a good medical discharge summary	Page 22
11. Compulsory Observed of Assisted Procedures (CO-AP)	Page 23-27
12. Case-Based Discussion (CBD)	Page 28-32
13. Mini Clinical Evaluation Exercise (mini-Cex)	Page 33-38
14. Performance Appraisal	Page 39-41
15. Basic Life Support (BLS) Skills	Page 42-43
16. MCQs	Page 44
17. Multisource Feedback (MSF)	Page 45-50
18. Continuing Professional Development	Page 51-52
19. Indications of Extension	Page 53
20. Certification of Completion of Training	Page 55
21. Component & Weightage For Certificate Completion Of Posting	Page 59
22. Certificate Completion Of Posting	Page 61

Where to implement DOPS

- Ward
- Out-patients
- A&E
- Theatre
- Simulation lab??

Adult Resuscitation	Head Immobiliser	Otoscopy	Insulin Injection
Airway Endotracheal Intubation	Scoop Stretcher	Heart and Lung Auscultation	Ophthalmoscopy
Laryngeal Mask Airway	Splinting	Rectal Examination	Aseptic Blood Culture Preparation
Basic Life Support	Limb Traction	Venepuncture	Central Venous Line Insertion
Paediatric Resuscitation	Collar Neck Application	Arterial Puncture	Lumbar Puncture
Neonatal Resuscitation	Chest Drain Insertion	Intraosseous Cannulation	Spinal and Epidural Anaesthesia
Suturing	Male Urinary Catheter Insertion	Vaginal Examination and Speculum	Breast Examination
Blood Pressure Measurement	Female Urinary Catheter Insertion	Pap Smear and High Vaginal Swab	Knee Aspiration
Inhaler Technique	Nasogastric Tube Insertion	Peak Flowmetry	Intravenous Cannulation

FACULTY OF MEDICINE: SIM@UKM

The different between DOPS and log book exercise

- DOPS must be observed 100%
- The task in DOPS are divided into:
 - Before performing: Indication
 - While performing the procedure
 - Post performing procedure: documentation
- using a DOPS form (with written feedback)
- MUST have verbal feedback

Educational Impact (log book)

- Commonly, assessment of clinical skills is inferred through evaluators' recollections of students' case presentations which may not accurately reflect students' clinical skills. (Kassebaum and Eaglen 1999)

Thank you.....



CASE BASED DISCUSSION

Dr Mohd Nasri Awang Besar
Department of Medical Education
Faculty of Medicine, UKM

Workplace-Based Assessment (WPBA) Workshop
Kuliyah of Medicine, IIUM
17th August 2023



CONTENTS

- 1 Purpose of CBD
- 2 Characteristic of CBD
- 3 How to conduct CBD?
- 4 How to implement CBD at the workplace

Introduction to CBD

- ▶ Case based discussion (CBD): UK postgraduate training
- ▶ Chart-stimulated recall (CSR): American Board of Emergency Medicine
- ▶ 15–20 minutes for discussion of the case and 5–10 minutes for feedback

Purposes of CBD

- **EXPLORE CLINICAL REASONING and CLINICAL JUDGEMENT!!!!**
 - NEED SKILL OF PROBING!!!
 - THEREFORE the examiner is referring to candidate's case note (case record) prior or during the CBD
 - Based on what has happened not what would happen

Special characteristic of CBD

1. Trainers review medical records seen by a trainee prior to CBD
2. The trainee discusses with an assessor cases they have recently seen or treated.
3. Focussed discussion: All or selected domains
4. Understanding the reasoning behind the trainee's choices.
5. Based on what has happened not what would happen
6. The trainee does most of the talking, taking the assessor through the whole period of the case, explaining what happened and why
7. Closed with written and verbal feedback

Domains (competencies) covers in CBD

- ▶ The CBD assesses several clinical domains
 - Clinical judgement and decision making
 - Medical record-keeping
 - Follow-up and future planning
 - Communication and team working
 - Leadership
 - Reflective practice
 - Professionalism
 - Clinical assessment
 - Investigation
 - Referrals
 - Treatment
 - Diagnostic skills and underlying knowledge base

Case-based Discussion (CbD)

F1

CBD Form

Assessor: have you been trained in assessment methodology and feedback?

☐ Yes ☐ No

Please complete the questions using a cross ☒ Please use black ink and CAPITAL LETTERS

Doctor's Surname:

Forename:

GMC number: **YOUR GMC NUMBER MUST BE COMPLETED**

Clinical setting:	A&E <input type="checkbox"/>	OPD <input type="checkbox"/>	In-patient <input type="checkbox"/>	Acute Admissions <input type="checkbox"/>	GP Surgery <input type="checkbox"/>	Other (please specify) <input type="text"/>
Clinical problem category:	Airway/Breathing <input type="checkbox"/>	CVS/Circulation <input type="checkbox"/>	Gastro <input type="checkbox"/>	Neuro & visual <input type="checkbox"/>	Pain <input type="checkbox"/>	Psychiatric/Psychological <input type="checkbox"/>
Focus of clinical encounter:	Medical record keeping <input type="checkbox"/>	Clinical Assessment <input type="checkbox"/>				
Assessor's rating of complexity of case: (F1)	Low <input type="checkbox"/>	Average <input type="checkbox"/>	High <input type="checkbox"/>			

Focus Complexity

Please grade the following	Well below expectations for F1 completion	Below expectations for F1 completion	Borderline for F1 completion	Meets expectations for F1 completion	Above expectations for F1 completion	Well above expectations for F1 completion	U/C*
1 Medical record keeping	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2 Clinical assessment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3 Investigation and referrals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4 Treatment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5 Follow-up and future planning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6 Professionalism	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7 Overall clinical judgement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Domain

Rating scale

Anything especially good?

Suggestions for development:

Written feedback

Agreed action:

Would you like to link this assessment as evidence to the foundation doctors PDP? (If yes; drop down menu will appear; you can select up to 10 outcomes) ☐ Yes ☐ No

Date (mm/yy) / Time taken for observation: (in minutes)

Time taken for feedback (in minutes)

Assessor's signature:

Assessor's surname:

Assessor's registration number*:

*if appropriate

ISCP INTERCOLLEGIATE SURGICAL CURRICULUM PROGRAMME

Case-Based Discussion (CBD)

Please use black ink and CAPITAL LETTERS.		Please complete the questions using a tick <input checked="" type="checkbox"/>	
Trainee		Assessor	
Name:		Name:	
GMC number:		GMC number:	
Specialty:		Position:	
<input type="checkbox"/> Cardio <input type="checkbox"/> Gen <input type="checkbox"/> Neuro <input type="checkbox"/> OMFS <input type="checkbox"/> Otol <input type="checkbox"/> Paed <input type="checkbox"/> Plast <input type="checkbox"/> T&O <input type="checkbox"/> Urol		(must be trained Consultant, SASG, SpR)	
Hospital:		Institutional e-mail:	
Training post (e.g. CT1/ST1):		Training: No <input type="checkbox"/> Written <input type="checkbox"/> Web/CD <input type="checkbox"/> Workshop <input type="checkbox"/>	
Clinical setting (e.g. Outpatients):		CBD relates to reflective writing <input type="checkbox"/>	
Summary of the clinical problem:			
Focus of encounter:	Medical record keeping <input type="checkbox"/>	Clinical assessment <input type="checkbox"/>	Management <input type="checkbox"/>
Complexity of the case:	Professionalism <input type="checkbox"/>		
1. Appropriate for early years training 2. Appropriate for the completion of early years training or early specialty training 3. Appropriate for the central period of specialty training 4. Appropriate for Certificate of Completion of Training (CCT)			

ASSESSMENT RATINGS

Your assessment ratings should be judged against the standard laid out in the syllabus for the trainee's stage of training

How do you rate this trainee in their:

	Outstanding	Satisfactory	Development required	Not assessed
1. Medical record keeping				
2. Clinical assessment				
3. Diagnostic skills and underlying knowledge base				
4. Management and follow-up planning				
5. Clinical judgement and decision making				
6. Communication and team working skills				
7. Leadership skills				
8. Reflective practice/writing				

FEEDBACK: Verbal feedback is a mandatory component of this assessment. Please use this space to record areas of strength and suggestions of development which were highlighted during discussion with the trainee:

GLOBAL SUMMARY

After summarising the discussion with the trainee in the box above, please complete the overall level at which the Case-Based Discussion was performed on this occasion, if there was sufficient evidence to make a judgement:

Level 0	Below that expected for early years training	
Level 1	Appropriate for early years training	
Level 2	Appropriate for completion of early years training or early specialty training	
Level 3	Appropriate for central period of specialty training	
Level 4	Appropriate for Certificate of Completion of Training (CCT)	

Time taken for observation (mins): Time taken for feedback (mins):

Date: Trainee's signature: Assessor's signature:

Domain	Description
Medical record keeping	Legible; signed; dated; appropriate to the problem; understandable in relation to and in sequence with other entries; helps the next clinician give effective and appropriate care.
Clinical assessment	Understands the patient's story; clinical assessments are based on appropriate questioning and examination.
Investigation and referral	Discusses the rationale for investigations and necessary referrals; understands why diagnostic studies were ordered or performed, risks and benefits were relevant to the differential diagnosis.
Treatment	Discusses the rationale for the treatment, including the risks and benefits.
Follow-up and future planning	Discusses the rationale for the formulation of the management plan including follow-up.
Professionalism	Discusses the care of this patient as recorded, demonstrated respect, compassion, empathy and established trust; discusses the patient's needs for comfort, respect, confidentiality were addressed; record demonstrated an ethical approach, and awareness of any relevant legal frameworks; has insight into own limitations.

Old version

Name of examiner: _____

Date of submitting the case report: _____

Summary of the clinical problem:

Case Complexity: ☐ Low ☐ Average ☐ High

Checklist on candidate's overall performance (Please circle)								
A = Very Good 1	B = Good 0.75	C = Acceptable 0.5	D = Poor 0.25	E = Not done 0	Not applicable	Weightage (10)	Score	
Activities	A	B	C	D	E			
Medical record keeping	A	B	C	D	E			
Clinical assessment	A	B	C	D	E			
Investigation	A	B	C	D	E			
Diagnostic skill and underlying basic knowledge	A	B	C	D	E			
Management and follow up and future planning	A	B	C	D	E			
Clinical judgement and decision making	A	B	C	D	E			
Referral	A	B	C	D	E			
Communication and team working skills	A	B	C	D	E			
Leadership skills	A	B	C	D	E			
Professionalism	A	B	C	D	E			
Examiner signature:						Total score		/10
Name:								
Global rating (Please circle)		Poor	Borderline	Good	Very Good			

New version

CASE BASED DISCUSSION (CBD) FORM
FACULTY OF MEDICINE
UNIVERSITI KEBANGSAAN MALAYSIA

Name: _____ Date: _____

Matric Number: _____

Department: _____

Name of Patient: _____ R/N: _____

System:

Summary of the clinical problem:

Problem / Case Complexity: Low ☐ Average ☐ High ☐

* A student must be assessed on Part A and Part B

Part A: The assessor **must choose (tick)** assess all items

	Very Good (5)	Good (4)	Acceptable (3)	Poor (2)	Very poor (1)	Score
Clinical judgement (diagnosis and differentials)						
Investigation						
Management, follow-up planning						
Score						/15

Part B: The assessor **may choose (tick)** more than one item

	Medical record keeping		Professionalism		Leadership skills		Referral
--	------------------------	--	-----------------	--	-------------------	--	----------

Very Good (5)	Good (4)	Acceptable (3)	Poor (2)	Very poor (1)	Score
					/5

Name of assessor: _____

Signature: _____

CASE BASED DISCUSSION (CBD) FORM
FACULTY OF MEDICINE
UNIVERSITI KEBANGSAAN MALAYSIA

* Please return this page to the student

Summary of the clinical problem:

WRITTEN AND VERBAL FEEDBACK

How is your performance today?

What you do well?

What else to improve?

Agreed action:

VERBAL FEEDBACK

Tips for verbal feedback:

- 1) The feedback should focus on each item
- 2) Student's score should not be discussed in feedback

How to conduct CBD?: Preparation

Trainee:

- Set the time and place with assessor or vice versa
- Prepare CBD form (either printed or online)

Assessor:

- Trained assessor
- The assessor is familiar with the case or
- the assessor is referring to candidate's case note (case record) prior or during the CBD

Both:

- Make time and arrange a suitable quiet room so that there are no distractions or any suitable place
- Agree the focus of the assessment

How to conduct CBD?: During the CBD

Trainee:

- ▶ **Explain:** Example–The case and any complexities, the patient's needs and how they were attended to, your planning, decision making and leadership, considerations, protocols, key people involved, investigations and findings, methods for expanding your knowledge and any research undertaken, any concerns etc.
- ▶ **Reflect on:** Links to other cases or events, rationale for your assumptions. Your experience of handling data, information and people etc. What went well, what you learned, further learning and how you intend to achieve it.

