SURMEPI

Stellenbosch University
Rural Medical Education Partnership Initiative

The national portfolio of learning for postgraduate family medicine training in South Africa

12th WONCA World Rural Health Conference – Gramado, Brazil
Workshop – 3 April 2014

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Website: http://surmepi.sun.ac.za

Proposed outline

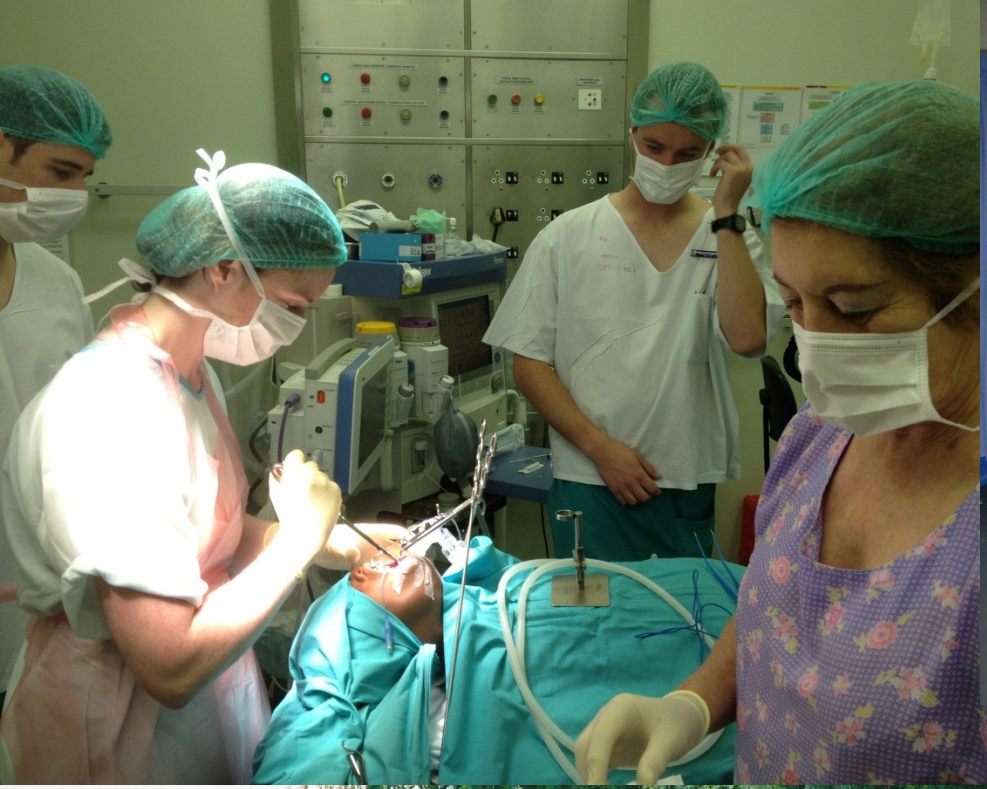
- Introduce group & check expectations (15 min)
- Portfolio experience in group(15 min)
- Background to SA portfolio (20 min)
- Group discuss (30 min)
- Observations, Supervision, Assessment (30 min)
- Closure (10 min)

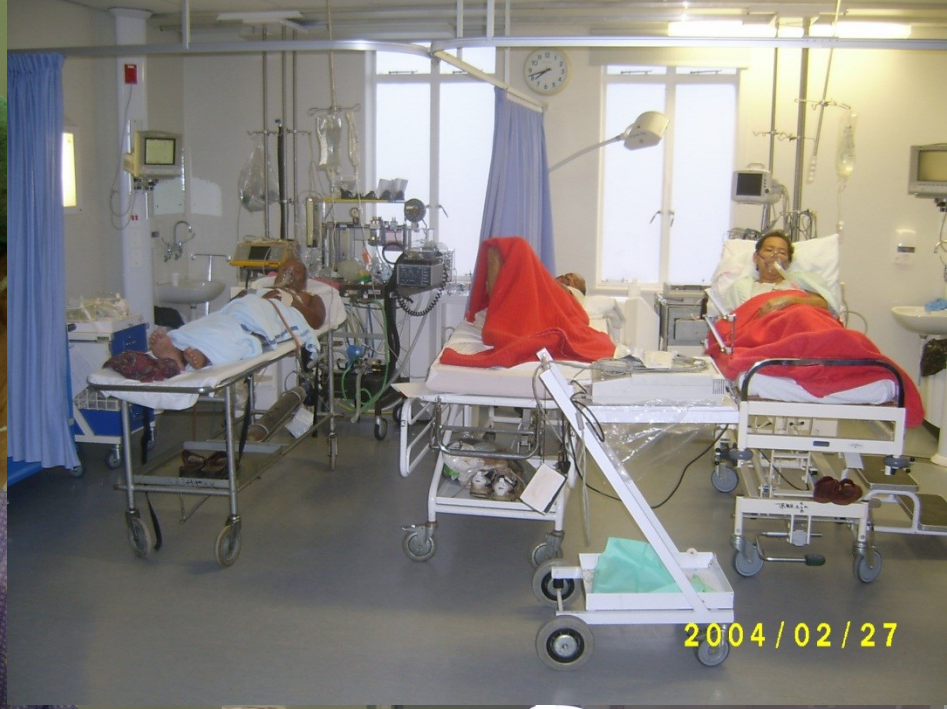
Background

- South Africa 52 health districts
- Family physician health team leader
- 2007: Fam Meds became a recognized specialty
- 5 National unit standards - 85 training outcomes[1]
- 8 Fam Meds depts: 4 year postgrad Tx programmes
- CMSA (FCFP) – Portfolio required for exit exam
- Consensus content validity of portfolio for SA[2]

1. Couper ID, Mash B, Smith S, Schweitzer B: Outcomes for family medicine postgraduate training in South Africa. *South Afr Fam Prac* 2012, 54(6):501–506.

2. Jenkins L, Mash B, Derese A. Development of a portfolio of learning for postgraduate family medicine training in South Africa: a Delphi study. BMC Family Practice 2012;13(1):11.

