

How to design an effective portfolio of learning for workplace-based assessment in Family Medicine training

- Primafamed Workshop
- Nairobi, Kenya
- Prof Louis Jenkins
- 5 June 2024



Workshop outline (2 hours)



- Who is in the room?
 - Experience with portfolios/EPAs?
- Some background
- What do we think should be in the portfolio?
 - Feasible
 - Meaningful
 - Able to assess registrar learning/progression/difficulty
- Learning events in portfolio
- Incorporating EPAs in portfolio
 - How will this work for my program?
 - Way forward

Who is in the room?
Experience with
portfolios/EPAs?
(15 min)

25 years ago

AMEE Medical Education Guide No. 11 (revised): Portfolio-based learning and assessment in medical education

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- Usually paper-based. Potential for video, etc.
- evidence gathered together, and possibly presented to another person for review, with a particular purpose in mind
- Purpose? mostly a log book recording specific activities, or offer an in-depth and long-term perspective on professional development over an extended period
- may demonstrate the process of progression, or to be assessed against specific targets of achievement.
- Some will be private documents, for personal review, while others need to be open to public scrutiny
- integrally related to a personal or professional learning plan.
- remains the practical and intellectual property of the person who develops it ~ the learner therefore has to take responsibility for its creation, maintenance and appropriateness for purpose.

Benefits?

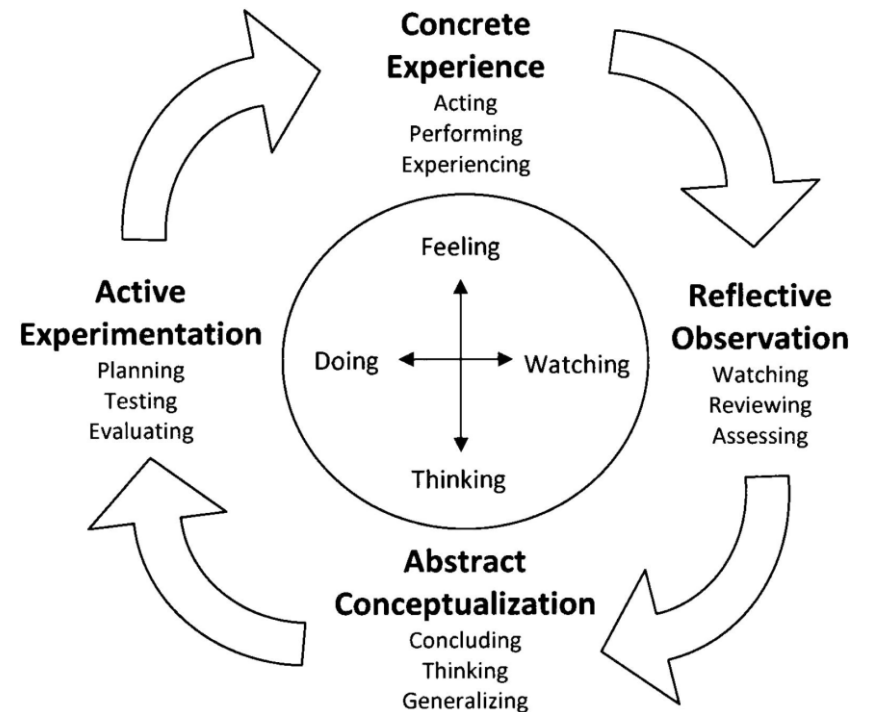
- recognizes and encourages the autonomous and **reflective learning** that is an integral part of professional education and development;
- based in the **real experience** of the learner, and so enables the consolidation of the **connection between theory and practice**;
- enables assessment within a framework of transparent and declared **criteria** and learning objectives;
- accommodate evidence of learning from a **range of different contexts**;
- provides a process for **both formative and summative** assessment;
- model for lifelong learning and continuing professional development

15 years ago

- tools for assessment of performance in the workplace
- tools to stimulate learning from experience
- content and structure of various types of portfolios
- potential of electronic portfolios
- strategies for using portfolios for stimulating learning for assessment
- factors that influence success
- require a new perspective on education from supervisors and registrars
- significant investment of time and energy

Mechanical tick-box compliance or educational, developmental, transformative?