Accessor:

- ▶ Select area of focus
- ▶ Use open questions to explore the reasoning behind actions and decisions made e.g. *Why? What options did you consider? What were the patient's main concerns?*

How to conduct CBD?: Post CBD exercise

Trainee:

- Upload feedback to the portfolio accurately in good time
- Record any re-evaluation of your initial reflections in light of the discussion (either in a private or portfolio area)
- Follow up action plans

Trainer:

- Follow up action plans

Example of guideline



Guidance for educators

Case-based discussion (CBD)

This guidance is designed to improve Continuous Assessment (CA) at the Faculty of Medicine UKM.

What is case-based discussion (CBD)?

A case-based discussion is a **structured discussion** of a clinical case based on the case note/ case report/ case write-up managed by the Medical Students. Its strength lies clinical reasoning and **feedback**.

How does it work?

- Cases from wards or clinic should be chosen by the students who have personally managed the patients at least 2 days prior.
- The cases also can derive from student's case report/ case write-up
- Ideally, the students should select two case records from patients they have seen recently, and in whose **notes they have made an entry**. The trainer should select one of these for the CBD session.
- Discussion should be conducted in person or in group in a conducive environment or a quiet room for uninterrupted assessment.
- Immediate feedback and actions advised for further learning are recorded (verbal and written) solely for the student's benefit.

Discussion must **starts from and be centered on the student's own record in the notes/case write-up/case report**. Lecturers **must read the whole or selected part of the case**. CBD typically takes 20-30 minutes including immediate feedback and completion of the form. It may be necessary to allocate more time.

What areas should CBD focus on?

CBD is most useful when considering the following areas: **Focus of encounter**

Medical record keeping

Clinical assessment

Investigation and referral

Treatment

Follow-up and future planning

Positive indicators

Legible; signed; dated; appropriate to the problem; understandable in relation to and in sequence with other entries; helps the next clinician give effective and appropriate care.

Understood the patient's story; made a clinical assessment based on appropriate questioning and examination.

Discusses the rationale for the investigations and necessary referrals; understands why diagnostic studies were ordered or performed, including the risks and benefits in relation to the differential diagnosis.

Discusses the rationale for the treatment, including the risks and benefits.

Discusses the rationale for the formulation of the management plan



Professionalism

including follow-up.

Discusses how the care of this patient, as recorded, demonstrated respect, compassion, empathy and established trust; discusses how the patient's needs for comfort, respect, confidentiality were addressed; discusses how the record demonstrated an ethical approach, and awareness of any relevant legal frameworks; has insight into own limitations.

Feedback

In order to maximize the educational impact of using CBD, the students must be given an opportunity to generally reflect their own performance. The sentence "How is your performance today" or "Tell me about your performance" could assist the lecturer to identify the student's performance gaps. Rather than just focus on the weaknesses, it is crucial to identify strengths, areas for development and agree an action plan. Even though the CBD discussion might be conducted in group, the feedback session should be done in one-to-one basis. **Do not disclose the scores** to the student to maintain student focus to the feedback.

How is the form accessed?

The CBD form is available at the department office or will be distributed to students during the early briefing of each posting. The completed form will be separated and the scores must be submitted to the department office. The feedback form should be kept by the student for future learning.

How should lecturers complete the form?

- ☐ **Lecturer's details:** This should include registration number and position. If there is no relevant option select 'other' and specify.
- ☐ **Clinical setting:** Select the most appropriate setting; if none apply select 'other' and specify.
- ☐ **Clinical problem category:** These are based on the clinical areas described in the Curriculum. If none apply select 'other' and specify. More than one category can be selected.
- ☐ **Focus of the encounter:** Select the most appropriate focus or areas of focus.
- ☐ **Written feedback:** Describe weaknesses, strength, suggestion for development and an agreed action.

Take home message for CBD

- ▶ “CBD is more feasible and simpler
 - 15–20 min ONLY
 - No need to access every item written in CBD form
 - Begin with present a case summary
 - Focus on chosen clinical encounter
 - Use medical record/student case note/case report/case write up
- ▶ With/Without the presence of patient
- ▶ The trainee does most of the talking, taking the assessor through the whole period of the case, **explaining what happened with reasons**
- ▶ Understanding the reasoning behind the trainee’s choices.

Video

How to incorporate CBD in your institution?



Overview

- ▶ The difference between CBD with
 - Modified long case
 - Case presentation during bedside teaching/clinic/ward round
 - Case write-up/ case report
- ▶ How to incorporate CBD in case presentation during
 - Bedside teaching
 - ward round
 - clinic
- ▶ How to upgrade case write-up/ case report to CBD

Understand the basic concept of CBD

- ▶ “CBD is more feasible and simpler
 - 15–20 min ONLY
 - Begin with present a case summary
 - No need to access every item written in CBD form
 - Focus on chosen clinical encounter
 - Use medical record/student case note/case report/case write up
- ▶ With/Without the presence of patient
- ▶ The trainee does most of the talking, taking the assessor through the whole period of the case, **explaining what happened with reasons**
- ▶ **Understanding the reasoning behind the trainee’s choices.**

Common misconception!!!

- ▶ **IT IS NOT a cased based learning (CBL)**
- ▶ **It is not case presentation (during bedside teaching or clinic session)**
- ▶ **However, it can easily upgrade to CBD!!!**

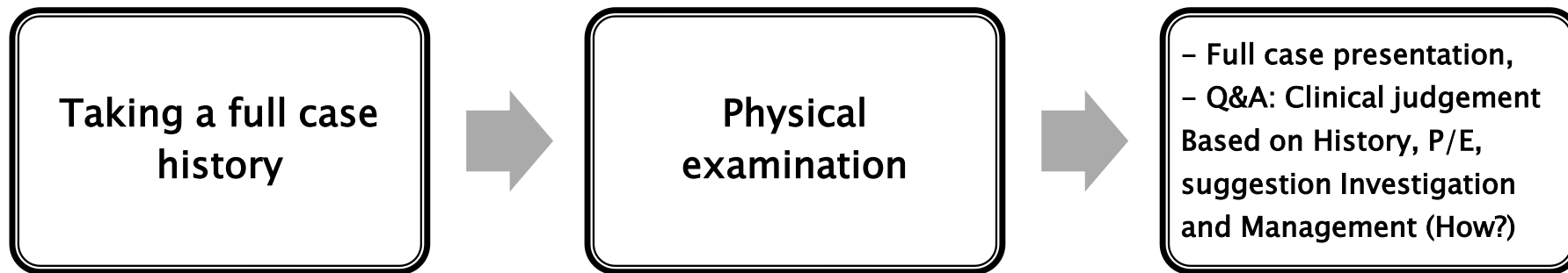
Similarities and Differences

	CBD	Case presentation	Long case
Observed	No	No	No
Question: Complexity, amount Answer schemes:	Not Standardize	Not Standardize	Not Standardize
Candidate present a case	Yes (brief)	Yes	Yes
Duration	Approx 15–20m	Not standardize	20–30m
Explore all aspect (domains)	Focus/All	All	All
Assessment form	Yes	Yes/No	Yes
Immediate feedback	Yes	Yes/No	No
The examiner is referring to <u>candidate's case note</u> (case record)	Yes	No	No
Focus on “why” and “other options”, rather than “How”	Yes	No	No
Wide sampling	Yes	Yes/No	No
Workplace	Yes	Yes/No	No

Can we change Modified long case to CBD?

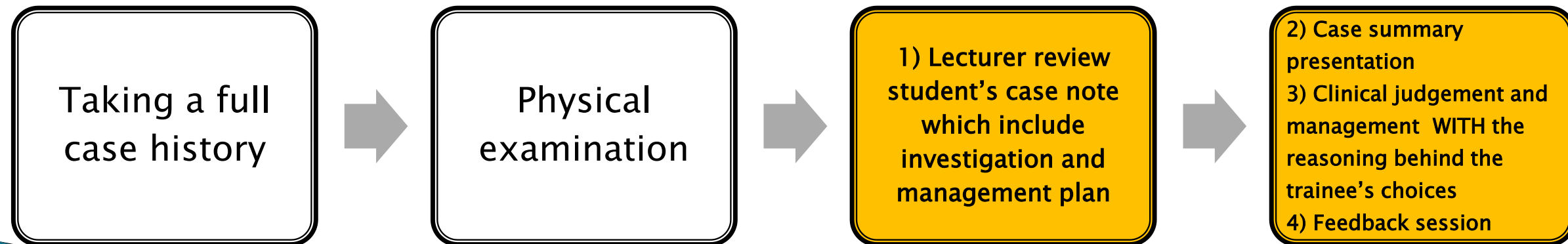
Modified Long Case: Unobserved

60 to 90 mins



CBD: Unobserved

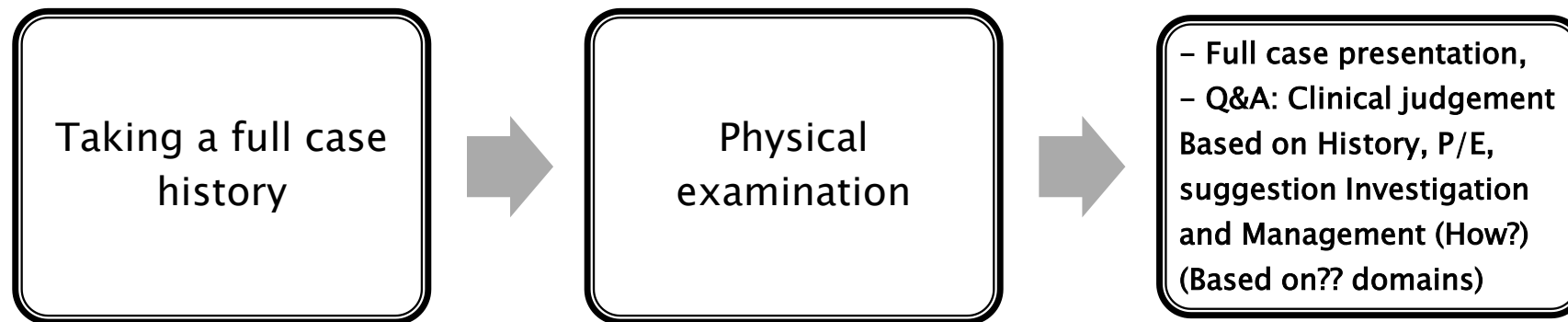
15-20 mins



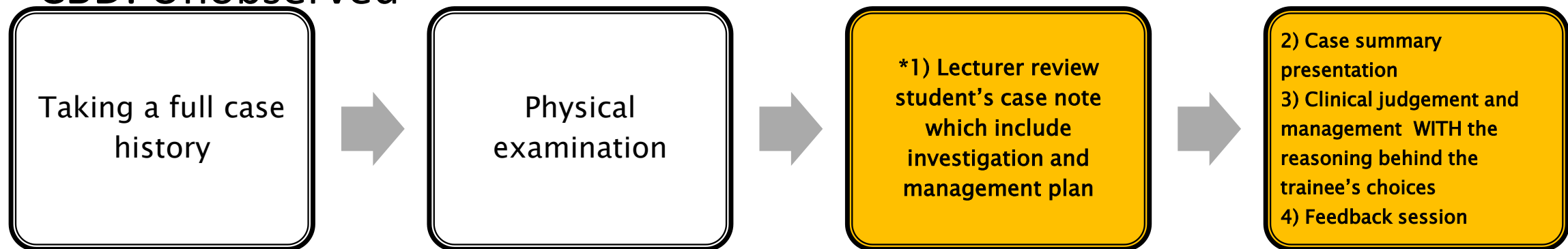
***Using standardize CBD form**

Can we upgrade Case presentation during bedside teaching/ clinic/ ~~ward round~~ to CBD?

