

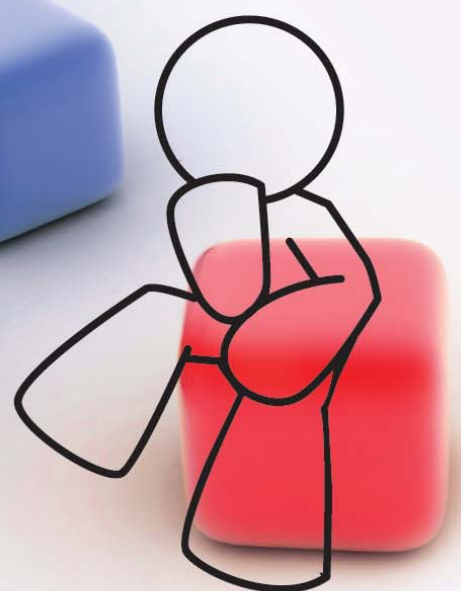


National Prescribing Service Limited

Using e-learning to improve prescribing practice in emerging prescribers

Karen Baskett National Prescribing Service





Think differently
about medicines
www.nps.org.au

Who?

The National Prescribing Curriculum (NPC)

- ★ 18 Case-based modules mirroring the decision-making process outlined in *WHO Guide to Good Prescribing*.
- ★ Modules used by all Australian Medical Schools and a variety of other health professional students.
- ★ Emphasis on building a personal formulary



What?





Why?

“Interns about to commence practice in NSW teaching hospitals are not adequately trained to prescribe medications on admission, during hospitalisation or on discharge safely or efficaciously. The interns recognise these deficits and would have liked more training in clinical pharmacology while in medical school.”

Hilmer et al 2009: 11



Why?

PBL

Challenge 1

Exposing learners to the principles of clinical pharmacology in a manner that fits with a PBL curriculum.

Changes to curriculum structure

Challenge 2

Finding innovative ways to help students absorb large amounts of knowledge in less time.

Independent learning

Challenge 3

Preparing learners to be self-directed adult learners.



What?

Introduction
+ Learning
Objectives

Case Study +
Context

 **Defining the
patient
Problem**

Therapeutic
Goals-voting

 **Specify
therapeutic
objective**


Therapeutic
Goals
Feedback

 **Specify
therapeutic
objective**

Non Drug
Treatment +
Feedback-Q&A

 **Choose a
Treatment**

Drug
Treatment

 **Choose
Treatment
+ P-drugs**

Review

Verify
Suitability

 **Verify
Suitability**

Provide
Information +
Feedback-Q&A

 **Monitor
Treatment**

Monitor
Treatment

 **Monitor
Treatment**

Prescription
Feedback

 **Start
Treatment**

Write
Prescription

 **Start
Treatment**





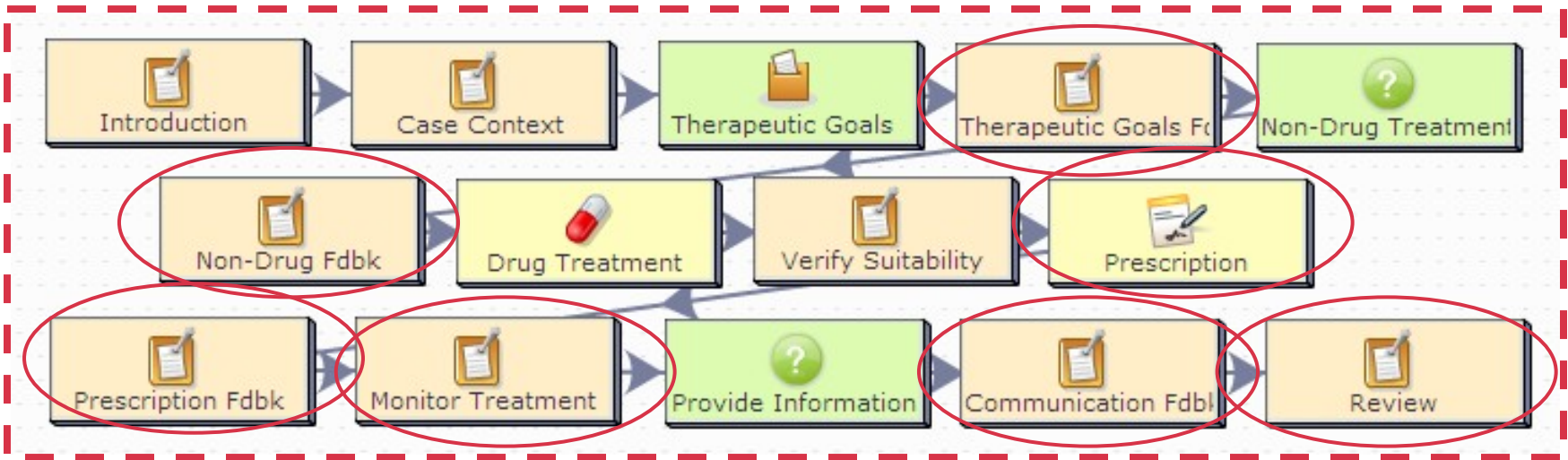
Learning Design

- ★ describes teaching processes in a structured way
- ★ typically describes sequences of activities
- ★ scaffolds content and collaboration
- ★ particularly useful for structured approaches (eg PBL)
- ★ LAMS provides flexibility in delivery mode and module design
- ★ a curriculum that moves with the times






Feedback 1



Therapeutic Goals Feedback

Click on the heading of each section to view the expert feedback.