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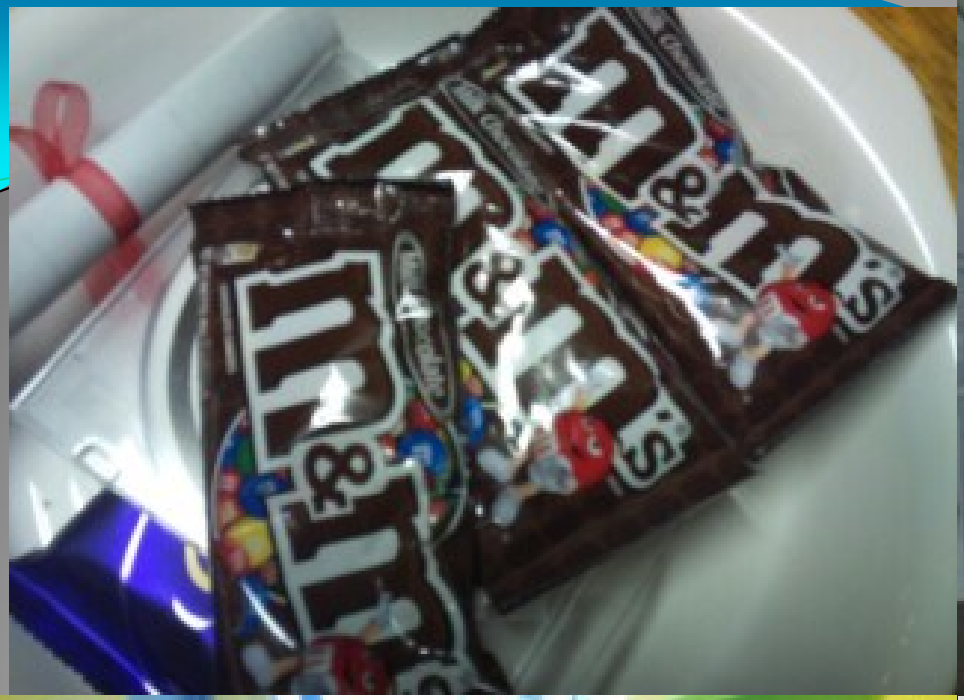


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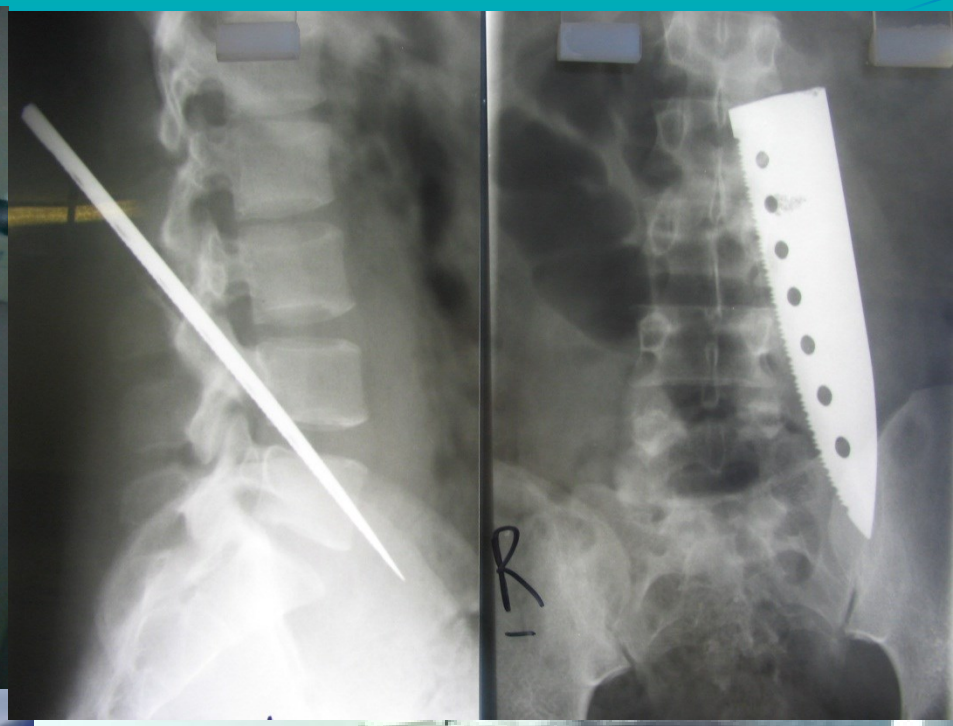
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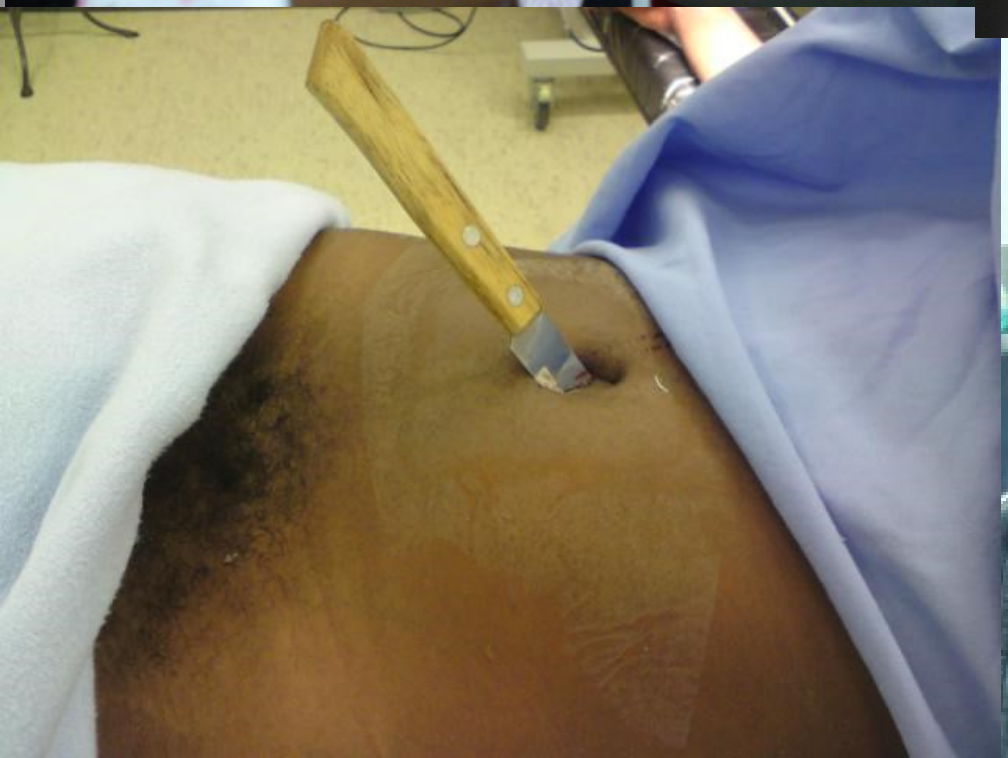