Case presentation: Unobserved



CBD: Unobserved

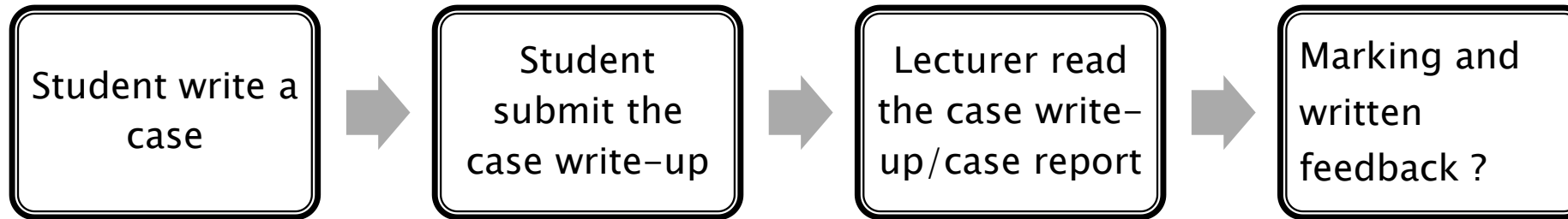


***Using standardize CBD form**

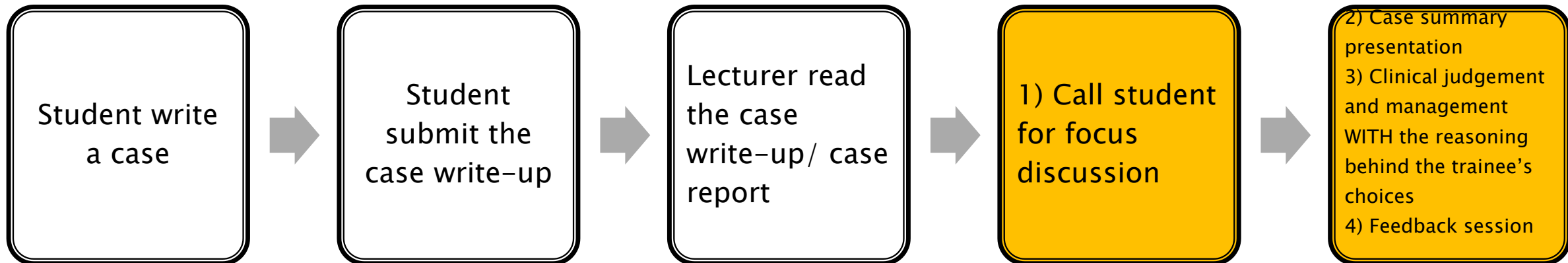
Single/ multiple encounter with the patient

Can we upgrade Case write up/ Case report to CBD?

Case write-up/ Case report- Unobserved



CBD: Unobserved



***Using standardize CBD form**

Transforming Case presentation at the clinic to CBD

What need to do

- ▶ Agree that the case should based on single encounter with the patient
- ▶ ***Using standardize CBD form**
- ▶ ***Student MUST write their plan (investigation and management)**
- ▶ ***Lecturer review and plan based on the candidate's "case note" prior to CBD** Without the presence of patient
- ▶ With or without the presence of other students
- ▶ With or without the presence of patient
- ▶ Avoid lengthy case presentation– just a present a case summary
- ▶ ***Focus on "why" and "other options", rather than "How" when referring on the "case note"**
- ▶ ***Close the session with the individual verbal feedback**
- ▶ Gentle reminder: Do not count student's performance as part of supervisor report/ log book

Transforming Case presentation at the clinic/bedside to CBD

What need to do

- ▶ *Using standardize CBD form
- ▶ *Student MUST write their plan (investigation and management)
- ▶ *Lecturer review and plan based on the candidate's "case note" prior to CBD
- ▶ With or without the presence of patient
- ▶ 10–15 mins
 - – just present a case summary
 - – focus on selected domain
 - –Based on what has happened not what would happen
 - – focus on clinical reasoning
 - “why” and “other options”, rather than “How”
 - Example–The case and any complexities, the patient's needs and how they were attended to, your planning, decision making and leadership, considerations, protocols, key people involved, investigations and findings, methods for expanding your knowledge and any research undertaken, any concerns etc
- ▶ *Close the session with the individual verbal feedback

Transforming Case presentation during bedside teaching to CBD

What need to do

- ▶ Agree that the case should based on **multiple** encounter with the patient
- ▶ *Using standardize CBD form
- ▶ *Lecturer review and plan based on the candidate's "case note" prior to CBD
- ▶ With or without the presence of patient
- ▶ With or without the presence of other students
- ▶ Avoid lengthy case presentation– just a present a case summary
- ▶ *Focus on "why" and "other options", rather than "How" when referring on the "case note"
- ▶ *Close the session with the individual verbal feedback
- ▶ Gentle reminder: Do not count student's performance as part of supervisor report/ log book

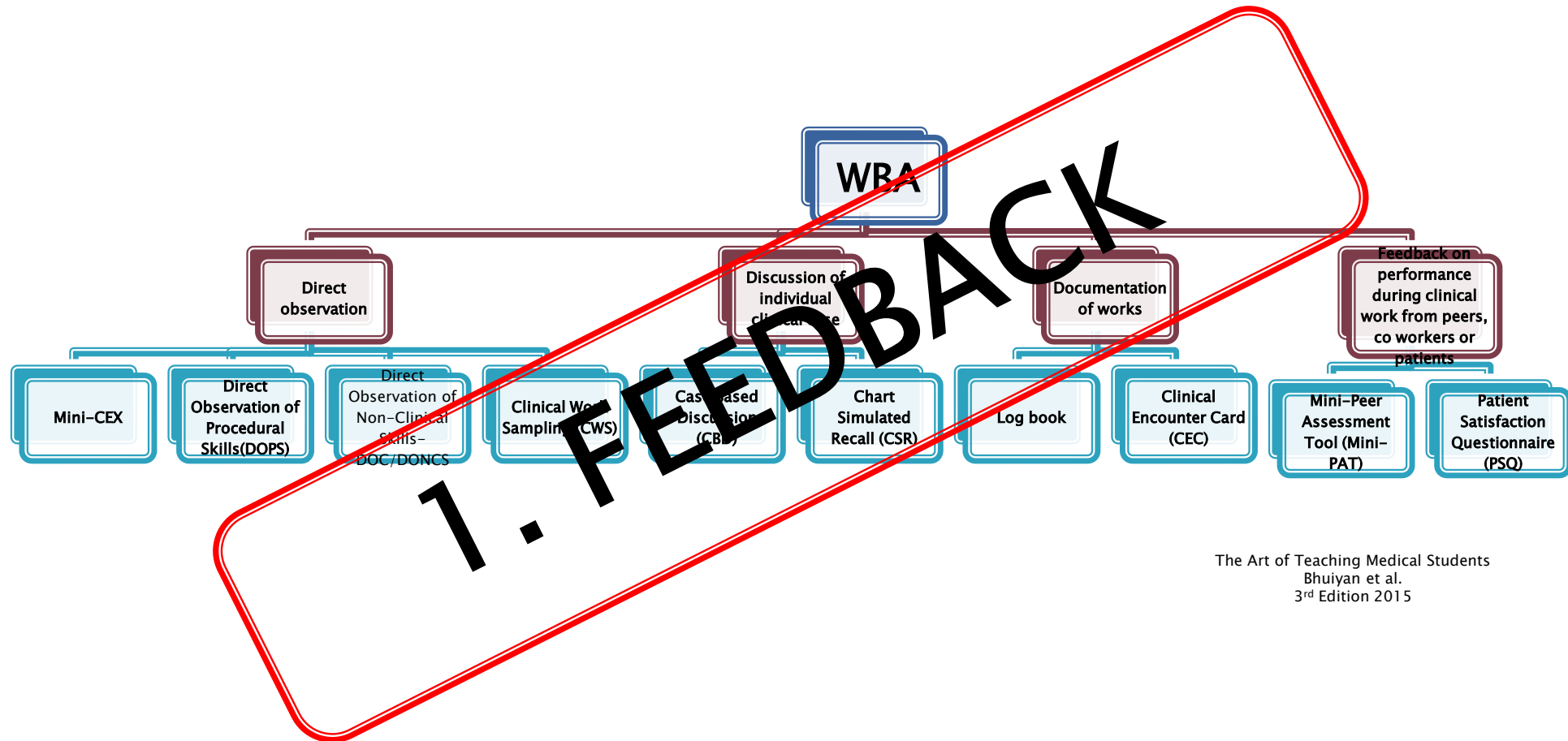
Further reading

1. ISCP Guidance notes on using the CBD
https://www.iscp.ac.uk/static/public/cbd_guidance.pdf
2. ISCP Guidance notes on using the Reflective CBD
https://www.iscp.ac.uk/static/public/reflective_cbd_guidance.pdf
3. ISCP Tips for using CBD
https://www.iscp.ac.uk/static/public/cbd_tips.pdf
4. Academy of Medical Royal Colleges: *Improving Assessment*
http://www.aomrc.org.uk/doc_view/49-improving-assessment

Thank you



FOUR Characteristic of WPBA



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Bhuiyan et al.
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Verbal or written feedback or both

- ▶ “The implications for performance assessment are that **narrative feedback, and action on that feedback**, needs to be designed into a culture of learning. Both **immediate and longitudinal approaches** to feedback are important...”

(Boursicot et al 2020)

- ▶ Toale et al (2021) analyzed 500 WPBA assessment (Supervised Structured Assessments of Operative Performance –SSAOPs)
 - 72.4%: utilized written feedback
 - “Gap” and “Action” approach– Low

Please refer to curriculum at www.mmc.nhs.uk for details of expected competencies for F1 and F2

Case-based Discussion (CbD) – F2 Version

Please complete the question using a cross: ☒ Please use black ink and CAPITAL LETTERS

Doctor's Surname

Forename

GMC Number:

GMC NUMBER MUST BE COMPLETED

Clinical setting: A&E ☐ OPD ☐ In-patient ☐ Acute Admission ☐ GP Surgery ☐

Clinical problem category: Pain ☐ Airway/Breathing ☐ CVS/Circulation ☐ Psych/Behav ☐ Neuro ☐ Gastro ☐ Other

Focus of clinical encounter: Medical Record Keeping ☐ Clinical Assessment ☐ Management ☐ Professionalism ☐

Complexity of case: Low ☐ Average ☐ High ☐ Assessor's position: Consultant ☐ SpR ☐ GP ☐

Please grade the following areas using the scale below:	Below expectations for F2 completion	Borderline for F2 completion	Meets expectations for F2 completion	Above expectations for F2 completion	U/C *
1 Medical record keeping	1 <input type="checkbox"/> 2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/> 6 <input type="checkbox"/>	<input type="checkbox"/>
2 Clinical assessment	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>
3 Investigation and referrals	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>
4 Treatment	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>
5 Follow-up and future planning	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>
6 Professionalism	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>
7 Overall clinical judgement	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>

*U/C Please mark this if you have not observed the behaviour and therefore feel unable to comment

Anything especially good?

Suggestions for development

Agreed action:

1

Name: _____ Date: _____

Matric Number: _____

Place of assessment: ☐ Ward ☐ Clinic ☐ Others

Name of Patient: _____ R/N: _____

Patient's age: _____ Gender: Male ☐ Female ☐

Patient's problem list / Diagnosis: _____

New ☐ Follow-up ☐ Problem / Case Complexity: Low ☐ Average ☐ High ☐

3

Checklist on candidate's overall performance (Please circle)

A = Very Good B = Good C = Acceptable D = Poor E = Not done

1 0.75 0.5 0.25 0

2

Activities		A	B	C	D	E	Not applicable	Weightage (10)	Score
History taking skills		A	B	C	D	E		5	
Physical Examination skills		A	B	C	D	E			
Diagnosis/Problem List		A	B	C	D	E			
Clinical Judgment	Investigations - Requesting	A	B	C	D	E			
	-Interpreting	A	B	C	D	E			
	Discussion	A	B	C	D	E			
	Management	A	B	C	D	E			
Professional qualities / Communication skills		A	B	C	D	E			
Counseling skills		A	B	C	D	E			
Organization /Efficiency		A	B	C	D	E			
Examiner signature: _____								Total score	/10
Name: _____									
Global rating (Please circle)		Poor	Borderline	Good	Very Good				

Please return this page to main office

WRITTEN FEEDBACK

4

Strengths and weaknesses:

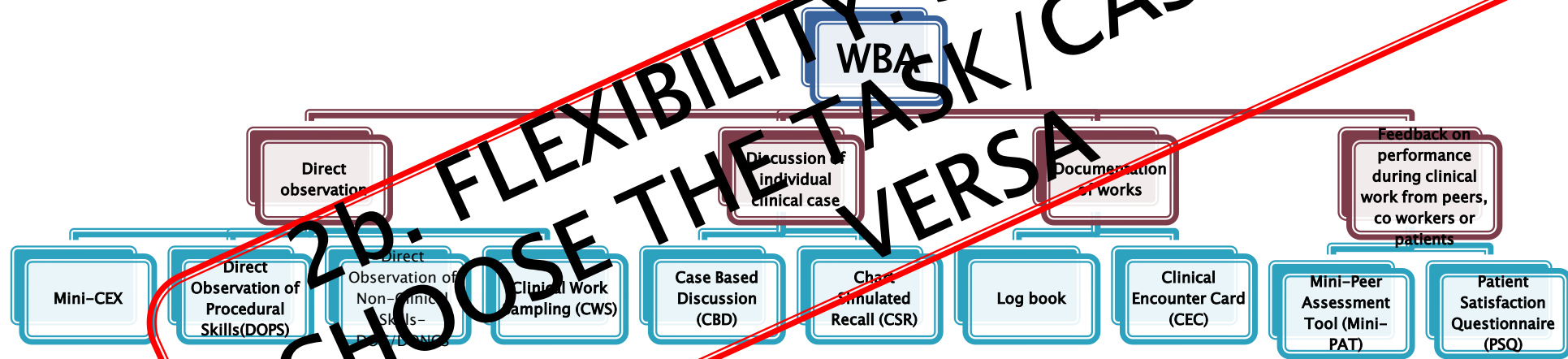
Plan for improvement:

Agreed action:

VERBAL FEEDBACK

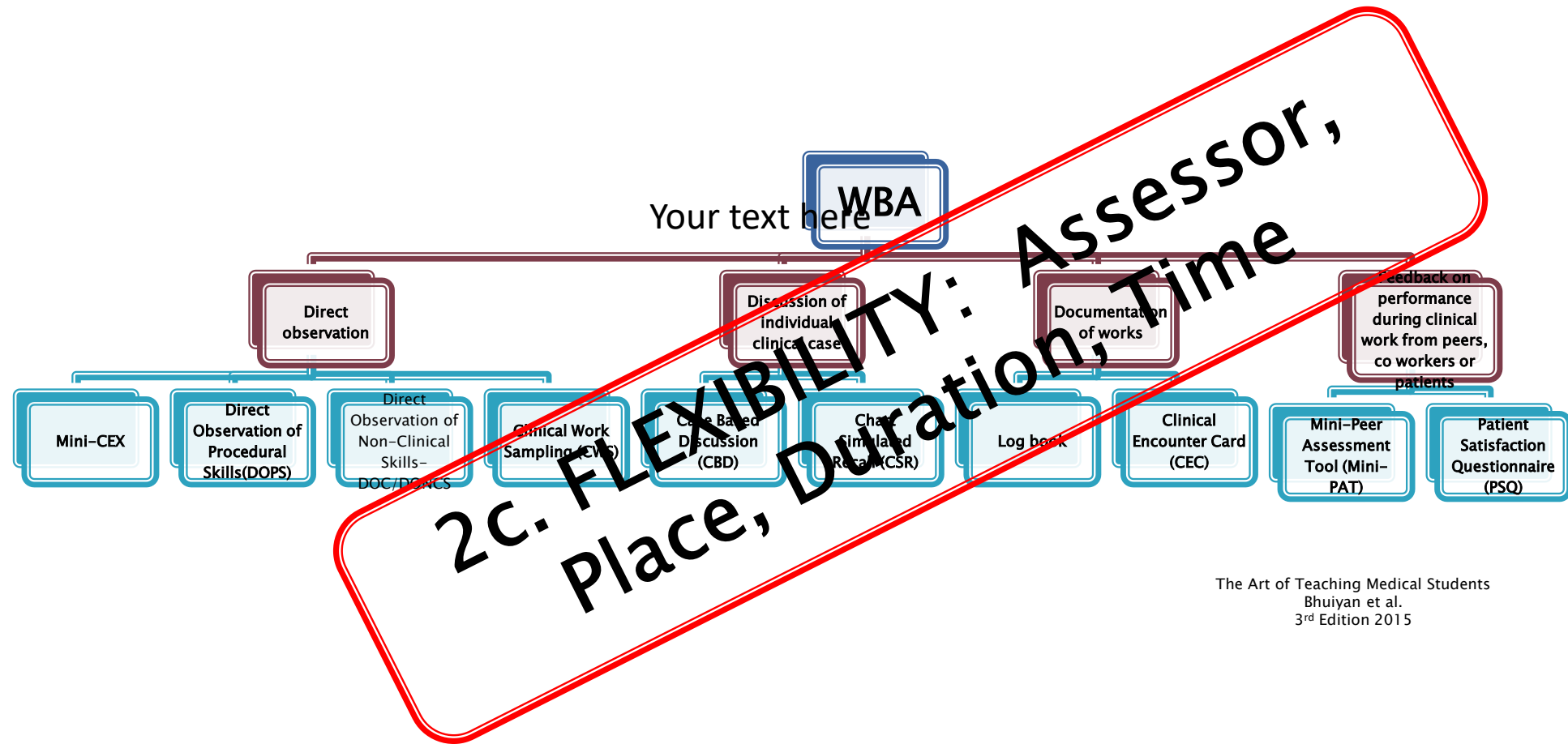
Tips for verbal feedback: 1) Allow student to reflect on their performance prior to lecturer's feedback (Open-ended self-reflection)
2) Lecturer's feedback should focus on each item
3) Student's score should not be discussed in feedback

2a. FLEXIBILITY:
Customize to your needs
!!!



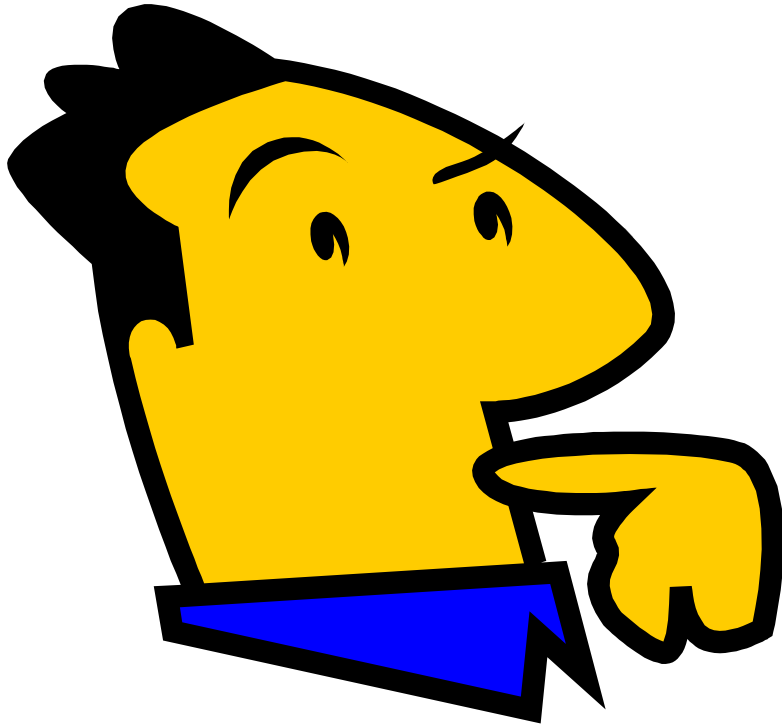
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Characteristic of WPBA



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Who can assess? (Flexible)

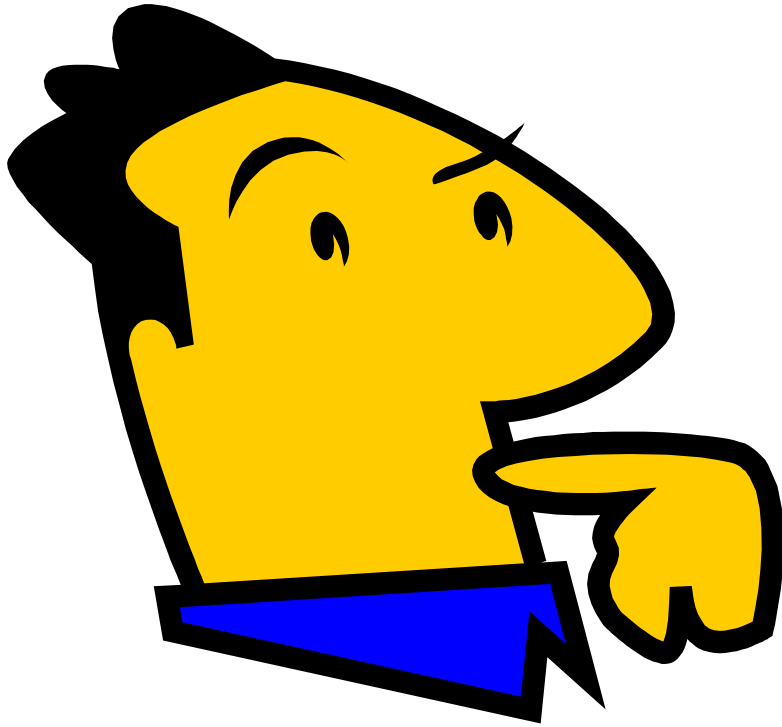


Examiners

- **Full time lecturers**
- **Part time lecturers**
- **Master student**
- **Others (eg: nurses)**

*** different examiner (including supervisor)**

Where can be assessed? (Flexible)



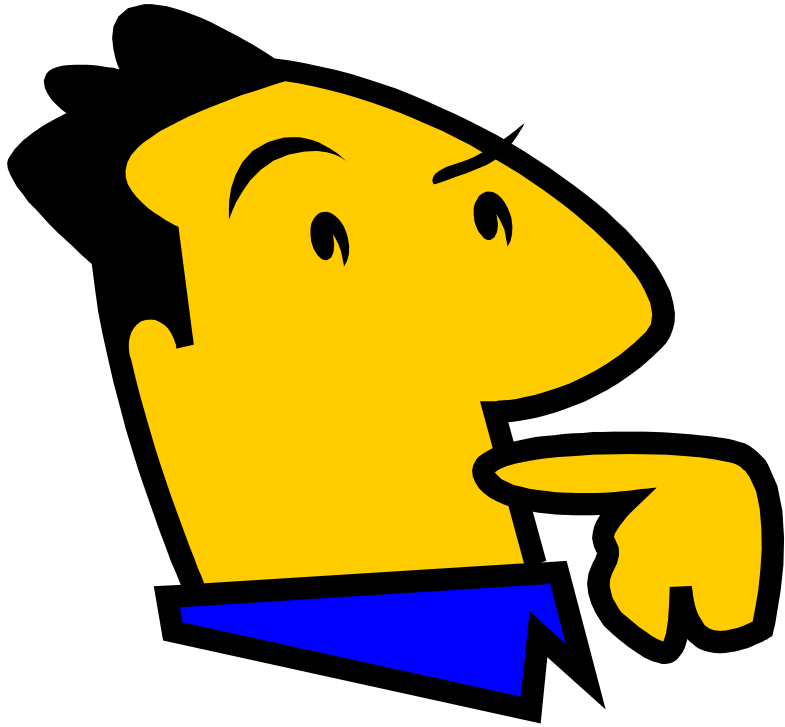
Workplace (F2F)

- inpatient,
- outpatient,
- emergency department settings.

Online


- synchronous (CBD)
- Mini-CEX (history taking)
- DOPS (simulation based)

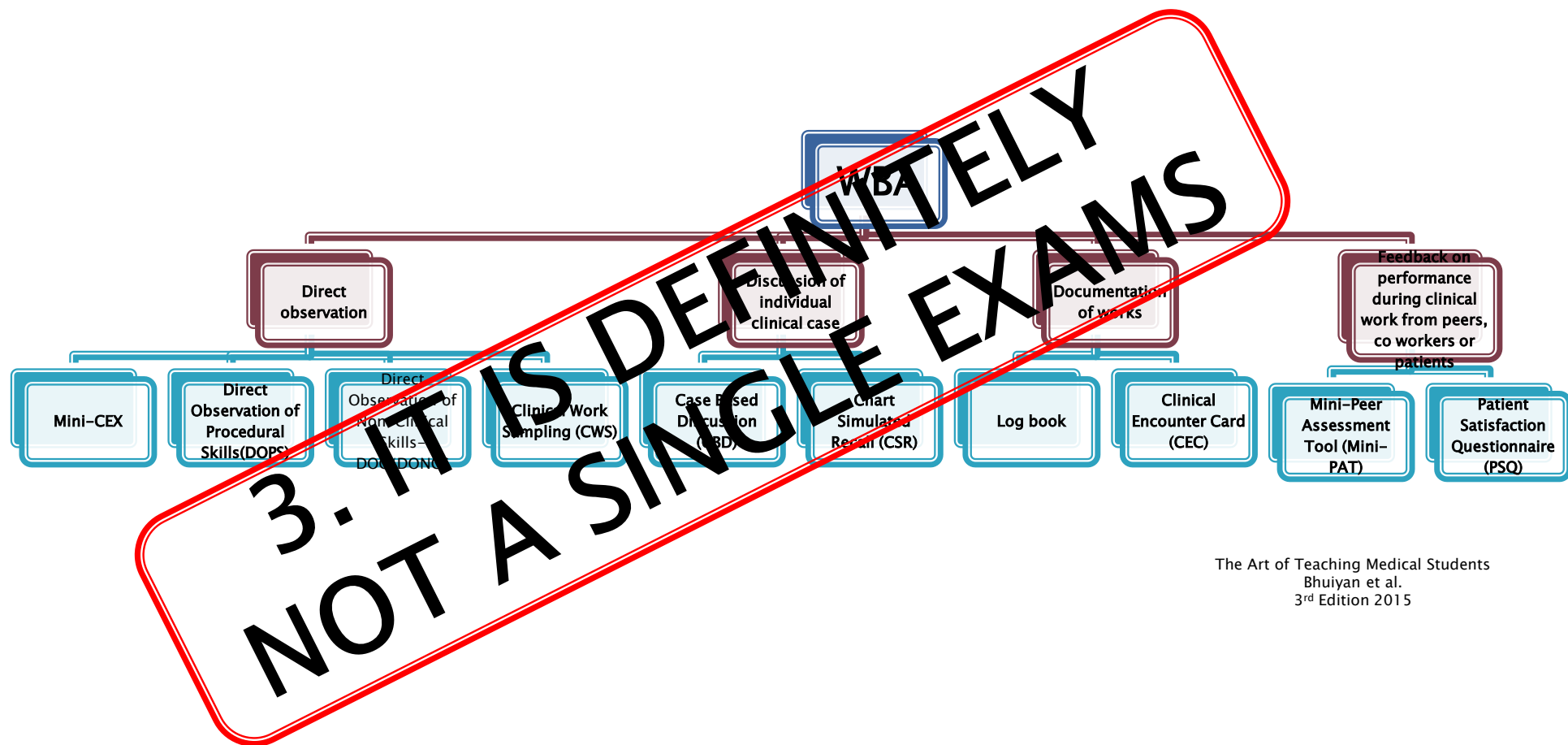
When can be assessed? (Flexible)



