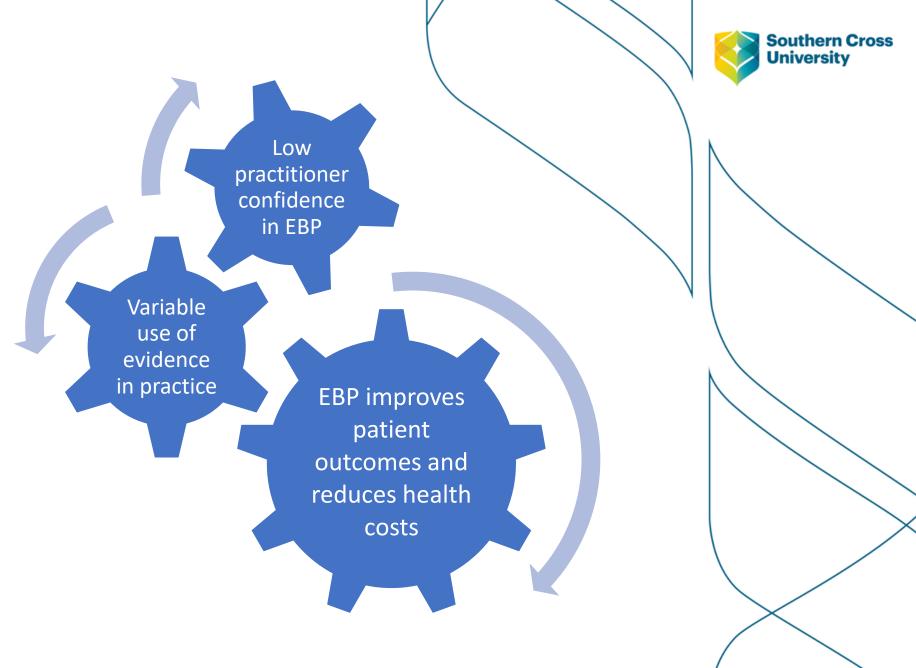


# **SNAPPS-PLUS Considering the evidence**

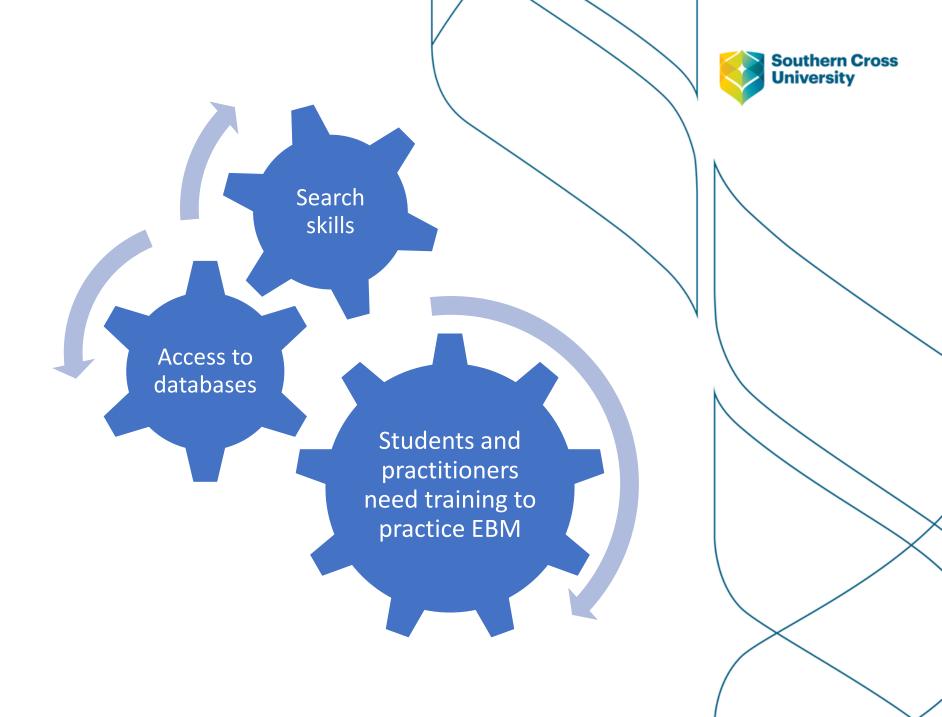
Sandra Grace Brett Vaughan Bimbi Gray Andre Kleinbaum











- Limited control over patient mix
- Different levels of student competence
- Supervision of multiple students at one time
- Limited time with each student