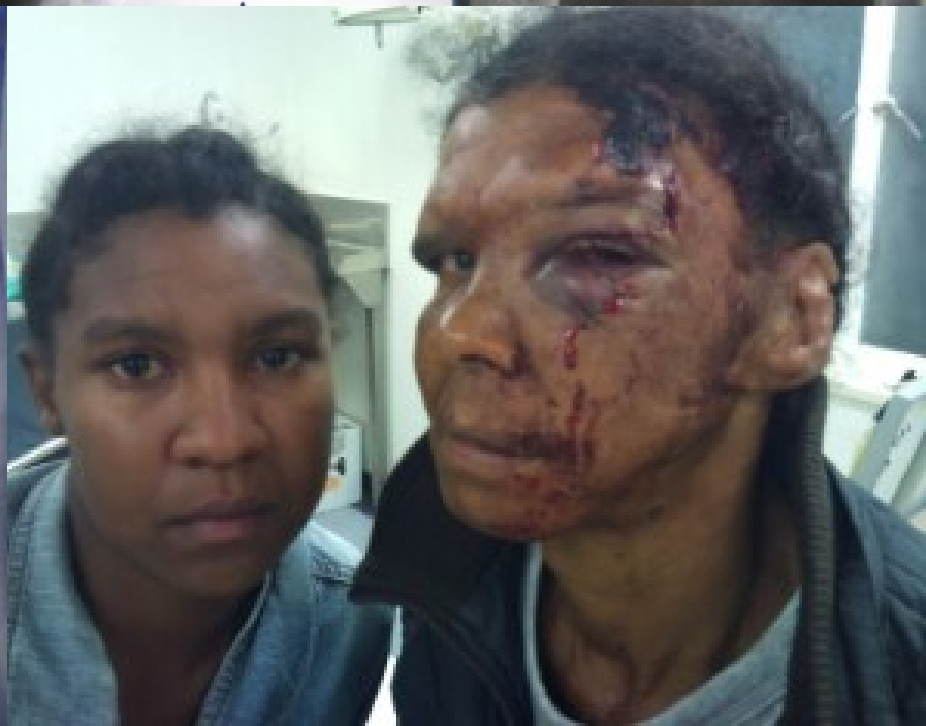

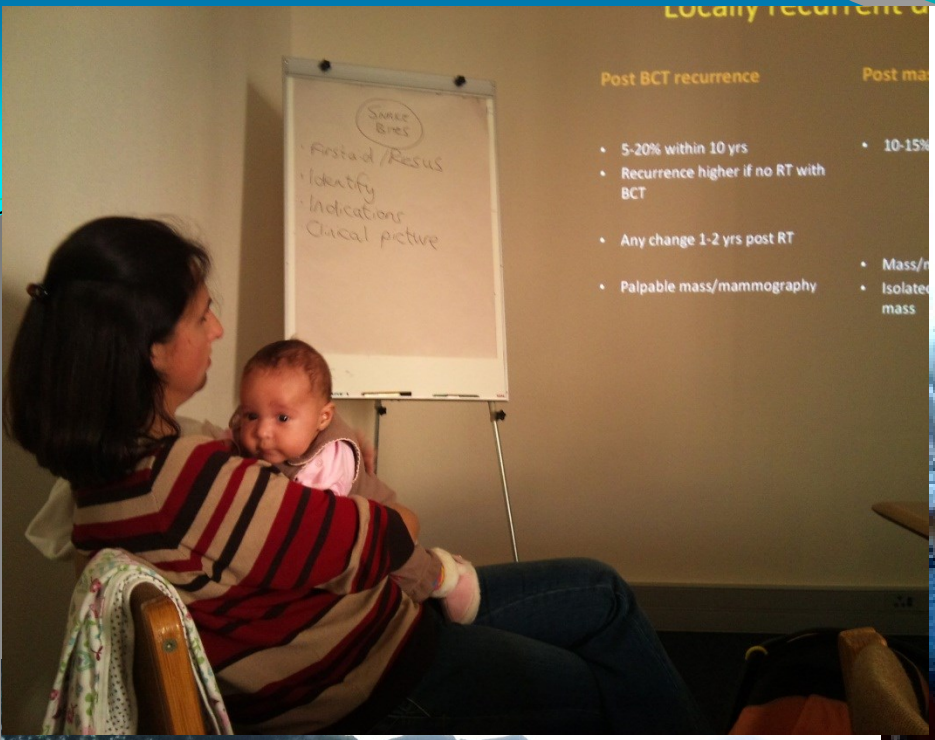
Post BCT recurrence
5-20% within 10 yrs
Recurrence higher if no RT with BCT
Any change 1-2 yrs post RT
Palpable mass/mammography


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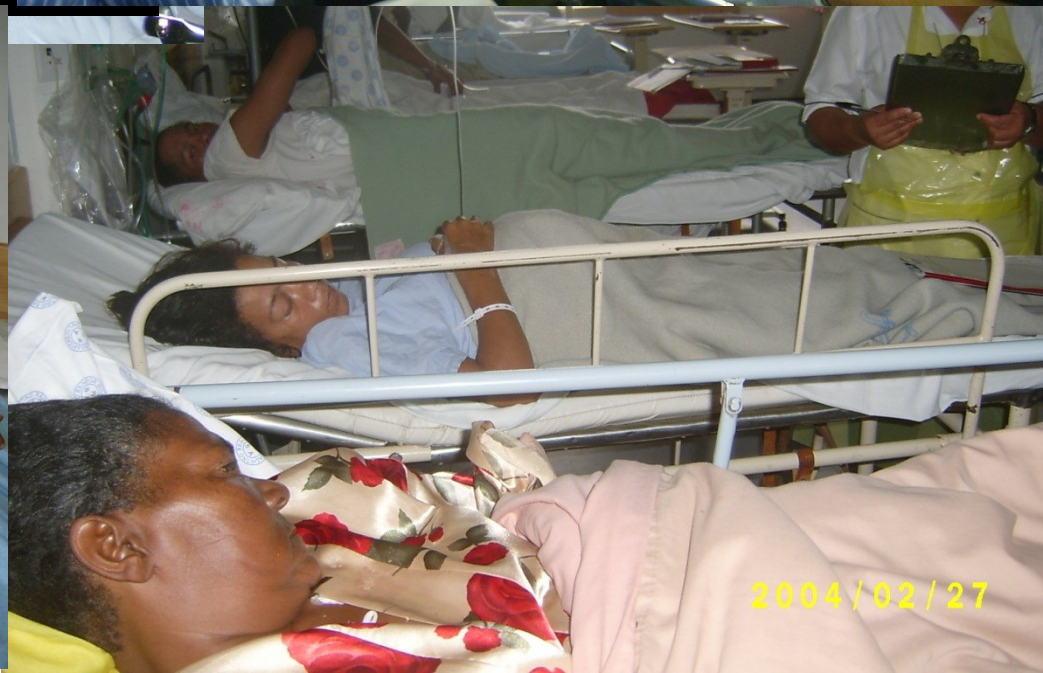
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Context

- Eight medical schools [Division/Dept of Fam Meds]
- 4-year postgrad training prog: MMed degree - registrars working and learning in training complexes - district and regional hospitals and PHC centres and clinics.
- Supervised by FPs and other specialists at the regional hospitals.
- Training complexes linked to academic programme run by one of the university medical schools.