- “The building of the portfolio itself requires engagement in a process of reflection and critical self-awareness. Its creation therefore constitutes an educational process, and this aspect needs to be recognized over and above the outcomes of learning that are identified and evidenced in the physical material contained in the portfolio” (Challis 1999)
- Knowles (1970) ~ adult learning ~ social roles
- Riegel (1973) ~ learning influenced by adults’ ability to use dialectical logic (principle of contradiction) & the ability to identify problems or pose questions
- Schon (1983) ~ reflection in action, reflection on action
- Kolb (1984) ~ experiential learning (helix/cycle)
- Boud (1985) ~ reflection for future action
- Gibbs (1992) ~ surface and deep learning



Purpose?

- ... **demonstrate learning**, not chronicle a series of experiences. Learning from experience will only happen once reflection and application of resulting modifications in practice have taken place.
- Quantity of evidence is no substitute for **quality**. No need for a portfolio to be a huge document. A few examples of reflective learning in practice may demonstrate a wide range of learning outcomes. Far more valuable than a portfolio that documents numerous repetitions of a task, but does not demonstrate resulting learning and change in practice.
- ... should become an **embedded part of everyday practice**. Running around just before a meeting with a supervisor, trying to 'find' or manufacture appropriate evidence, is a waste of valuable time and does not constitute appropriate professional practice. The art, from the learner's point of view, is in taking advantage of both planned and opportunistic learning in order to record its impact on current and future practice.

Role of supervisors?

- “A significant issue in encouraging learners to engage in processes of reflection is the role played by others in supporting reflection.”
- “...if (supervisors) and others assisting (registrars) are to have an effective role in promoting learning, that role is essentially to support the learner in the process and to assist the learner in extracting the maximum benefit from what occurs” (Boud et al., 1985, p. 36).
- “Portfolio-based learning encapsulates these principles of adult learning, but at the same time offers an effective means not only of facilitating and recording learning and valuing the individual’s unique experiences, but also of reviewing and assessing that learning.”(Challis 1999)

Feedback

- ...important requirement for effective assessment.
- What went well? What could be done better? Action plan?
- *“Mentor feedback was valued highly by all the participants. They linked the portfolio’s effectiveness in the learning process to mentor feedback. The participants appreciated the educational role of the mentor’s feedback in their learning process through the identification of their learning needs, strengths, weaknesses and methods for personal and professional development and improvement.”*

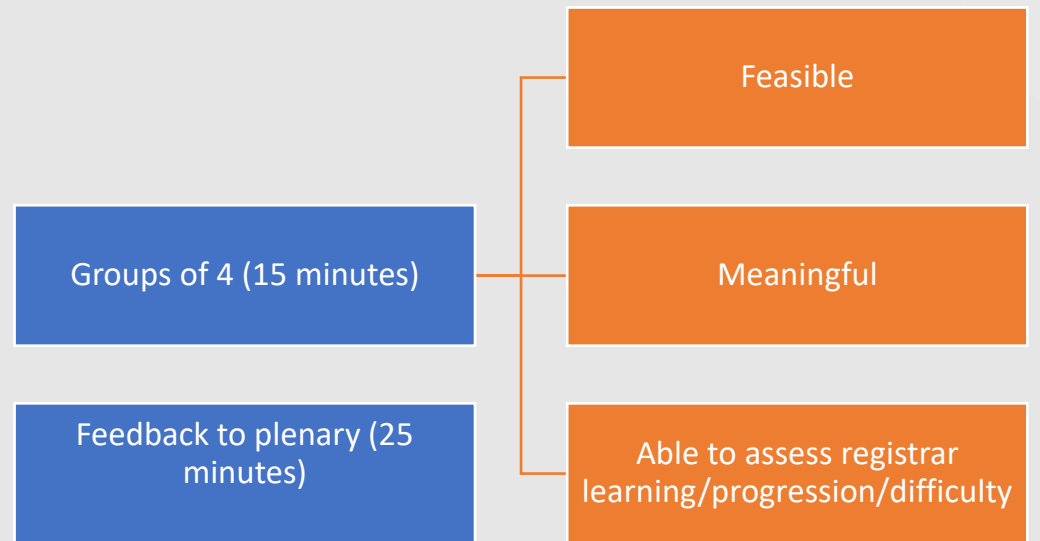
- AlRadini FA. Perceptions of portfolio assessment in fam meds graduates: a qualitative interview study. BMC Med Educ. 2022 Dec 30;22(1):905.
- Friedman Ben David M, Davis MH, Harden RM, Howie PW, Ker J, Pippard MJ. AMEE Medical Education Guide No. 24: portfolios as a method of student assessment. Med Teach. 2001;23:535–51.
- Jenkins L, Mash B, Derese A. The national portfolio for postgraduate family medicine training in South Africa: a descriptive study of acceptability, educational impact, and usefulness for assessment. BMC Med Educ. 2013;13:101