- Dedicated time/ Anytime
- At the clinic
- During bedside teaching
- During on call
- During ward round
- After ward round

When can be assessed? (Flexible)

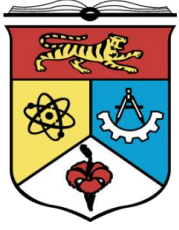
- ▶ **Structured approach**
(Formal assessment)
 - ▶ Set a number of WPBA per candidate
 - ▶ Lecturer set the case place, date and time
 - **Unstructured approach**
(Informal assessment)
 - Set a MINIMUM number of WPBA per candidate
 - Both the assessor and the patient are selected by the trainee, but the assessor must agree that the encounter is appropriate.
- 



The Art of Teaching Medical Students
 Bhuiyan et al.
 3rd Edition 2015



The Art of Teaching Medical Students
Bhuiyan et al.
3rd Edition 2015



Workplace-based Assessment

Mini-Clinical Evaluation Exercise

Dr Mohd Nasri Awang Besar
Department of Medical Education
Faculty of Medicine, UKM

Workplace-Based Assessment (WPBA)

Workshop

Kuliyah of Medicine, IIUM

17th August 2023



Content

1. What
2. Function
3. The process
4. *What can be assessed in Mini-CEX?
5. Mini-CEX form
6. How to implement at your workplace

History:

American Board of Internal Medicine (ABIM) (1972)

Traditional clinical evaluation exercise (CEX):

- 2 hours with an assessor: Performs a complete encounter
(history and physical examination on an inpatient and then reaches diagnostic and therapeutic conclusions)
- Problems:
 - Labour intensive
 - Questionable generalizability – only one-patient encounter

→ Multiple snapshots → Mini CEX

What is Mini-CEX (Norcini JJ, 1995)

- Brief: 15- to 20-minutes
- Multiple observations
- Focused (various domains)
- Formative feedback
- Various settings: Clinic, Ward, OT, ambulatory, emergency department and inpatient
- Using rating scales
- Can be conducted throughout the year

ACADEMIA AND CLINIC

The Mini-CEX (Clinical Evaluation Exercise): A Preliminary Investigation

John J. Norcini, PhD; Linda L. Blank, BA; Gerald K. Arnold, PhD; and Harry R. Kimball, MD

■ **Objective:** To gather preliminary data on the mini-CEX (clinical evaluation exercise), a device for assessing the clinical skills of residents.

■ **Design:** Evaluation of residents by faculty members using the mini-CEX.

■ **Setting:** 5 internal medicine training programs in Pennsylvania.

■ **Participants:** 388 mini-CEX encounters involving 88 residents and 97 evaluators.

■ **Measurements:** A mini-CEX encounter consists of a single faculty member observing a resident while that resident conducts a focused history and physical examination in any of several settings. After asking the resident for a diagnosis and treatment plan, the faculty member rates the resident and provides educational feedback. The encounters are intended to be short (about 20 minutes) and to occur as a routine part of training so that each resident can be evaluated on several occasions by different faculty members.

■ **Results:** The encounters occurred in both inpatient and ambulatory settings and were longer than anticipated (median duration, 25 minutes). Residents saw either new or follow-up patients who collectively presented with a broad range of clinical problems. The median evaluator assessed two residents and was generally satisfied with the mini-CEX format; residents were even more satisfied with the format. The repro-

In 1972, the American Board of Internal Medicine abandoned the oral examination of residents for logistic and psychometric reasons. It then delegated to program directors the task of evaluating the essential components of residents' clinical competence, including clinical skills. Over the years, the American Board of Internal Medicine has worked with program directors to develop efficient, effective local evaluation systems, and it has recommended that the clinical evaluation exercise (CEX) be part of the process (1). The traditional CEX is conducted by an experienced physician who observes a resident while that resident interviews a single patient (unfamiliar to the resident), does a complete physical examination, presents findings, and plans the patient's management. After the exercise, the evaluator gives the resident substantive feedback and documents the experience on a form provided by the Board. Later, the resident gives the evaluator a written record of the patient work-up for review. The traditional CEX takes about 2 hours. Approximately 82% of residents have one such evaluation during their first year of training, and a much smaller percentage (32%) have more than one (2).

As a measurement device, the traditional CEX is limited in three ways. First, the resident is observed by only one evaluator, and studies have shown that even experienced physicians differ from one another when observing exactly the same events (3). Second, the resident is ob-

Functions of mini-CEX

- The mini-CEX can be used in both undergraduate and postgraduate training programs with reasonable validity and reliability.
- Although can be used for summative purposes, by facilitating meaningful feedback and its antecedent favourable educational consequences, ***the mini-CEX is especially suitable for formative assessment.***

Mortaz Hejri S, Jalili M, Masoomi R, Shirazi M, Nedjat S, Norcini J. The utility of mini-Clinical Evaluation Exercise in undergraduate and postgraduate medical education: A BEME review: BEME Guide No. 59. Medical teacher. 2020 Feb 1;42(2):125-42.

The process:



Perform a task

10min

OBSERVED



10min

Presentation and
discussion

? min

Feedback session



What can be assessed in Mini- CEX?

Medical interviewing

Physical examination

Humanistic qualities/professionalism

Clinical judgment

Counseling

Organization/efficiency

What can be assessed in Mini- CEX?

History-taking from a patient who presents with a problem, e.g., abdominal pain.

History-taking to elucidate a diagnosis, e.g., hypothyroidism.

Physical examination of system or part of body, e.g., examination of hands.

Physical examination relevant to follow up of visit, e.g., CCF.

Physical examination to help confirm or refute a diagnosis, e.g., thyrotoxicosis.

What can be assessed in Mini- CEX?

Communication with other members of health care teams, e.g., brief a nurse regarding the management plan for a terminally ill patient.

Breaking bad news, e.g., informing a wife of her husband's bronchial carcinoma.

Educating a patient about management, e.g. use of inhaler for asthma.

General advice to a patient, e.g., upon discharge from hospital with a myocardial infarction.

Explanation to patient about tests and procedures, e.g., endoscopy.

Conflict resolution, e.g., a patient complains that her weight as recorded in out-patients was not her correct weight.

What can be assessed in Mini- CEX?

Consent taking: a diagnostic procedure, e.g. ophthalmoscopy.

Written communication, e.g., writing referral letter or discharge letter.

Interpretation of findings to superior, e.g., charts, laboratory reports or findings documented in patient's records.

Management, e.g. writing a prescription.

Critical appraisal, e.g. review of published article or pharmaceutical advertisement.

Please refer to www.hcat.nhs.uk for guidance on this form and details of expected competencies for F1

Mini-Clinical Evaluation Exercise (CEX) – F1 Version

Please complete the question using a cross: ☒ Please use black ink and CAPITAL LETTERS

Doctor's Surname

Forename

GMC Number: **GMC NUMBER MUST BE COMPLETED**

Clinical setting: A&E ☐ OPD ☐ In-patient ☐ Acute Admission ☐ GP Surgery ☐

Clinical problem category: Airway/Breathing ☐ CV5/Circulation ☐ Gastro ☐ Neuro ☐ Pain ☐ Psych/Behav ☐ Other ☐

New or FU: New ☐ FU ☐ Focus of clinical encounter: History ☐ Diagnosis ☐ Management ☐ Explanation ☐

Number of times patient seen before by trainee: 0 ☐ 1-4 ☐ 5-9 ☐ >10 ☐ Complexity of case: Low ☐ Average ☐ High ☐

Assessor's position: Consultant ☐ GP ☐ SpR ☐ SASG ☐ SHO ☐ Other ☐

Number of previous mini-CEXs observed by assessor with any trainee: 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5-9 ☐ >9 ☐

Please grade the following areas using the scale below:	Below expectations for F1 completion	Borderline for F1 completion	Meets expectations for F1 completion	Above expectations for F1 completion	U/C*
1. History Taking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Physical Examination Skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Communication Skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Clinical Judgement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Professionalism	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Organisation/Efficiency	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Overall clinical care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*U/C Please mark this if you have not observed the behaviour and therefore feel unable to comment.

Anything especially good?

Suggestions for development

Agreed action:



Focus

Complexity

Domain

Rating scale

Written feedback

MINI CLINICAL EVALUATION EXERCISE (MINI-CEX) FORM
FACULTY OF MEDICINE
UNIVERSITI KEBANGSAAN MALAYSIA

Name: _____ Date: _____

Matric Number: _____

Place of assessment: ☐ Ward ☐ Clinic ☐ Others

Name of Patient: _____ R/N: _____

System:

Summary of the clinical problem:

New ☐ Follow-up ☐ Problem / Case Complexity: Low ☐ Average ☐ High ☐

* A student must be assessed on Part A and Part B

Part A: The assessor **may choose (tick) more than one item**

<input type="checkbox"/>	History taking	<input type="checkbox"/>	Physical Examination	<input type="checkbox"/>	Communication skills	<input type="checkbox"/>	Professional behaviour
--------------------------	----------------	--------------------------	----------------------	--------------------------	----------------------	--------------------------	------------------------

* Physical examination covers MSE, Developmental assessment and Newborn assessment

Very Good (5)	Good (4)	Acceptable (3)	Poor (2)	Very poor (1)	Score
					/5

Part B: The assessor **may choose (tick) more than one item**

<input type="checkbox"/>	Clinical judgement (diagnosis and differentials)	<input type="checkbox"/>	Management (Investigation and treatment)	<input type="checkbox"/>	Knowledge on the topic (For communication skills only)
--------------------------	--	--------------------------	--	--------------------------	--

Very Good (5)	Good (4)	Acceptable (3)	Poor (2)	Very poor (1)	Score
					/5

Name of assessor: _____

Signature:

MINI CLINICAL EVALUATION EXERCISE (MINI-CEX) FORM
FACULTY OF MEDICINE
UNIVERSITI KEBANGSAAN MALAYSIA

* Please return this page to the student

Summary of the clinical problem:

WRITTEN AND VERBAL FEEDBACK

How is your performance today?

What you do well?

What else to improve?

Agreed action:

VERBAL FEEDBACK

Tips for verbal feedback:

- 1) The feedback should focus on each item
- 2) Student's score should not be discussed in feedback

Example of guideline



Mini-clinical evaluation exercise (mini-CEX)

Guidance for foundation doctors and trainers

This guidance is designed to accompany the 'SLE Frequently asked questions' document.

What is a mini-clinical evaluation exercise (mini-CEX)?

A mini-CEX is a supervised learning event (SLE) which involves direct observation of a doctor/patient clinical encounter by a trainer for teaching purposes.

Who can contribute to a mini-CEX?

Foundation doctors will obtain most benefit if they receive feedback from a variety of different people. Feedback should usually be from:

- supervising consultants
- GP principals
- doctors who are more senior than an F2 doctor
- experienced nurses (band 5 or above); or
- allied health professional colleagues.

How does it work?

Foundation doctors are expected to demonstrate improvement and progression during each placement and this will be helped by undertaking frequent SLEs such as the mini-CEX.

The process is typically led by the foundation doctor. Topics should be chosen jointly by the foundation doctor and trainer to address learning needs. Feedback and actions advised for further learning are recorded solely for the foundation doctor's benefit.

Mini-CEX should not be completed after a ward round presentation or when the doctor/patient interaction was not observed. An appropriate record of all mini-CEX events must be kept within the foundation doctor's e-portfolio.

The observed process typically takes around 20 minutes and immediate feedback around 5 minutes. It may be necessary to allocate more time.

What areas should mini-CEX focus on?