5 Unit Standards – end of Tx, FP should be able to…

1. Effectively manage himself or herself, his or her team and his or her practice, in any sector with visionary leadership and self-awareness in order to ensure the provision of high-quality, evidence-based care.

2. Evaluate and manage patients with both undifferentiated and more specific problems cost-effectively according to the bio-psychosocial approach.

3. Facilitate the health and quality of life of the community.

4. Facilitate the learning of others regarding the discipline of family medicine, primary health care and other health related matters.

5. Conduct all aspects of health care in an ethical and professional manner.

What are we aiming for?

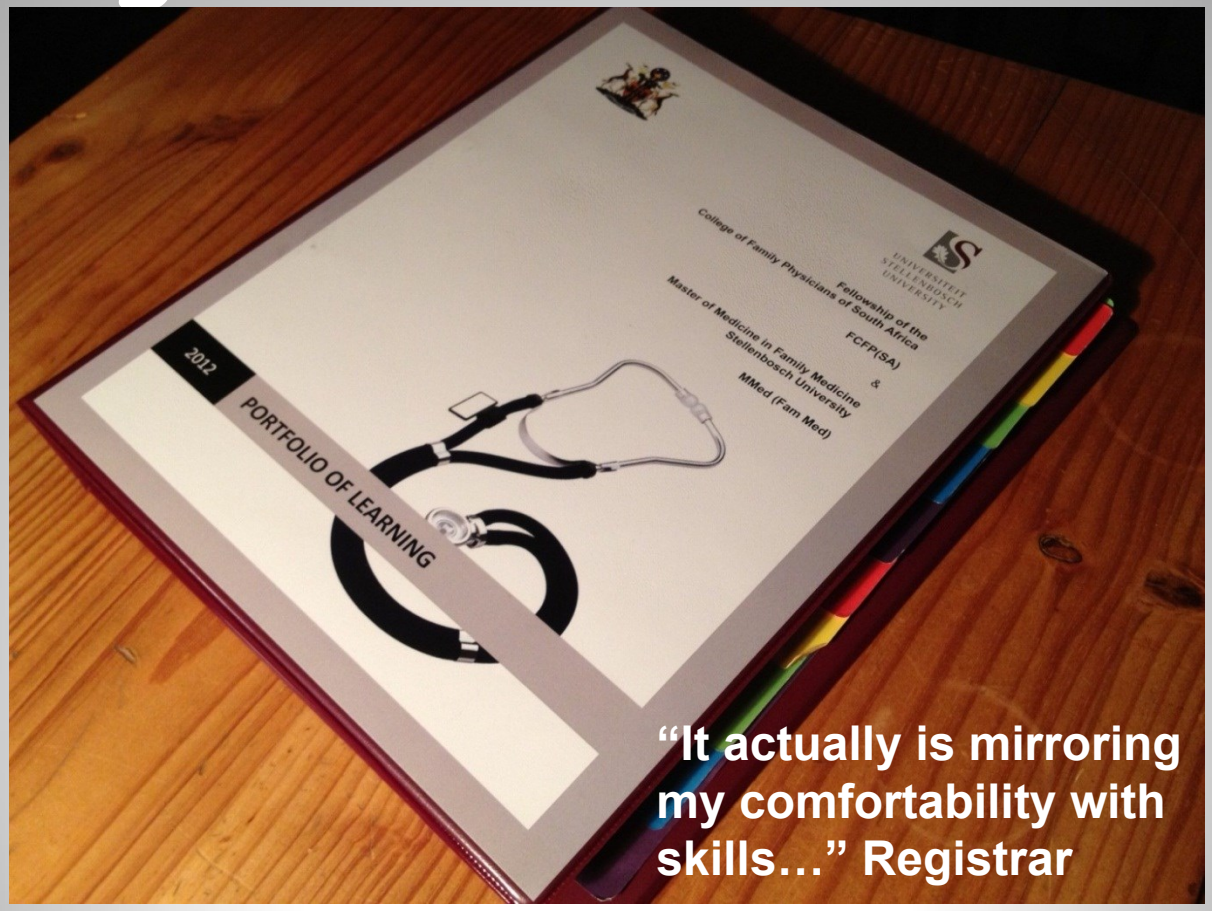
- …working to become competent family physicians
- …training colleagues to become competent
- …improved health outcomes
- …life-long adult learners

Couper, Smith, Mash, Schweitzer. Outcomes for FM postgraduate training in SA. S Afr Fam Pract 2012;54(6):501-506

Objectives? We need to…

- adapt to the learning climate (or change it)
- learn > 200 skills
- develop into expert generalists
- keep caring (patients, peers, personal)
- have resilience
- show proof of performance in context
- exit with a national exam
- be useful in the health districts of SA

Where does the portfolio come in? assisting as a learning tool



Purpose

- **Internally, it is part of Clinical Family Medicine, with a strong formative (learning between registrar and supervisors) and a summative component (towards year mark).**
- **Externally, an acceptable portfolio forms part of the FCFP exams of the CMSA.**

Purpose cont…

- Asssist with the planning of learning, capture evidence of learning, documenting reports and supervisor assessments.
- Graded annually by each university.
- Satisfactory portfolio over 3 years needed for Fellowship exam.

Tool to help the registrar to…

- Think consciously about your own training - *reflective learning*.
- Document the scope and depth of your training experiences.
- Provide a record of your progress and personal development.
- Provide a basis for discussion with your supervisors.
- Provide documented evidence for the CMSA of the quality and intensity of the training that you have undergone, as a requirement of the exam for the FCFP.

- Cumulative record of your personal learning, goals, needs, strategies and activities throughout your 4 years.
- Owned by the registrar.
- Not exhaustive, minimum that you should be doing.
- You will learn a great deal more than what is written on the pages of your portfolio – “backup file”.
- Personal reflection (journaling) – could have apart.