Key components of WPBA



Source: Dudek N, Gofton W, Bhanji F. Workplace-based assessment practical implications [homepage on the Internet]. 2017 [cited 2022 Nov 27]. Ottawa: The Royal College of Physicians and Surgeons Canada. Available from: https://med.uottawa.ca/pathology/sites/med.uottawa.ca.pathology/files/work-based-assessment-cbd_part_2.pdf
EPA, entrustable professional activity; WBA, workplace-based assessment.

What do we think should be in the portfolio?



Observations

- Culture that values observations
 - prioritize/schedule 1x/week
- Development individuals > tools
- Feedback quality
- Action planning
- Apply multiple times
- Embed within usual patient care



Hauer, Holmboe, Kogan. Twelve tips for implementing tools for direct observation of med trainees' clinical skills. *Med Teacher* 2011;33:27-33
Kogan. *Perspect Med Educ* (2017) 6:286–305 (Do's and Don'ts of Direct Observations)

Educational meetings (Learning conversations) ~ group / individual / CPD

Encourage students to **reflect** on and record learning events and reflect on feedback, revise their approaches and align to learning outcomes / specs in EPAs.

Tools:

- Case-based Discussions
- Chart stimulated recall sessions
- Clinical Question analysis
- Significant Event Analysis (could also be a Morbidity and Mortality [M&M] discussion)
- Entrustment-Based Discussions

Specific CBD: Entrustment-Based Discussion

- To evaluate risks before summative entrustment
- 10-15 min oral discussion, after a (critical) activity

Questions

1. ***What have you done?*** (1')
2. ***Probe for background knowledge and understanding*** (2')
(anatomy, physiology, tests, treatment)
3. ***Awareness of risks and potential complications*** (3')
4. ***What would you have done if.. ?*** (4') .. things had been different (unexpected patient, culture, medical history, lab or other findings, (lack of) cooperation, mental, physical abnormality, multimorbidity, etc)?