Mini-CEX is most useful when considering the following areas:

- history
- diagnosis
- examination
- management plan
- communication
- discharge
- other

Focus of encounter	Positive indicators
History	Facilitates patient telling their story; effectively uses appropriate questions to obtain accurate, adequate information; responds appropriately to verbal and non-verbal cues.
Diagnosis	Establishes a problem list; takes account of probabilities in ranking differential diagnoses; reviews and adjusts differential diagnosis in light of developing symptoms and response to therapeutic interventions.
Examination	Follows efficient, logical sequence; examination appropriate to clinical problem; explains to patient; sensitive to patient's comfort and modesty.
Management plan	Constructs a management plan; prioritises actions on the basis of the differential diagnosis and clinical setting.
Communication	Explores patient's perspective; jargon free; open and honest; empathic; agrees management plan/therapy with patient.
Discharge	Starts planning from moment of admission; considers long-term conditions; recognises impact of long-term conditions on patients, family and friends; liaises with patient, family, carers and primary care teams; considers role of other agencies; considers need for environmental adaptations; ensures necessary care plans are in place; arranges follow-up

Remember: Not all areas need be reviewed on each occasion.

What is the reference standard?

When giving feedback to F1 doctors, trainers should consider what they would expect for satisfactory completion of F1. Similarly for F2, trainers should consider what they would expect for satisfactory completion of F2.

Feedback

In order to maximise the educational impact of using mini-CEX it is important to identify strengths, areas for development and agree an action plan. This should be done sensitively and in a suitable environment.

How many mini-CEX should be completed?

Foundation doctors are expected to undertake directly observed encounters per placement. They are required to undertake a **minimum** of nine directly observed encounters per annum in both F1 and in F2. At least six of these encounters each year should use mini-CEX. The other encounters may use the 'direct observation of procedural skills' (DOPS) tool. Foundation doctors should therefore complete a minimum of six mini-CEX in F1 and another six in F2. These should be spaced out during the year with at least two mini-CEX completed in each four month period. There is no maximum number of mini-CEX and foundation doctors will often complete very high numbers of SLEs recognising the benefit they derive from them.

Supervised learning event (SLE)	Recommended minimum number
Direct observation of doctor/patient interaction: Mini-CEX DOPS	3 or more per placement* Optional to supplement mini-CEX

*based on a clinical placement of four month duration.

How is the form accessed?

The mini-CEX SLE form is available within the e-portfolio. If the trainer is a supervisor with access to the foundation doctor's e-portfolio, they can access the form themselves. However, if this is not the case, the foundation doctor could either send an electronic ticket or log in and complete the form with the trainer. If the form is completed using the foundation doctor's login, an automatic email will be sent to the trainer and the mini-CEX will be flagged as self-entered.

How should trainers complete the form?

- **Training:** the trainer must state if they have been trained in providing feedback.
- **Trainer's details:** this should include registration number and position. If there is no relevant option select 'other' and specify.
- **Clinical setting:** select the most appropriate setting; if none apply select 'other' and specify.
- **Clinical problem category:** these are based on the clinical areas described in the Curriculum. If none apply select 'other' and specify. More than one category can be selected.
- **Focus of the encounter:** select the most appropriate focus or areas of focus.
- **Syllabus sections covered:** the SLE can be directly linked to the foundation doctor's curriculum record by selecting the relevant syllabus heading (as listed in the Curriculum) from a drop-down menu.
- **Free-text feedback and agreed action:** describe anything that was especially good, suggestion for development and an agreed action.

Take home message for Mini-CEX

- “Mini”-CEX is more feasible, flexible and simpler
 - 15-20 min ONLY
 - No need to access every item written in Mini-CEX form
 - It is focus history taking / focus physical examination OR almost anything
 - Can assess TWO or more students for each case (focus history taking / focus physical examination)
 - Using a simple form
- presentation/ discussion with or without a patient

Video

How to incorporate Mini-CEX in your institution?



Overview

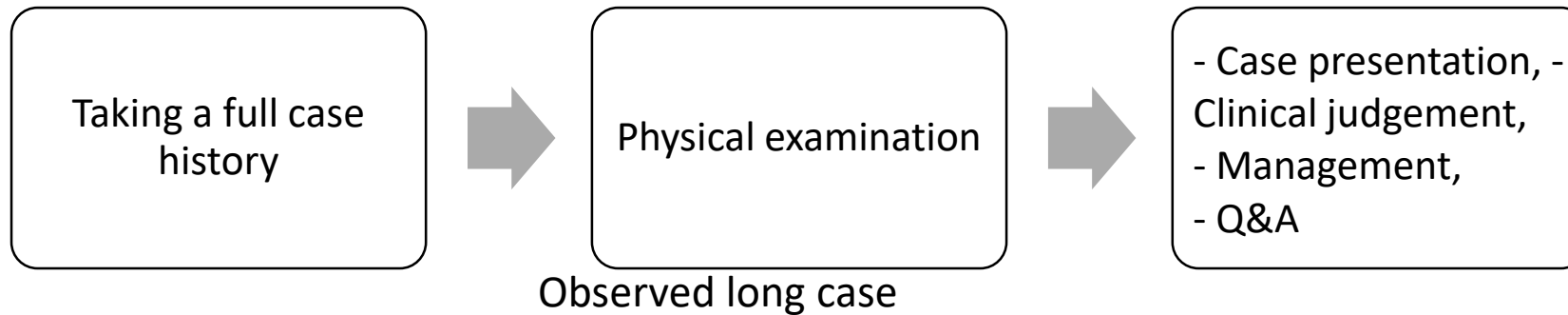
- The difference between Mini-CEX with
 - Modified long case
 - OSCE
 - Case presentation
- How to incorporate Mini-CEX in case presentation during
 - Bedside teaching
 - ward round
 - clinic
- What else we can assess other than history taking and physical examination in Mini-CEX?
- Do we need to assess everything in Mini-CEX?

Take home message for Mini-CEX

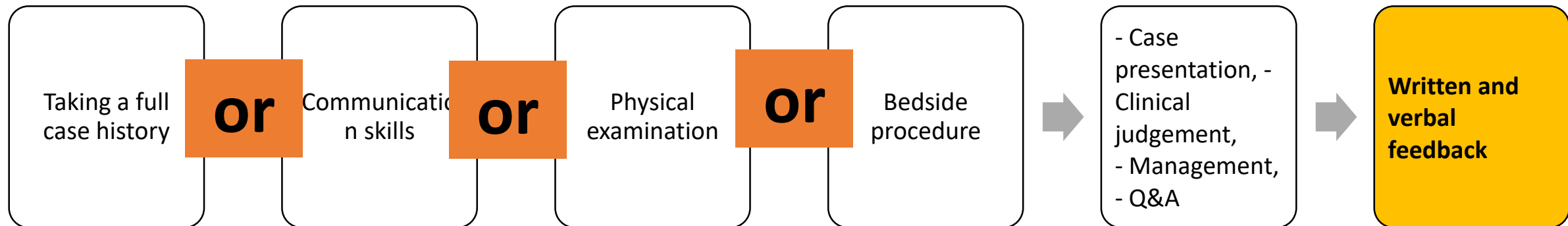
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 - Using a simple form
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Can we upgrade Observed long case to Mini-CEX

Observed Long Case: 45-60 minutes



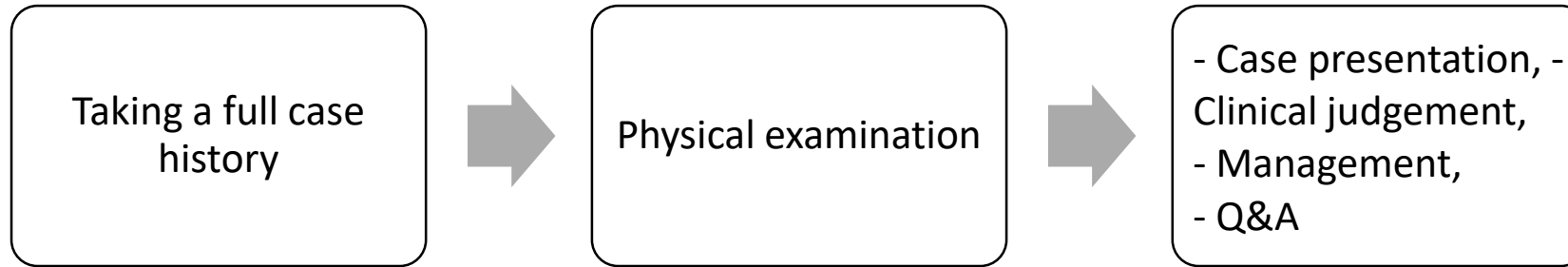
Mini-CEX: Observed- 20-25 minutes



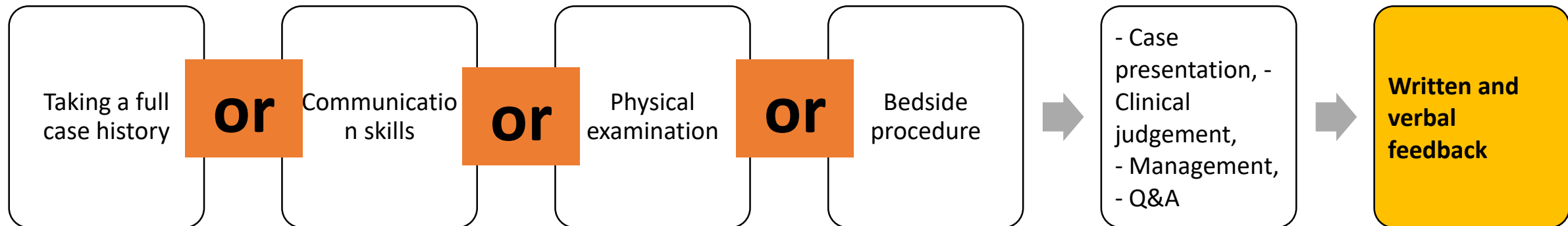
***Using standardize Mini-CEX form**

Can we upgrade traditional long case to Mini-CEX

Traditional Long Case - Unobserved: 60-90 minutes



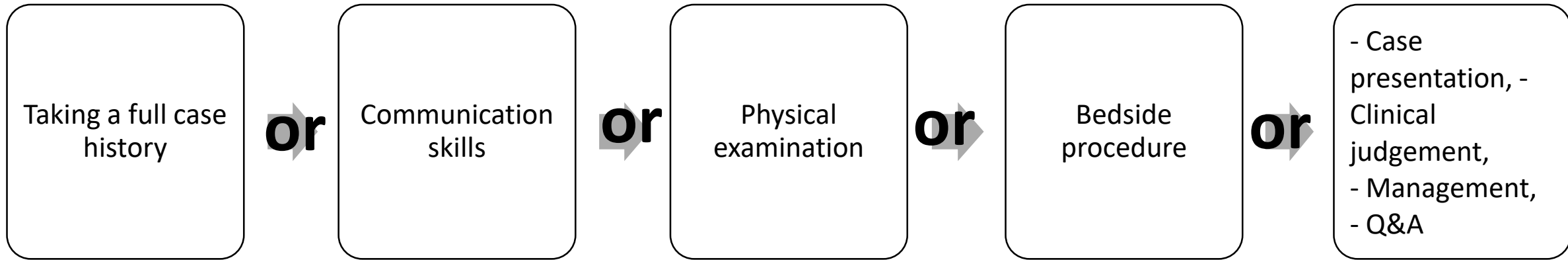
Mini-CEX: Observed- 20-25 minutes



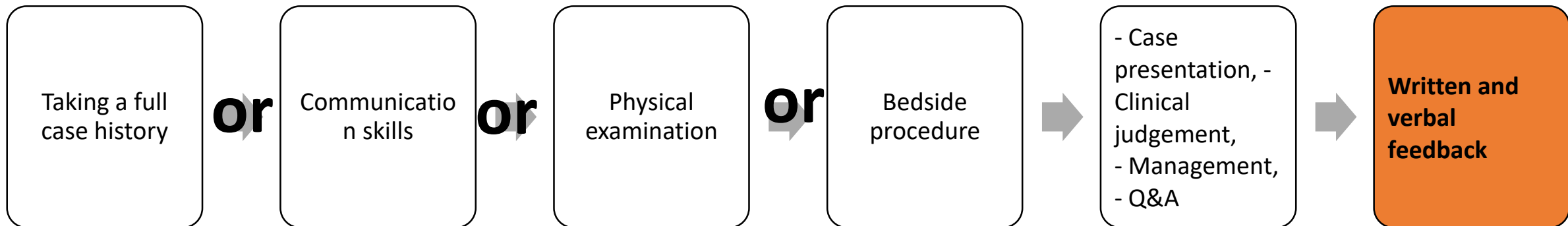
***Using standardize Mini-CEX form**

Can we upgrade OSCE to Mini-CEX

OSCE: Observed at the simulated environment



Mini-CEX: Observed at the workplace



***Using standardize Mini-CEX form**

The difference between OSCE and Mini-CEX

Mini-CEX

FAMILY MEDICINE POSTING UNIVERSITI KEBANGSAAN MALAYSIA

Mini Clinical Evaluation Exercise (Mini-CEX) Form

Name: _____ Date: _____

Metric Number: _____

Place of assessment: ☐ KP-HUKM ☐ KK Bt. 9, Cheras ☐ KK Bt. 14, Ulu Langat

Name of Patient:
R/N: _____

Patient's age: _____ Gender: ☐ Male ☐ Female
Patient's problem list / Diagnosis:

New ☐ Follow-up ☐ Problem / Case Complexity: ☐ Low ☐ Average ☐ High

	Very Good	Good	Acceptable	Poor	Not done	Not observed
Marking scheme	1	0.75	0.5	0.25	0	
History taking skills						
Physical Examination skills						
Diagnosis/Problem List						
Clinical Judgment	Investigations - Requesting					
	-Interpreting					
	Discussion					
	Management					
Professional qualities / Communication skill						
Counseling skills						
Organization /Efficiency						
Overall clinical performance (Total score)	Student score / (Number of domain X 10)					

Examiner's signature and Stamp:

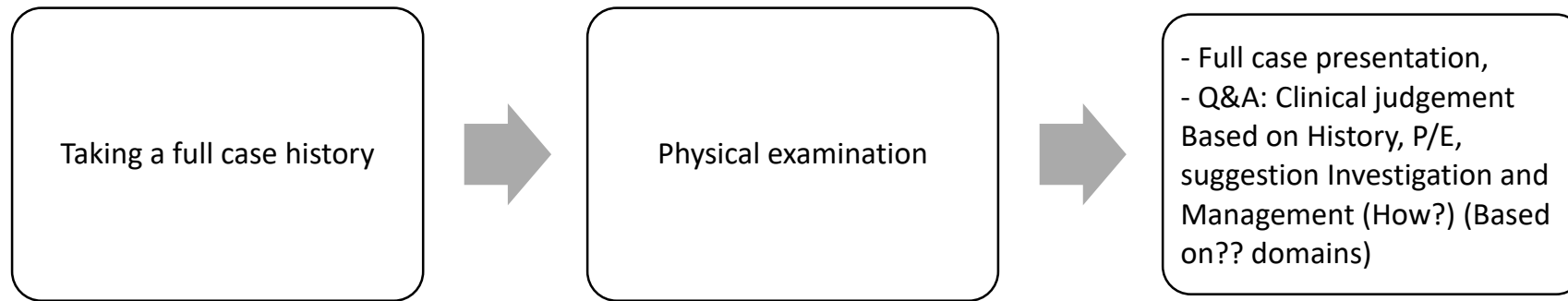
Detail items

OSCE

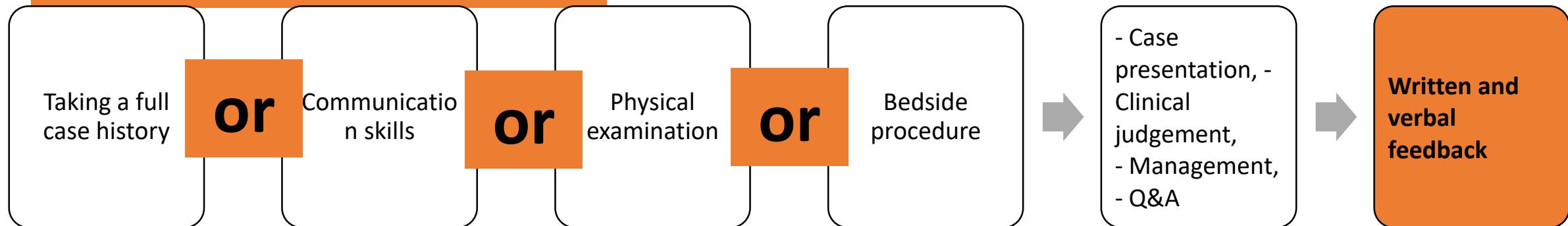
PHYSICAL EXAMINATION		43%	
1.	Inspection <ul style="list-style-type: none"> Position : hands supported by pillow Inspection of palmar and dorsum hands, skin, nails, joints, muscle 	A B C D E A B C D E	2% 4%
2.	Palpation Joints swelling, temperature and tenderness	A B C D E	5%
3.	Screening for nerve involvement – (nerve entrapment) <ul style="list-style-type: none"> Median nerve (wasting of thenar eminence, opposition, thumb abduction) Ulnar nerve (abduction and adduction of the digits(dorsum and palmar interossei muscles) Radial nerve (wrist extension) 	A B C D E A B C D E A B C D E	4% 4% 4%
4.	Specific test for carpal tunnel <ul style="list-style-type: none"> Tinel's / Phalen's test 	A B C D E	5%
5.	Functional status Key or hand gripping/ writing/buttoning/unbuttoning	A B C D E	5%
6.	Others <ul style="list-style-type: none"> Elbow inspection for rheumatoid nodules/ psoriatic plaques For Rheumatoid arthritis: Lungs auscultation (pulmonary fibrosis) 	A B C D E A B C D E	1% 1%
7.	Approach <ul style="list-style-type: none"> Systematic approach / Organize in examination Clear instruction Consistently attentive to patient's comfort or dignity Good bedside manner (Good introduction to patient and asking consent) 	A B C D E	10%

Can we upgrade Case presentation during bedside teaching/ clinic/ ward round to Mini-CEX?

Case presentation: Unobserved



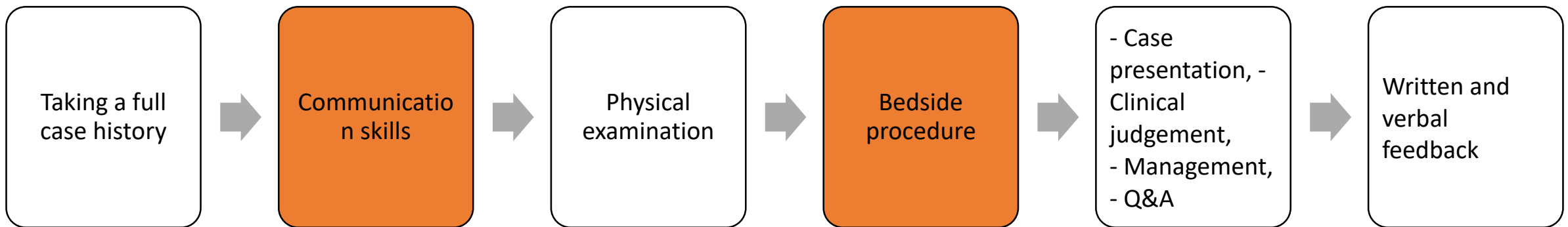
Mini-CEX: Observed



***Using standardize Mini-CEX form**

***Improve feasibility: Can assign two students**

What else we can assess other than just focus on history taking and physical examination in Mini-CEX?



What can be assessed in Mini- CEX?

Medical interviewing

Physical examination

Humanistic qualities/professionalism

Clinical judgment

Counseling

Organization/efficiency

What can be assessed in Mini- CEX?

History-taking from a patient who presents with a problem, e.g., abdominal pain.

History-taking to elucidate a diagnosis, e.g., hypothyroidism.

Physical examination of system or part of body, e.g., examination of hands.

Physical examination relevant to follow up of visit, e.g., CCF.

Physical examination to help confirm or refute a diagnosis, e.g., thyrotoxicosis.

What can be assessed in Mini- CEX?

Communication with other members of health care teams, e.g., brief a nurse regarding the management plan for a terminally ill patient.

Breaking bad news, e.g., informing a wife of her husband's bronchial carcinoma.

Educating a patient about management, e.g. use of inhaler for asthma.

General advice to a patient, e.g., upon discharge from hospital with a myocardial infarction.

Explanation to patient about tests and procedures, e.g., endoscopy.

What can be assessed in Mini- CEX?

Consent taking: a diagnostic procedure, e.g. ophthalmoscopy.

Written communication, e.g., writing referral letter or discharge letter.

Interpretation of findings to superior, e.g., charts, laboratory reports or findings documented in patient's records.

Management, e.g. writing a prescription.

Blood pressure measurement

What other authors/organizations say?

- Mini-CEX is a time-efficient, low-infrastructure and objective evaluation tool of clinical skills based in real clinical situations. (Pernar et al, 2011 – surgery)
- The mini-CEX assesses a broader range of clinical situations, has better reproducibility, and offers greater opportunity for observation and feedback by more than one faculty member on more than one patient (Tariq, 2012- O&G)
- Has a very positive educational impact and relative feasibility.(Weller et al – 2009, - Anaesthesiology)

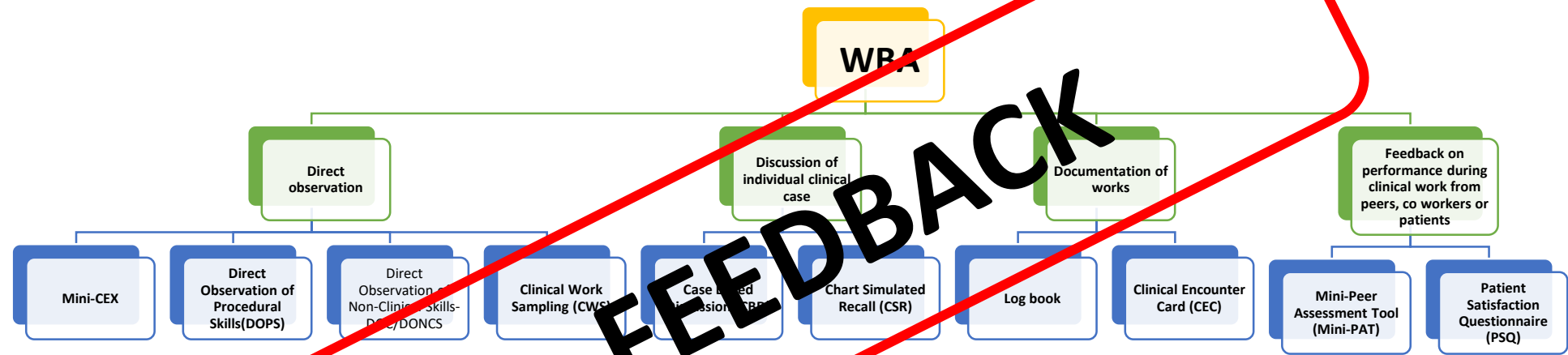
Comparing type of WPBA

WBA	Competencies	Examples of Assessors	Setting	UNIQUE
Mini-CEX	Cognitive, Psychomotor, Affective domain	Educational/ Clinical Supervisors, senior trainee	In patient & Outpatient	<ul style="list-style-type: none"> • Must observe • More flexible
CBD	Cognitive, Affective domain			<ul style="list-style-type: none"> • No observation (Does not require patient) • Examiner are require to read the student's case note prior to CBD and the discussion are based on candidate's case note
DOPS/PBA	Technical skills, procedures and protocols. (*Cognitive, Psychomotor, Affective domain)	Multi professional team (MPT)	In patient (including OT) & Outpatient	<ul style="list-style-type: none"> • Must observe • Can use simulation lab • *Includes pre and post procedure

Thank you.....



FOUR Characteristic of WPBA



1. FEEDBACK

The Art of Teaching Medical Students
Bhuiyan et al.
3rd Edition 2015

Verbal or written feedback or both

- “The implications for performance assessment are that **narrative feedback, and action on that feedback**, needs to be designed into a culture of learning. Both **immediate** and **longitudinal approaches** to feedback are important...”

(Boursicot et al 2020)

- Toale et al (2021) analyzed 500 WPBA assessment (Supervised Structured Assessments of Operative Performance -SSAOPs)
 - 72.4%: utilized written feedback
 - “Gap” and “Action” approach- Low

Please refer to curriculum at www.mmc.nhs.uk for details of expected competencies for F1 and F2

Please complete the question using a cross: Please use black ink and CAPITAL LETTERS

[illegible]

Surname

GMC Number:

GMC NUMBER MUST BE COMPLETED

A&E

OPD

In-patient

Acute Admission

GP Surgery

Pain

Airway/

CVS/

Psychv

Neuro

Gastro

70

Other

Medical Record Keeping

Clinical Assessment

Management

Professionalism

Low

Average

High

Assessor's
position:

Consultant

SpR

GP

*U/C Please mark this if you have not observed the behaviour and therefore feel unable to comment

*U/C Please mark this if you have not observed the behaviour and therefore feel unable to comment

Suggestions for development

Agreed action:

1

Name: _____ Date: _____

Matric Number: _____

Place of assessment: ☐ Ward ☐ Clinic ☐ Others

Name of Patient: _____ R/N: _____

Patient's age: _____ Gender: Male ☐ Female ☐

Patient's problem list / Diagnosis: _____

New ☐ Follow-up ☐ Problem / Case Complexity: Low ☐ Average ☐ High ☐

3

Checklist on candidate's overall performance (Please circle)

A = Very Good B = Good C = Acceptable D = Poor E = Not done

2

Activities		A	B	C	D	E	Not applicable	Weightage (10)	Score
History taking skills		A	B	C	D	E		5	
Physical Examination skills		A	B	C	D	E			
Diagnosis/Problem List		A	B	C	D	E			
Clinical Judgment	Investigations - Requesting	A	B	C	D	E			
	-Interpreting	A	B	C	D	E			
	Discussion	A	B	C	D	E			
	Management	A	B	C	D	E			
Professional qualities / Communication skills		A	B	C	D	E			
Counseling skills		A	B	C	D	E			
Organization /Efficiency		A	B	C	D	E			
Examiner signature: _____								Total score	/10
Name: _____									
Global rating (Please circle)		Poor	Borderline	Good	Very Good				

Please return this page to main office

2a. FLEXIBILITY:
Customize to your needs !!!