Portfolio detail

1. Introduction
2. Learning outcomes
3. Learning plans, reflections on rotations & supervisors' feedback and assessments
4. Educational meetings with supervisor
5. Observations of the registrar by the supervisor
6. Written assignments
7. Logbook of clinical skills
8. Emergency meds certificate(s)
9. Others courses, workshops, conferences
10. End of year assessment

Background

- 1990 – Miller – no instrument to evaluate “does”
- 1993 – UK – RCGP - portfolios
- 2003 – SA – CMSA - portfolios
- 2007 – CMSA Symposium – logbooks vs portfolios
- 2010 – CMSA – 3 workshops – Validity of WPBA
- 2011 – HPCSA – portfolio submission 30 CEUs/a
- 2012 – CFP (SA) – Portfolio of learning

The SA nat. portfolio of learning

- **2009** – Workshop at WONCA Africa Regional Conference – Purpose and broad contents of portfolio
- **2010** - Draft portfolio – content validity and assessment tools – 30 FM experts in SA – Delphi 4 rounds
- **2010** - Parallel consensus process on the training outcomes and 5 unit standards for FM in SA (2004) – revised and agreed upon by 8 HODs
- National consensus that 50 of the 85 national learning outcomes can be assessed via national portfolio
- **2011** – Portfolio tested with registrars, supervisors, program managers) in SA – educ. impact, acceptability, use
- **2012** - Final portfolio and reliability of Pf assessment tool – CMSA exams, and each FM Dept adapt to satisfy own needs

Summary from CMSA Workshop 2010 (Vd Vleuten, Maastricht)

- Transfer of knowledge into practice is a big challenge.
  Need to give registrars authentic tasks to "do what they know".(M&Ms, IUCD)
- Feedback from supervisors to registrars is NB for reflection. Not happening as it should.
- Scenarios form the basis now for almost all forms of assessment. Direct observations, CbD
- Context specificity of assessment – competence is specific, not generic. District hosp, PHC, specialist rotations.

Summary cont...

- Reliability less dependant on any single measure (MCQs, Orals, OSCEs, Essays, etc.), but on feasible sampling, particularly on the no of hours spent (4 hours = good benchmark). 8-10 encounters / judgements, different contexts and with different tests, have been shown in psychometric testing to increase reliability (Williams, 2003).
- Triangulation (e.g. Multi-Source Feedback + Mini-CEX + ...) overcomes unreliable self-assessment (Eva, 2005). {Depressed people are most accurate!}

Summary cont……

- Interaction between the supervisor and the registrar (feedback) is more important than the form of assessment. Thus we need role models / supervisors / mentors.
- Subjective expert judgement has incremental value. (Vd Vleuten, Schuwirth, Eva)
- Qualitative (narrative) feedback is more reliable (useful) than scores. Scores tend to be inflated (Dudek, 2005).
- Quality (validity) of the portfolio depends on the people using the tool, and the quality of the feedback (Govaerts, Van der Vleuten, Schuwirth, & Muijtjens, 2007).

Principles of Family Medicine

- Committed to the person
- Seeks to understand the context of the illness
- Sees every contact as an opportunity for prevention
- Views the practice as a population at risk
- Is part of a community-wide network

^McWhinney 1989

- Share the same habitat*
- See in OPD, homes, hospital, clinics
- Attaches importance to the subjective aspects of medicine (relationships, self-awareness, values, attitudes)
- Manager of resources

* "If we do not live where we work, and when we work, we are wasting our lives, and our work too." (Wendell Berry, 1978)

Applied to the registrar and supervisor/mentor/trainer?
2 Jobs: Patient care and Learning.

Group feedback on portfolio use

- What works well for you?
- What works badly?
- Feelings?
- What have you learnt?
- Context?
- How will you change it?

Challenge – move from counting numbers to adult learning

- Evidence of Learning – accommodate learning styles
- Allow reflection
- Mediates supervisor-registrar interaction (formative)
- Summative assessment (assessment drives learning)*
- Improved processes of care (quality in service)
- Life-long learners (better doctors, better people)

* Portfolio = 100% of Clinical Family Medicine at US, = year mark for Year 2,3,4.

Also now will carry a mark in the College exam

How do we do it?

- Understand purpose of portfolio (What is MY purpose for doing this training?)
- Simple
- Lean and Mean (not thick)
- Talk about it (supervisor and registrar) – ward, OPD, theatre, tea, coffee shop, phone (learning conversations)
- Clear, flexible structure
- Freedom (determine own content) - …
- Commit 12 minutes/day (1 hr/week, or 2 hrs/2 weeks)

Goals, content, organization

- **Not** a mere collection of events seen or experienced, but contains critical reflections on these and the learning that has been made from them.*

- **Not:**
  Masses of papers
  Extended Logbook

*Snadden & Thomas, 1998

- Instructions: "Show how you…"
- Captions: "What the document is", and Why it is valuable evidence"

- Selection of evidence say a lot about the registrar….
- Personal Development Plan (SPMS!)
- "Reflective Essay"
- Different types of evidence ↑reliability (triangulation)

Strategies to stimulate self-directed assessment seeking…

- Take personal responsibility for looking outward, explicitly seeking feedback and information from external sources of assessment data, e.g. from colleagues, nurses, patients, community, pharmacists, spouse.
- Safe environment (complete, not compete)
- Focus on description
- Be concrete in reports:

What went well, wrong; how did you solve this; what effect did this have?

- Perspective of others: What did I want; patient, colleague, nurse want? Think? Do? Emotions?

"Continuous effort, not strength or intelligence, is the key to unlocking our potential." Winston Churchill

Learning plans…

- Group(s)
- Questions, discuss, clarify

Educational meetings

- Required for several sections of the portfolio.
- 86% reported meetings with someone who could facilitate learning at least every 2 weeks.
- Meetings with a FP took place less often and with their specific supervisor the least of all.
- Setting a learning agenda never took place in 14.3%, and direct observations of clinical skills infrequently in 30.6%, and never in 12.3%.
- Personal problems: daily-monthly in 59.2%.