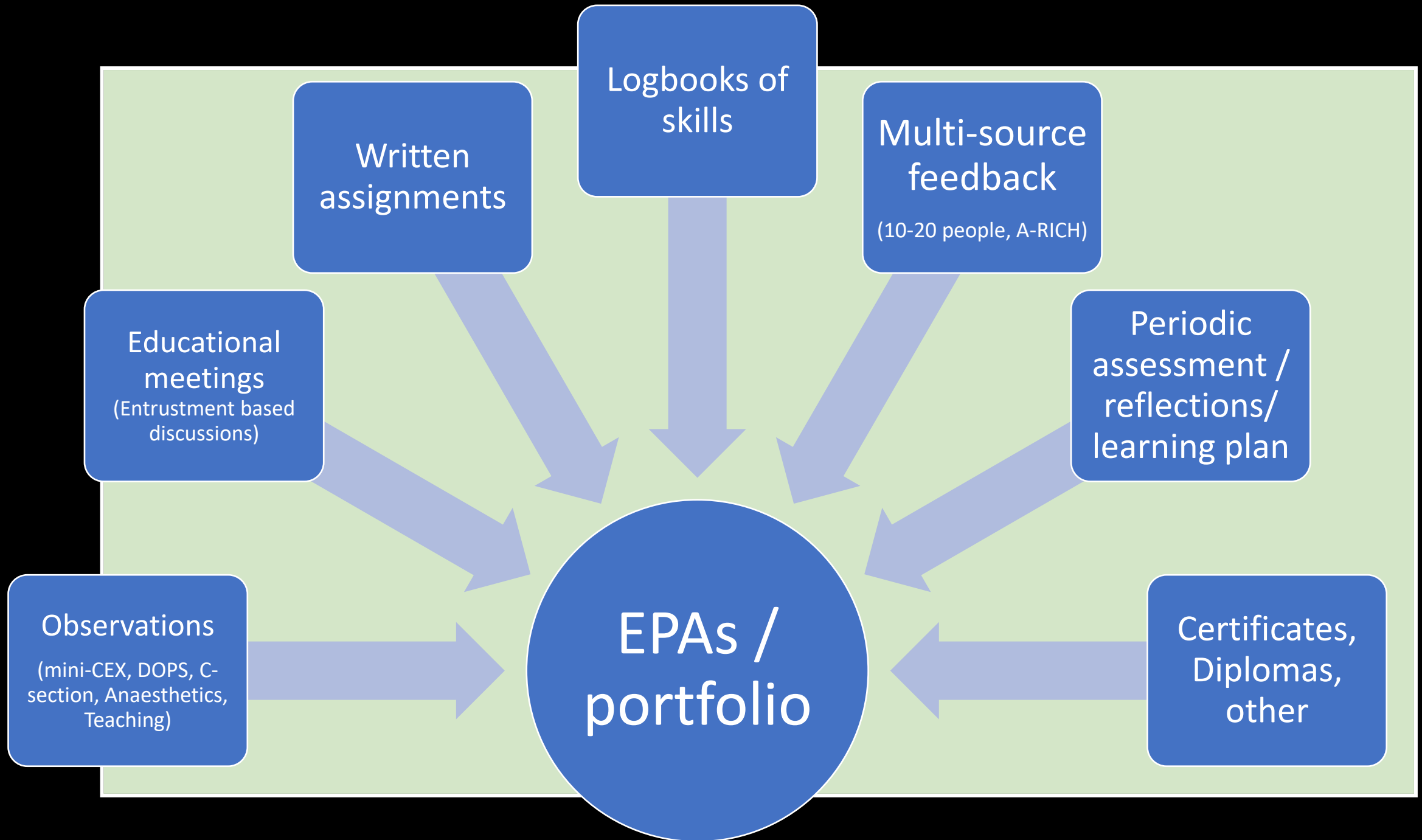
The Clinical Teacher's Toolbox

From case-based to entrustment-based discussions

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The graphic shows a red toolbox containing various medical tools like a stethoscope, syringe, and forceps. Several white paper strips with text are scattered around the toolbox, including 'quality', 'learning', 'patient-centred', 'learning assessment', 'curricula', 'diversity', 'feedback', 'teaching', and 'audit'.



Incorporating EPAs in the
portfolio...

Early beginnings...