WRITTEN FEEDBACK

4

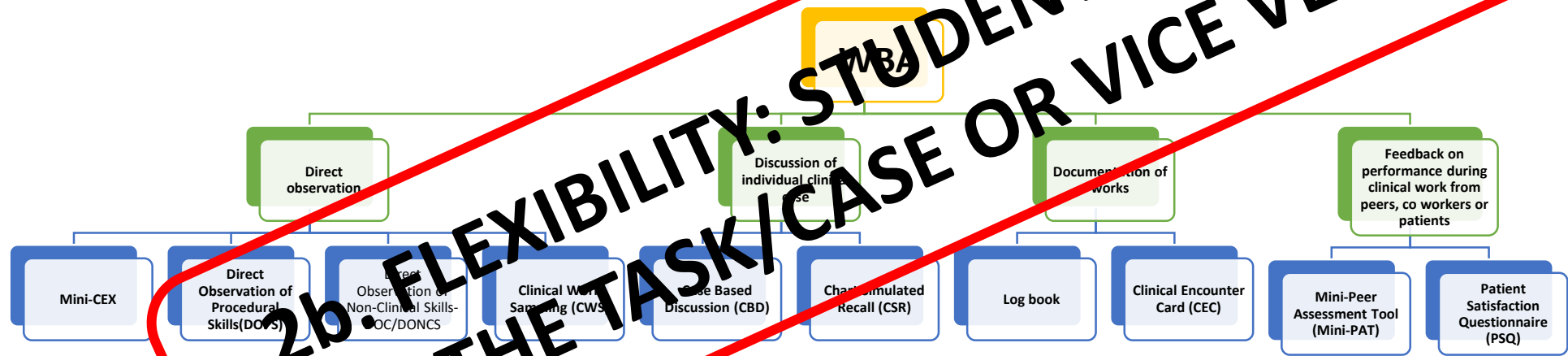
Strengths and weaknesses:

Plan for improvement:

Agreed action:

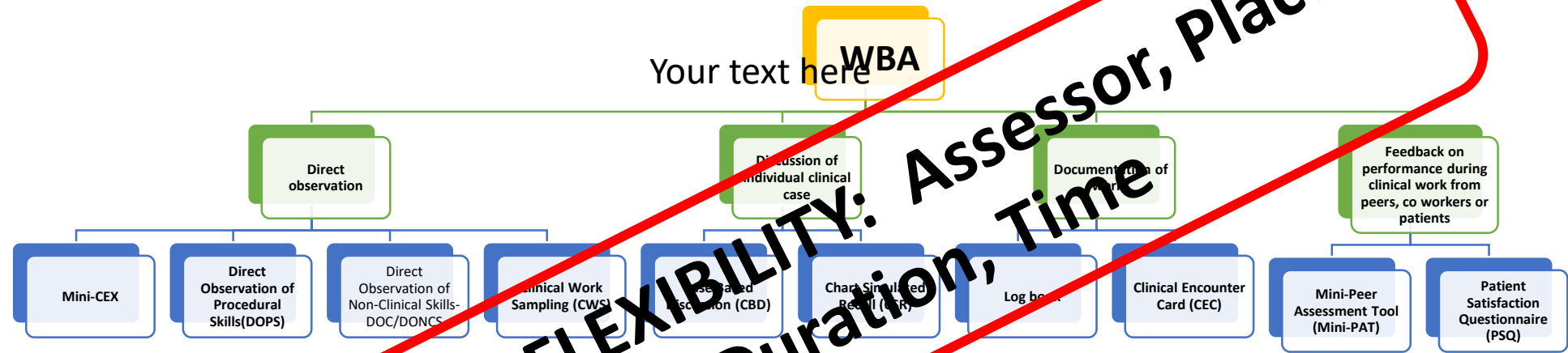
VERBAL FEEDBACK

Tips for verbal feedback: 1) Allow student to reflect on their performance prior to lecturer's feedback (Open-ended self-reflection)
2) Lecturer's feedback should focus on each item
3) Student's score should not be discussed in feedback



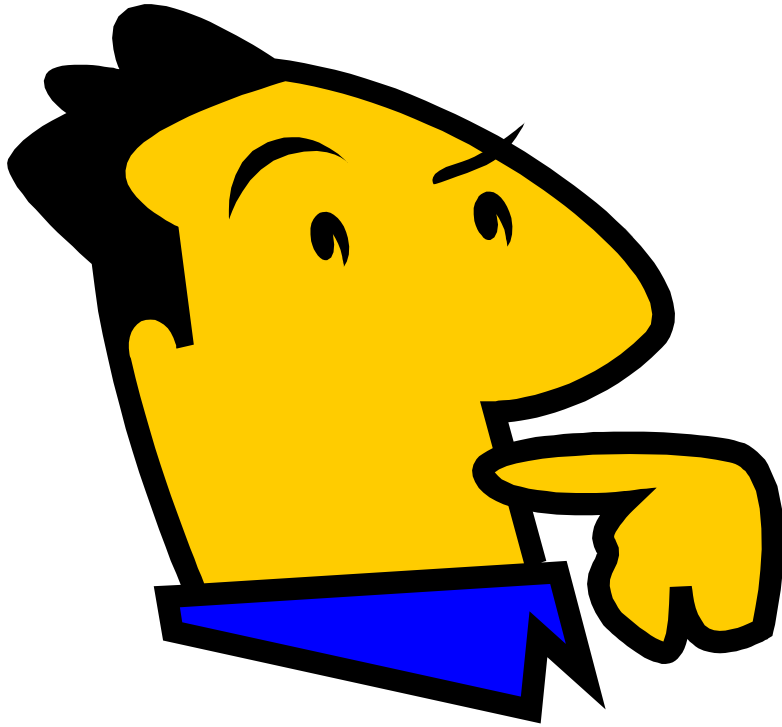
2b. FLEXIBILITY: STUDENT CAN CHOOSE THE TASK/CASE OR VICE VERSA

Characteristic of WPBA



2c. FLEXIBILITY: Assessor, Place, Duration, Time

Who can assess? (Flexible)

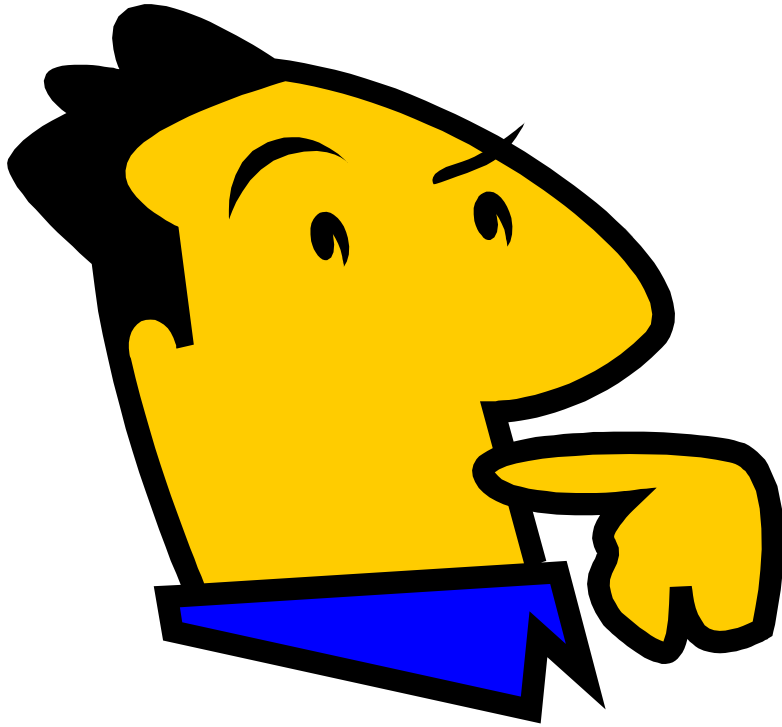


Examiners

- **Full time lecturers**
- **Part time lecturers**
- **Master student**
- **Others (eg: nurses)**

*** different examiner (including supervisor)**

Where can be assessed? (Flexible)



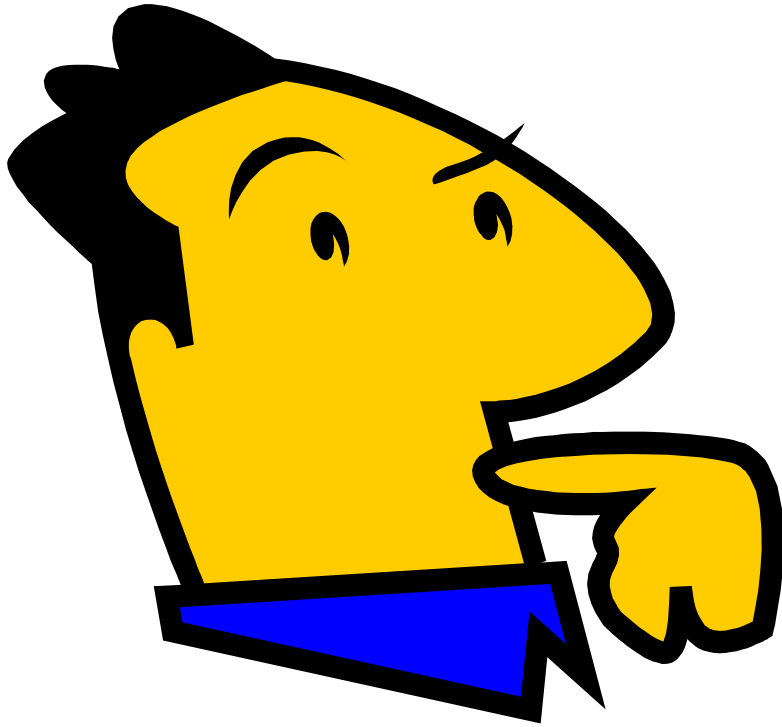
Workplace (F2F)

- inpatient,
- outpatient,
- emergency department settings.

Online

- synchronous (CBD)
- Mini-CEX (history taking)
- DOPS (simulation based)

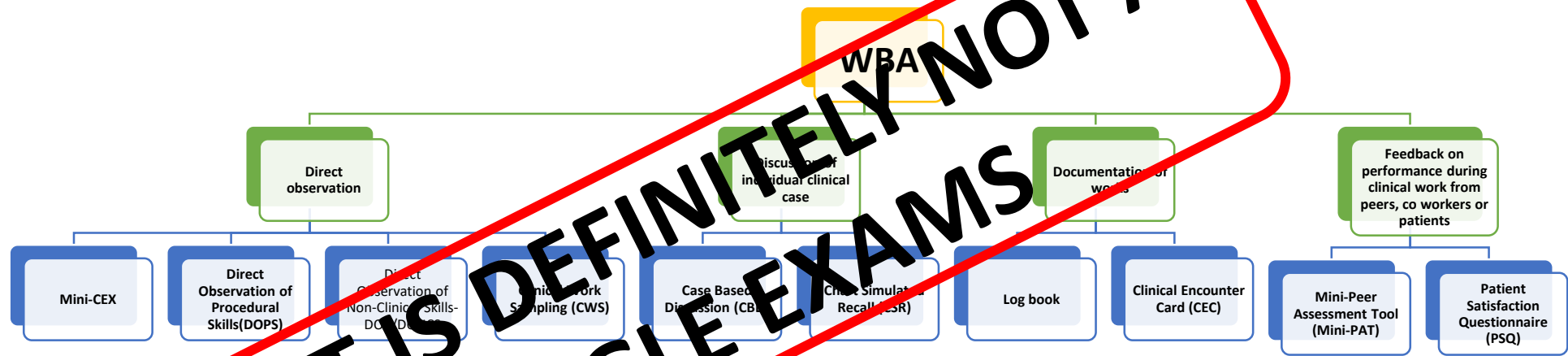
When can be assessed? (Flexible)



- Dedicated time/ Anytime
- At the clinic
- During bedside teaching
- During on call
- During ward round
- After ward round

When can be assessed? (Flexible)

- **Structured approach** (Formal assessment)
 - Set a number of WPBA per candidate
 - Lecturer set the case place, date and time
- **Unstructured approach** (Informal assessment)
 - Set a MINIMUM number of WPBA per candidate
 - Both the assessor and the patient are selected by the trainee, but the assessor must agree that the encounter is appropriate.



3. IT IS DEFINITELY NOT A SINGLE EXAMS



4. ASSESS BY A DIFFERENT ASSESSOR