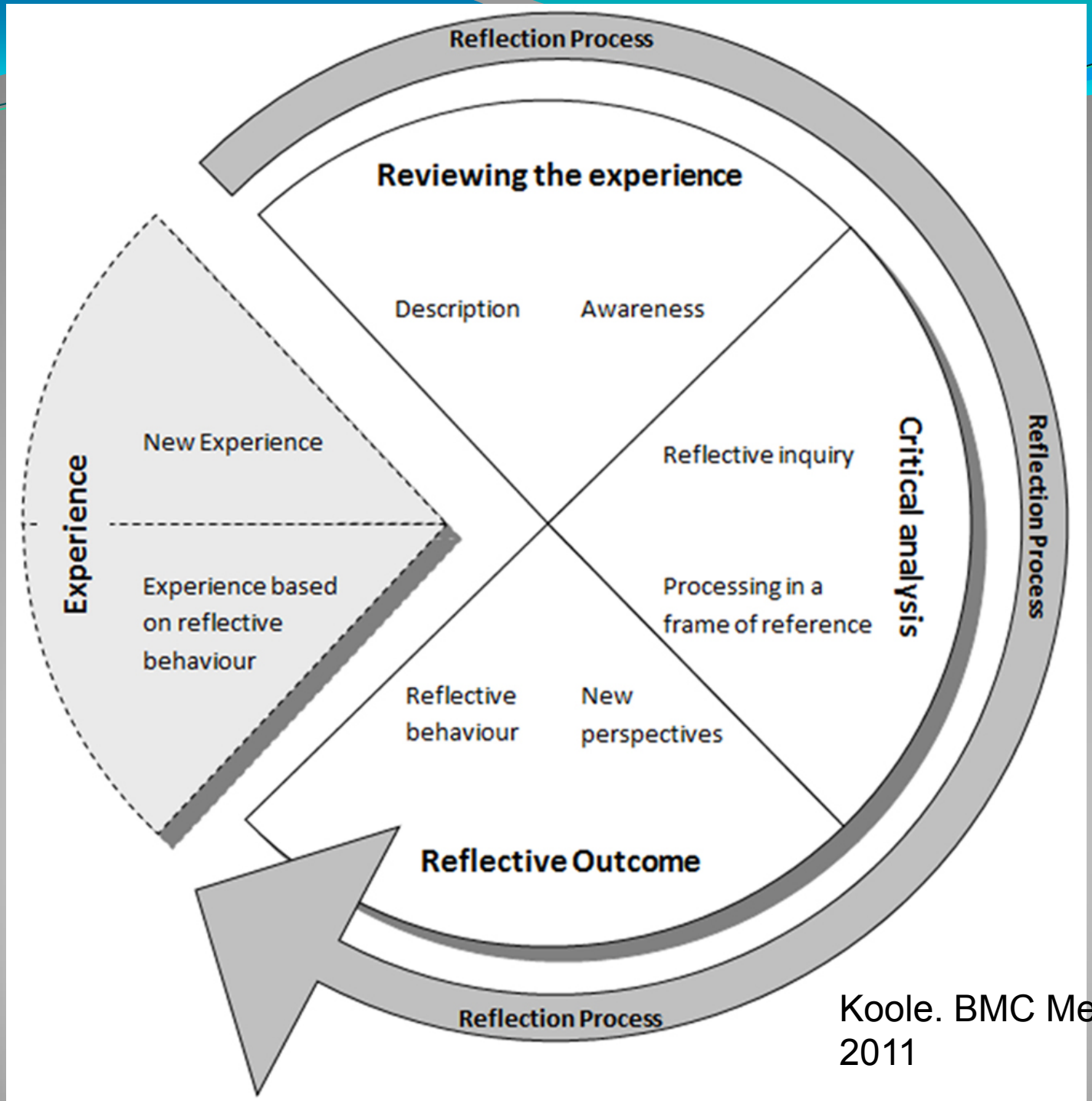
Mash, Goedhuys, D'Argent. Enhancing the educational interaction in FM registrar training in the clinical context. SAFamPract 2010;52(1):51-54.

Reflection …+feedback

- Are we present (situational awareness)?
- Moment of surprise this week?
- Noticing of discrepancy.
- Asked someone for feedback this week? Prompted?
- Strong emotions
- Transformative learning last month? Changed perspective*.
- Participatory action research (iteratively).

*Mezirow

- **R**ight
- **E**rror
- **F**eelings
- **Le**arn
- **C**olleagues
- **T**ry again



Koole. BMC Med Educ. 2011

Feedback

- Perceived by both groups, but especially the registrars (88% vs. 52%, p=0.005), to be very inadequate.
- Most feedback received from FPs & other specs.
- Registrars reported less feedback from family physicians and other specialists and more from other registrars, medical officers, patients, or nurses, than the supervisors thought.
- Both groups reported little feedback from managers.

Feedback & Reflection (microsystems)

Feedback

- Early
- Specific
- Sensitive
- Honest
- Private
- Action

Reflection

- Single loop
- Double loop (Why, how)
- Triple loop (Systems, context)

Listen
Engage
Ask
Recognize/reflect
Note

Mikkelsen, Holm. Contextual learning…2007

Observations of the registrars

- Consultation (n=33, 67%)
- Teaching activities (n=28, 57%)
- Clinical procedures (n=25, 51%)
- Direct observation was used by all the supervisors, while only 4 (17%) supervisors and 5 (19%) registrars used video and 1 supervisor used audiotape for indirect observation.

Direct observation of consultation

Feedback and assessment with mini-CEX

Do we need observation and feedback?

- In a study using unannounced standardized patients, Ramsey found that a group of primary care physicians only asked 59% of essential history items.
- Among 1057 counseling sessions involving primary care physicians and surgeons, only 9% of encounters met basic criteria for effective informed decision making. Other studies have shown that physicians fail to elicit over half of patient complaints and that many of the public's complaints about physicians relate to communication problems.
- Effective communication has been shown to improve patient outcomes and adherence, and most patients want an active role in the decision making processes.

12 Tips for better observations

- Poor consultation skills - Evident in CMSA exams
- (4) Create a culture that values DO – role models (model / mould)
- (5) Faculty development – individuals > tools
- (6+8) Feedback
- (7) Action planning
- (9) Apply multiple times
- (10) Systems – 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

Assignments that registrars most frequently completed

- Clinical competence (71%)
- Evidence-based medicine (65%)
- Ethical reasoning (57%)
- Family orientated primary care (50%)
- Community orientated primary care (26%)
- The frequency with which registrars included these various types of assignments in their portfolio ranged from 12% to 51%.

Shall we look at the logbook?

- Background?
- Pros?
- Cons?

Couper, Mash. Obtaining consensus for core clinical skills for training in FM in SA. SA Fam Pract 2008

Ownership

- Registrars found it more useful in enabling reflection on learning than the supervisors' believed (p=0.03).
- While all agreed that regs had responsibility for completing the portfolio, the regs wanted the supervisor to take more responsibility (p=0.03):

"With regards to the learning events, ultimately it is my responsibility to enter it, but if the supervising family physician is not often available or approachable, it is difficult to negotiate."


A randomised
controlled trial of
suture materials used
for caesarean section
skin closure: Do
wound infection rates

Central role of Supervisor/Trainer

"The system works well when it operates through the interaction of a learner and mentor using the material as a catalyst to guide further learning."*

*Snadden & Thomas, 1998

Driessen et al., 2005

Grant, 2007

What is a Supervisor/Trainer?

- Am I a supervisor?
- (Am I a learner)
- Mentor to someone?
- Encourager/guide?
- Creating opportunities for learning?
- Facilitating reflection?
- Honest feedback?
- Assessment/judgement?