Start with few EPAs

Suggest few and simple tools

Registrar must be intentional in choosing EPAs in Learning Plans

Select learning events acc to EPAs

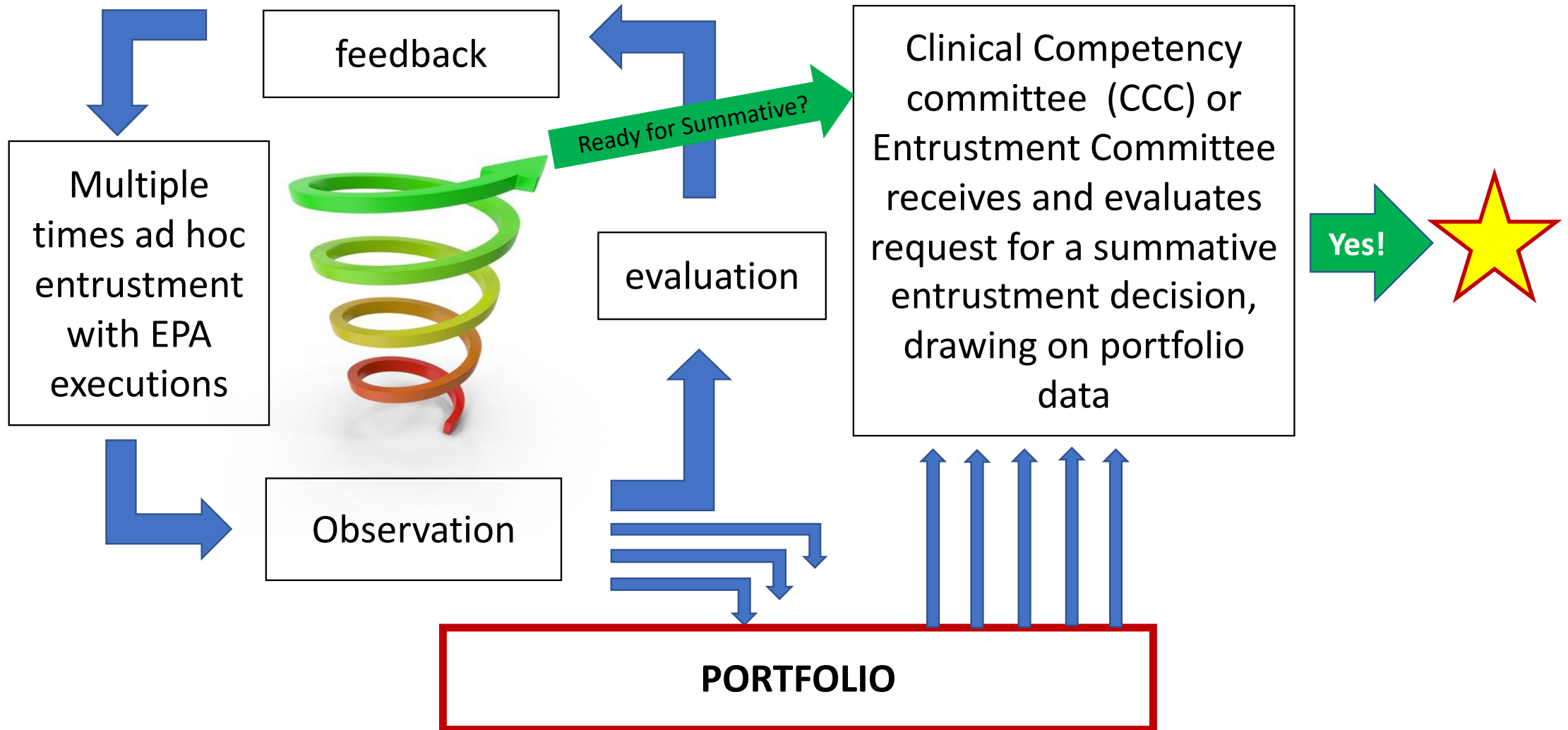
Supervisor feedback focus on selected EPAs

Some EPAs are transversal

Framework of EPAs

1. Assemble a core team
2. Build up expertise
3. Establish a clear vision of the purpose of EPAs
4. Draft preliminary EPAs
5. Elaborate EPAs
6. Adopt a framework of supervision
7. Perform a structured quality check
8. Refinement and/or consensus
9. Pilot test EPAs
10. Attune EPAs to their feasibility in assessment
11. Map EPAs to existing curriculum
12. Build a revision plan

The flow of workplace-based assessment data



Electronic portfolio



Easier to assess and keep track over 4 years

Universal (across programmes)