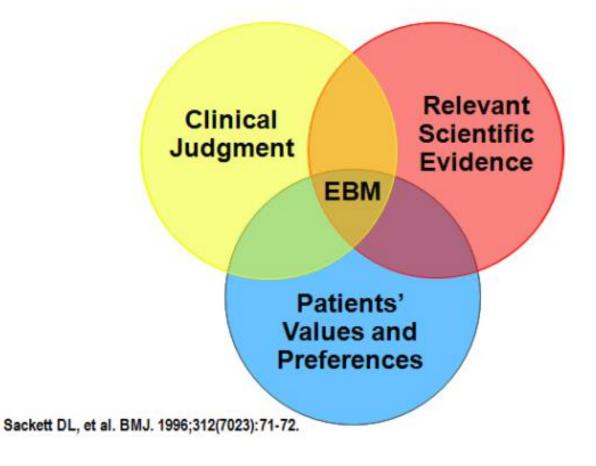
# Improving the experience

- Creating a positive learning environment is key in clinical education
- Establish a learner-centred environment
- Use processes to improve efficiency
- Use objective measures for feedback





#### What Is Evidence-Based Medicine?



# **Models of clinical supervision**

**Example: One minute preceptor** 

Advantages

- Quick and easy for educator/student
- Provides feedback at each step

Disadvantages

- May only be good for advanced learners
- Provides feedback on reasoning process only



# SNAPPS (Wolpaw et al., 2003)

Advantages

- Easy for educator/student
- Learner-centred
- Useful for all levels of learner
- Develop lifelong learning skills (Nixon et al., 2014; Pascoe t al., 2015)
- High student satisfaction

Disadvantages

- Relies on educator taking on a 'facilitator' role
- Limited opportunity for feedback
- Student may perceive educator is doing 'nothing'







Ρ	Patient, problem or population	
I	Intervention or management	
C	Another management strategy or no treatment	
0	Anticipated outcome	





SUMMARISE	the patient history and current status		
NARROW	the hypotheses to 2-3 relevant differentials		
ANALYSE	comparing and contrasting the possible differentials		
PROBE	the clinical educator by asking questions about uncertainties, difficulties or alternative approaches		
PLAN	the intervention approach		
SELECT	a case-related issue for self-directed learning		

### **SNAPPS-Plus**

#### TABLE 4

#### Formulating a Clinical Question Using the PICO Format

Clinical Question: Does Estrogen Replacement Decrease the Incidence of Cancer in Postmenopausal Women?

Patient, population, or problem

Describe important characteristics as accurately as possible

May include the primary problem, disease, and comorbidities

May Include gender, age, or ethnicity

Which groups do you need information about (e.g., postmenopausal women)?

Intervention, prognostic factor, exposure

What is the intervention you are considering?

What do you want to do for the patient?

Is it a medication, a test, a procedure, or therapy?

What factor might influence the prognosis of the patient, such as age, risk factors, exposure (e.g., estrogen replacement therapy)?

Comparison of intervention, if appropriate

Is there a means for comparison, such as more than one drug, a placebo, or two different diagnostic tests?

Is it an intervention compared with no intervention or an absence of a risk factor (e.g., no estrogen replacement)?

Outcome you would like to measure or achieve

What can you accomplish, measure, improve, or affect?

What are you trying to do for or with your patient?

Reduce adverse affects, reduce or eliminate symptoms, improve function (e.g., impact on incidence of breast cancer)

krainovich-Miller et al., 2009





# Is OMT alone or OMT with exercise more efficacious for the management of acute low back pain?

Ρ	Adult male with acute low back pain
Ι	OMT alone
С	OMT and exercise
0	Reduced pain, improved ADLs

# The SNAPPS-Plus supervision model in the SCU osteopathy program: A pilot study

#### AIM:

To implement and evaluate the SNAPPS-Plus clinical supervision model in the Master of Osteopathic Medicine program at SCU

## Method

Phase 1

Phase 2

Phase 3



Baseline data

• Clinical educators and students EBPQ surveys

#### • Pilot study

• Training workshops (students and clinical educators)

• 52 students, 5 cases each using PICO searches

#### • Evaluation

• PICO coding, clinical educators and student EBPQ surveys, and focus groups

### **Results**



### Table 1: Results of the Student Evidence-Based Practice Questionnaire

	Time 1		Time 2	
Subscale	Mean (SD)	Range	Mean (SD)	Range
Practice <sup>^</sup>	26.6 (8.2)	12-41	31.2 (6.1)	23-42
Attitude <sup>*</sup>	17.8 (2.6)	11-21	17.0 (4.5)	6-21
Retrieving & reviewing evidence <sup>#</sup>	30.9 (7.5)	18-39	33.4 (4.8)	26-41
Sharing & applying EBP <sup>%</sup>	22.9 (5.5)	11-29	25.6 (2.7)	22-32