Twelve tips for developing effective mentors

1. Expectations, listen, feedback skills
2. Awareness culture & gender
3. Support & challenge
4. Forum to express problems
5. Aware of prof boundaries
6. Need mentoring
7. Need recognition
8. Need rewards
9. Need protected time
10. Need support
11. Peer mentoring
12. Evaluate effectiveness

Ramani, Gruppen, Kachur. Med Teacher 2006

Inconvenient truths – 8 habits

- Think out loud
- Activate the learner
- Listen smart
- Keep it simple
- Wear gloves
- Adapt, enthusiastically
- Link learning to caring
- Kindle kindness

Reilly, BM. Inconvenient truths about effective clinical teaching. Lancet 2007; 370:705-711

Skills in supervision

- Mentoring/Supervision/Leadership is slowly developed (not in only a few workshops) ~ at the patient bedside, over time.
- Workload implications ~ group supervision, peer co-supervision.
- Supervisors need to reflect on their own clinical reasoning strategies when assessing registrars.
- Need to be aware of different learning styles (Kolb)

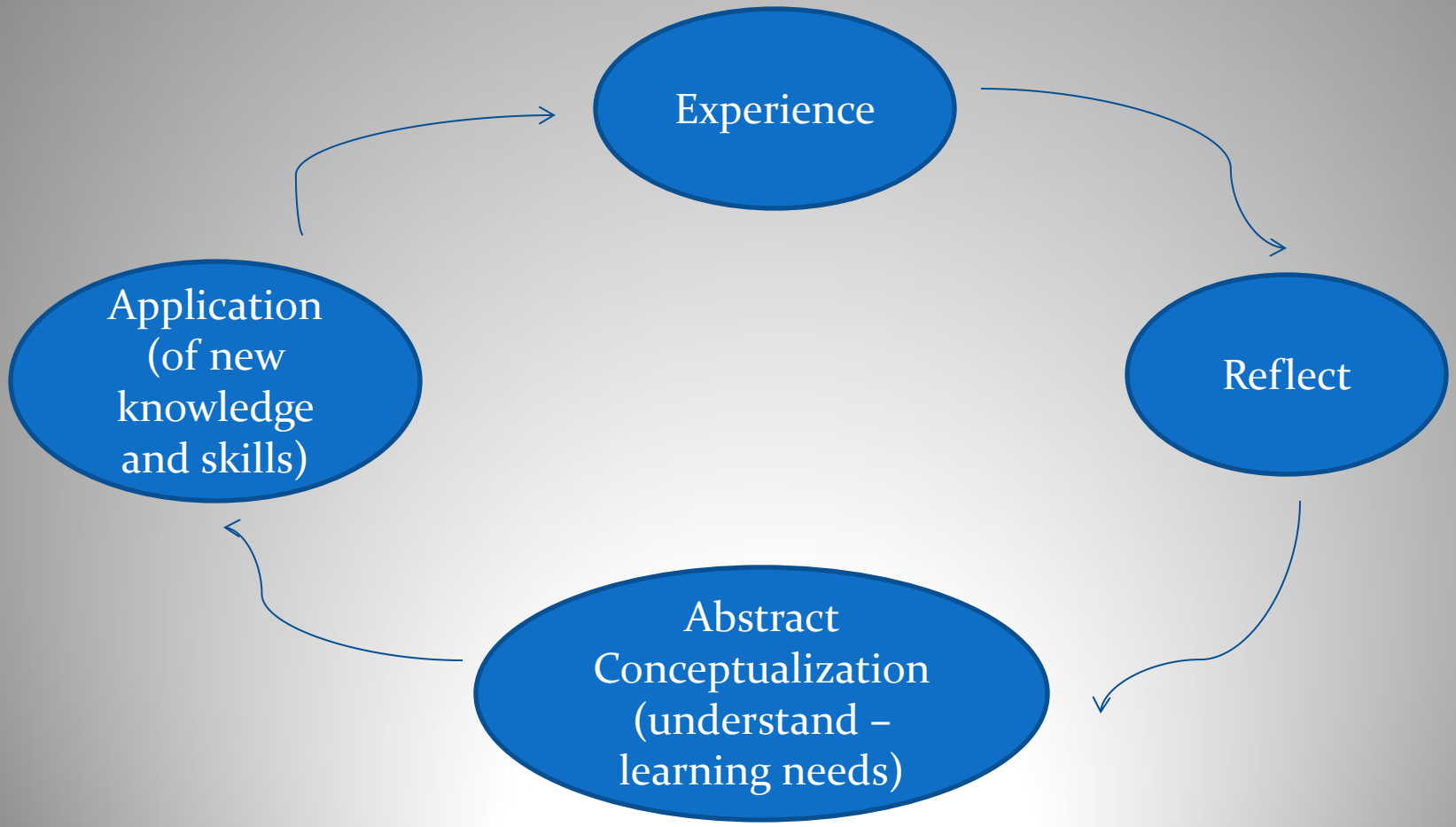
Learning Styles*

- My learning style?
- Yours?
- Thinking about thinking? (metacognition)

*David Kolb 1984

1. Feel and Do – Accommodating
2. Feel and Watch – Diverging
3. Think and Watch – Assimilating
4. Think and Do - Converging

Kolb again (experiential learning cycle)



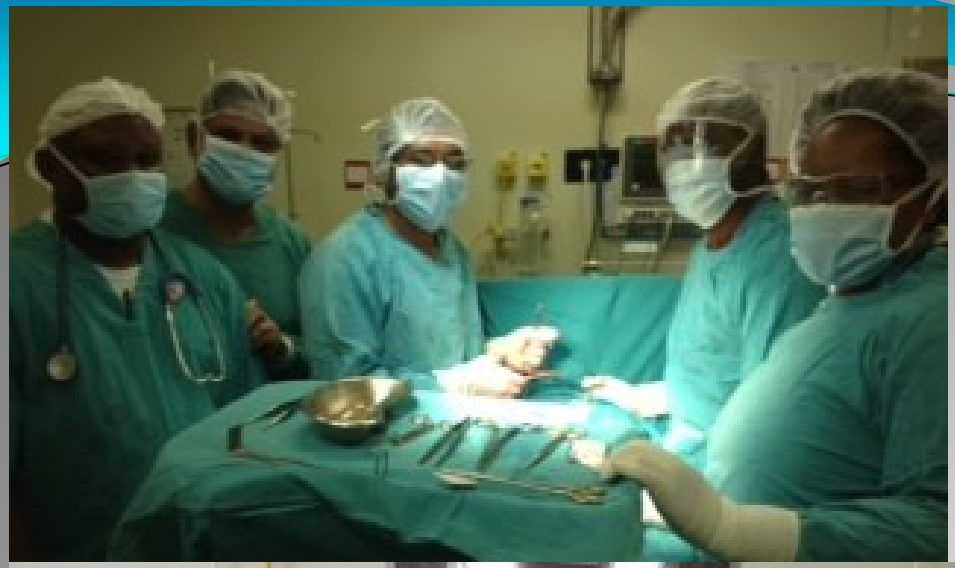
More on mentoring…

- Be available
- Encourage educational meetings
- Look out for learning conversations ***(notice)***
- Verbalise questions
- Answers when asked
- Regular small contacts
- Patient-centred
- Learner-centred

"I'm always ready to learn although I do not always like being taught." Winston Churchill

Reflections on mentoring...