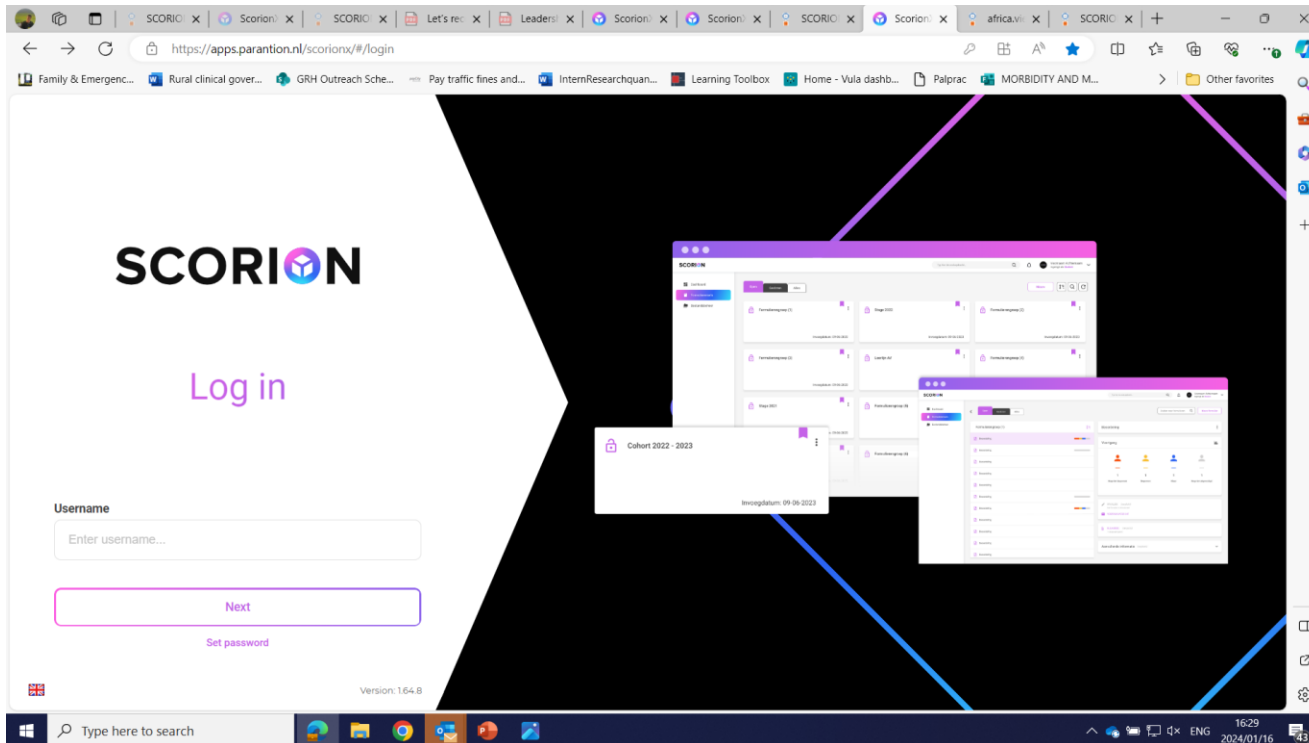
Easier external exam (9 FM departments)

↑ Utility by registrars

Mapping to EPAs (track development)

Quick view registrar/supervisor activity

Programmatic assess - multiple assessment points



Siddiqui, Z.S., Fisher, M.B., Slade, C., Downer, T., Kirby, M.M., McAllister, L.M., Isbel, S.T., & Brown Wilson, C. (2022). Twelve tips for introducing E-Portfolios in health professions education. *Medical Teacher*, 45, 139 - 144.

Key Lessons

- ePoL is more than a repository for forms that assess learning but should support the educ principle of ‘assessment-for-learning’. Each data point in the PoL should be an opportunity for constructive feedback or reflection that stimulates further learning.
- The e-PoL should support key principles of WPBA, namely triangulation, aggregation and saturation. Triangulation implies there are various data points from different assessors in different settings to support an entrustment decision on each EPA.

Clinical Competence committee

- Panel of assessors (faculty), not just HOD
- High-stakes summative judgement: assessment-of-learning in portfolio
- Assessors need to agree on the number and weighting of data points needed for each EPA
- Quantitative and qualitative information
- Local and national CCC – meet 2x/year
- Feedback to registrar and program



Way forward...



SUPPORT FROM
ESTABLISHED PROGRAMS



TIPS FROM LITERATURE



RESEARCH