<sup>^</sup>min. score=6, max. score=42; <sup>\*</sup>min. score=3, max. score=21; <sup>#</sup>min. score=7, max. score=49; <sup>%</sup>min. score=5, max. score=35





#### • Building a culture of EBM

It gave me the ability to give exercises confidently in some discussions with patients, like when that occurs for low back pain. It was really beneficial for me to give specific exercise for a specific condition. (Student 4)

I found information from different practices which is nice to get different points of view ... I have a patient with shoulder pain and I wasn't aware until I found research that doing spinal manipulation of T2-T3 can decrease the shoulder pain, then I ... implemented it in my practice. (Student 9)







#### • Helping students develop research skills

For me, the big education came in understanding the hierarchy of research, not just what makes it a gold standard article and what is relevant but how to access a journal on the psychosocial aspects about a patient's osteoarthritic knee. (Student 2)

 Weighing up the value of clinical experience and research evidence in clinical decision making

I feel there are two group - you have osteopaths who are evidencebased and others who are not - some supervisors did put a stand on years of research but ... they're like, 'Oh I've been doing this and it works'. (Student 9)



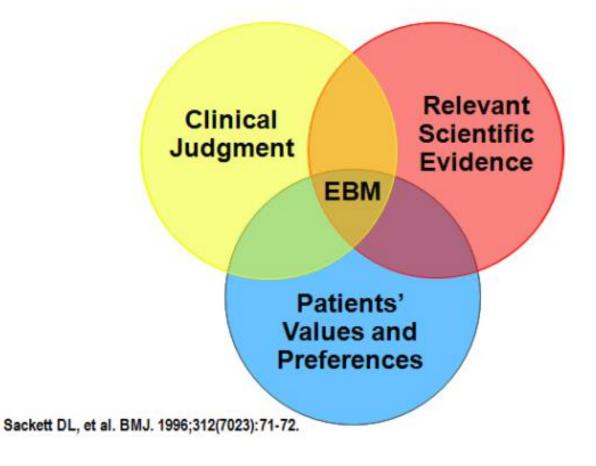
# • Co-learning environment for students and supervisors

But when I searched manual therapy versus surgery, [the supervisor] got very surprised to learn about surgery. (Student 9)

One thing with this PICO search is I think that we're definitely teaching our supervisors what the evidence says. It has definitely been a bit of a learning experience for the supervisors. (Student 12)



#### What Is Evidence-Based Medicine?



## References



- Krainovich-Miller, B., Haber, J., Yost, J., & Jacobs, S. K. (2009). Evidence-based practice challenge: teaching critical appraisal of systematic reviews and clinical practice guidelines to graduate students. Journal of Nursing Education, 48(4), 186-195.
- Nixon, J., Wolpaw, T., Schwartz, A., Duffy, B., Menk, J., & Bordage, G. (2014). SNAPPS-plus: an educational prescription for students to facilitate formulating and answering clinical questions. *Academic Medicine*, 89(8), 1174-1179.
- Pascoe, J. M., Nixon, J., & Lang, V. J. (2015). Maximizing teaching on the wards: Review and application of the One-Minute Preceptor and SNAPPS models. *Journal of Hospital Medicine*, 10(2), 125-130.
- Sawanyawisuth, K., Schwartz, A., Wolpaw, T., & Bordage, G. (2015). Expressing clinical reasoning and uncertainties during a Thai internal medicine ambulatory care rotation: Does the SNAPPS technique generalize?. *Medical Teacher*, 37(4), 379-384.
- Seki, M., Otaki, J., Breugelmans, R., Komoda, T., Nagata-Kobayashi, S., Akaishi, Y., ... & Izumi, M. (2016). How do case presentation teaching methods affect learning outcomes?-SNAPPS and the One-Minute preceptor. BMC Medical Education, 16(1), 12.
- Wolpaw, T. M., Wolpaw, D. R., & Papp, K. K. (2003). SNAPPS: a learner-centered model for outpatient education. Academic Medicine, 78(9), 893-898.
- Wolpaw, T., Papp, K. K., & Bordage, G. (2009). Using SNAPPS to facilitate the expression of clinical reasoning and uncertainties: a randomized comparison group trial. *Academic Medicine*, 84(4), 517-524.