- Part of many mentors
- Learn from the registrar
- Read widely
- Brand (be) FM (aware)
- Make time to think
- Have a healthy hobby
- Humour (+/- tears)
- Honest feedback (trust)
- Hope in people (long view)



Assessment…

- Some places the registrar must complete a part (self-assessment), followed by the supervisor's assessment
- End of each rotation/attachment – complete the assessment
- If no "rotations", then supervisor must assess in Feb and August (2X/year).
- The registrar's assessment (in the portfolio), is also informing the training programme (reflection).

Validity and reliability

- 8-10 exposures (e.g. Written assignments, Direct observations)*
- Triangulation
- Real context
- Close supervisor over time

*Vd Vleuten

Developing the portfolio assessment tool (PAT)

- Feasible and reliable
- Assessment end of each year - repeated over three years
- Prerequisite to sit Part A of CFP exam in the fourth year
- All sections already include individual assessments with grades
- PAT was designed to aggregate these grades at the end of the year
- Together with a global score by the programme manager or HOD
- Calculate a total score out of 100

Components of PAT

Sections in the portfolio	Score or grading	Description	Minimum needed
Learning plans	/10	Rating of the written learning plan by the supervisor	6-monthly; or 1 for every rotation
Rotational reports	/10	Rating of the registrar's performance by the supervisor	6-monthly; or 1 for every rotation
Educational meetings	/20	Rating of the number of hours accumulated and the range of different types of educational interactions.	24 hours, 5 different types of interaction as specified in the portfolio
Observations by supervisors	/10	Rating of the registrar performing a variety of different competencies such as a consultation, procedure or teaching event	10 observations, 1 must be a teaching event
Assignments	/10	Grades obtained for written assignments	2-3 assignments per year
Logbook	/30	Rating of competency to perform clinical skills by the supervisor (A=theory only; B=have seen; C=can do under supervision; D=can do independently)	168 skills over 4 years must achieve a D rating. 43 skills over 4 years must achieve at least a C rating.
Global rating	/10	Rating of the overall evidence of learning, quality of reflection and organisation of the portfolio	
Total grade	/100		

Inter-rater reliability of original and modified PAT

Modified PAT sections	ICC consistency 2012	ICC consistency 2013	95% CI 2013
Learning Plans (/10)	0.93	0.40	0.14-0.75
Rotation Reports (/10)	0.83	0.26	0.04-0.65
Educational Meetings (/20)	0.87	0.89	0.75-0.97
Observations (/10)	0.78	0.21	0.00-0.60
Assignments (/10)	0.82	0.76	0.54-0.93
Logbook (/30)	0.33	0.91	0.81-0.98
Global rating (/10)	0.51	0.48	0.21-0.80
Total score (/100)	0.58	0.92	0.81-0.98

Reliable total score for the assessment of the portfolio (0.92)

- Largely due to 30% contribution of Logbook to the final score, which also demonstrated good inter-rater reliability.
- Similar to work from Europe on internship portfolios, where inter-rater reliability coefficients for 15 tasks ranged from 0.58 to 0.79, with a reliability coefficient of 0.89 for the instrument as a whole (95% CI = 0.83-0.93)*

*Michels N, Driessen E, Muijtjens A, Van Gaal L, Bossaert L, De Winter B. Portfolio assessment during medical internships: How to obtain a reliable and feasible assessment procedure? Educ Health 2009;22(3):313.

Global rating adapted

1 Poor	2 Barely adequate	3 Average	4 Good	5 Excellent
Reflections on rotations[1]:				
Describes what happened: Only experiences or clinical activities are described.	*Describes one's reactions:* Writing shows self-awareness in terms of one's thoughts, feelings and context.	*Critical analysis of learning:* Writing shows critical analysis with development of more abstract conceptualization of new knowledge, skills and personal growth.	*Critical analysis of learning and learning needs:* Writing also shows critical analysis of what must still be learnt or focused on next.	*Critical analysis of learning, learning needs and practical planning:* Writing also shows how these new learning needs have been translated into future plans.
1 Poor	2 Barely adequate	3 Average	4 Good	5 Excellent
Organization of portfolio:				
Incomplete or many areas disorganized or filled in mostly at the end of the year.	Complete with a few areas disorganized but completed throughout the year.	Complete and organized in a systematic way. Completed throughout the year.	As before but presented in an exemplary way.	As before but with innovative additional evidence such as photos, videos, patient reports.

WPBA in postgrad education - has shown mixed results

- WPBA reliability study: Trainee score variance for 14 competency items – 20.3% on average, 28.8% for overall rating. Mostly measurement error.^
- Composite reliability of a WPBA toolbox for postgraduate medical education in a portfolio study: Minimum of 7 mini-CEXs, 8 DOPS, and one multi-source feedback (MSF) was sufficient to yield reliable results.*
- Other studies have shown mini-CEX reliability with 8-10 assessors and DOPS reliability with two to three assessors and two cases.

^McGill D, van der Vleuten C, Clarke M. Supervisor assessment of clinical and professional competence of medical trainees: a reliability study using workplace data and a focused analytical literature review. Adv in health sc. Educ. 2011;16(3):405-425.

*Moonen-van Loon J, Overeem K, Donkers H, van der Vleuten C, Driessen E. Composite reliability of a workplace-based assessment toolbox for postgraduate medical education. Adv in Health Sciences Educ. 2013:1-16.

Validity - Key principle

- Reliability is one component
- More observations > more items (global ratings=reliable)
- Spread of cases/contexts (our pf has 31 contacts, excluding logbook)
- Balance with feasibility/efficiency
- Triangulated with other assessments (FCFP)
- Supervisor training is NB
  - Direct observations
  - Feedback
  - Help registrars to change
- Use of same tools over time (no new tools!)*

*Regehr G, Eva K, Ginsburg S, Halwani Y, Sidhu R. 13 Assessment in Postgraduate Medical Education: Trends and Issues in Assessment in the Workplace. 2011.

Next?

- Discuss and consensus at SAAFP ETC, CFP Council
- Upload latest portfolio (with final PAT) to CMSA website
- Depts of FM to print + use portfolio with final PAT
- Adapt locally for specific university needs
- Grow a list of reading resources
- Short video clip of learning plan, feedback, using the PAT
- Supervisor and registrar training and support
- Program/faculty support – mind shift WPBA
- Electronic support/sharing/hybrid