✓	Reduce distress due to dyspnoea and/or anxiety
✓	Reduce his tachycardia
✓	Increase venodilatation
✓	Prevent complications
✗	Correct neurohormonal activation
✗	Increase force of ventricular contraction with cardiac glycoside
✓	Consider reducing or stopping drugs causing sodium and fluid retention
	More Information



The therapeutic goals in the management of acute pulmonary oedema are to reduce the patient's symptoms of distress and to prevent complications by improving tissue oxygenation. The mechanisms by which these are achieved are reducing left ventricular pre-load and pulmonary congestion and removing any precipitating or aggravating factors.



Peer Feedback

Moore (1996) described three types of interactions necessary for effective distance education:

- ★ learner to content
- ★ learner to learner
- ★ learner to instructor



Answers from other Learners

Question :

Propose as many non-drug treatments as appropriate and write your suggestions in the box below.

After submitting your suggestions you will see your own and your peers' ideas.

physiotherapy for chest exercises (to overcome diaphragmatic splinting post-abdo surg)
IV fluids for hydration and to correct any electrolyte imbalances
oxygen if the px has trouble breathing post-op

Provide support to patient
half hourly obs to monitor adequacy of pain relief
IV rehydration for vomiting
Aim for good pain relief so the patient can mobilise early

IVT
Fluid balance chart
O2 if needed
4-hrly obs, with pain scale
Check bowel + bladder function
Check wound + dressings
Change IVs, dressings regularly
Heat packs/ice as needed for pain relief
TED stockings
Early mobilisation

Education
Psychological support (counselling, CBT)
Ensure comfort (hydration, sleep hygiene)
Environment (sun exposure, calm environment)
Alternative therapies (TENS, acupuncture)
Ultrasound therapy

eat high protein foods
drink ample of water
increase mobility
think positively and riley




Authentic tasks

PATIENT DETAILS

UR No: P 12345
Family Name: Umaga
Given Names: Mary
Age: 74 Sex: M F
Patient/Weight (kg): 62
Height (cm): 167

ALLERGIES & ADVERSE REACTIONS (ADR)
 Nil Known Unknown

Drug (or other)	Reaction/Type/Date
Augmentin	Skin rash in 2005

Show expert's prescription:  salbutamol 100 microgram MDI prednisolone
ipratropium bromide 20 microgram MDI hydrochlorothiazide
diltiazem (cardizem CD) paracetamol
doxycycline nicotine

YEAR 2009
DOCTORS MUST ENTER administration times

MEDICATION

Date	Medication (Print Generic Name)	<input type="checkbox"/> Tick if Slow Release	0600
1/6	ipratropium bromide 20 microgram MDI		1200
Route	Dose	Frequency & NOW enter times →	1800
MDI	40 microgram	6 hrly	2200
Indication	Pharmacy		
dyspnoea			
Prescriber Signature	Print Your Name	Contact	
	Expert's Name	12345	



Authentic tasks

Writing a prescription is only part of a process

Emphasis on other activities:

- ★ The patient as the centre of the care cycle
- ★ clear and effective communication with client + carers
- ★ working effectively with other health care professionals
- ★ Offering non-drug options and lifestyle changes as management options.



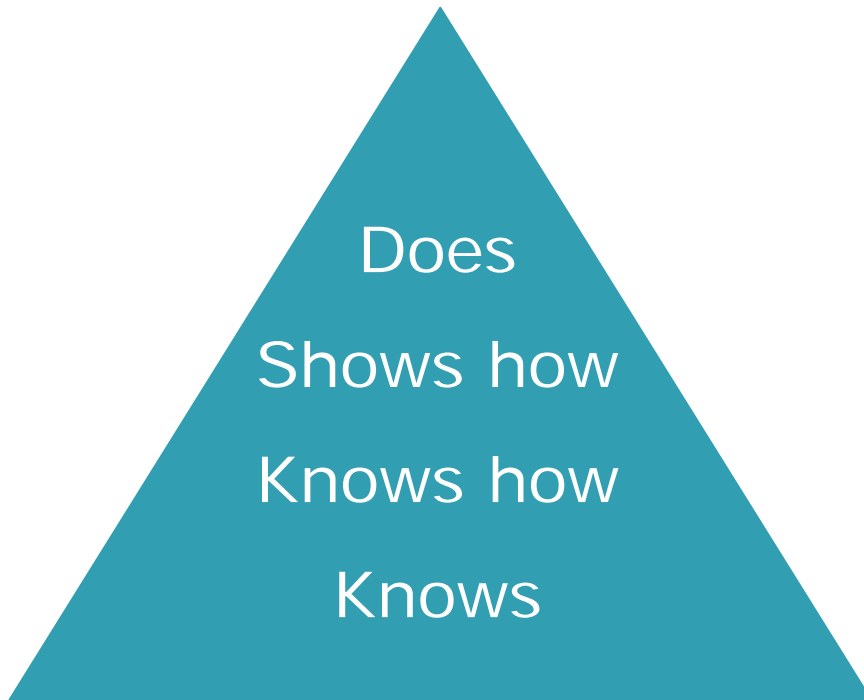
Theory



- Active
- Authentic
- Connected
- **Collaborative**
- Complex
- Intentional



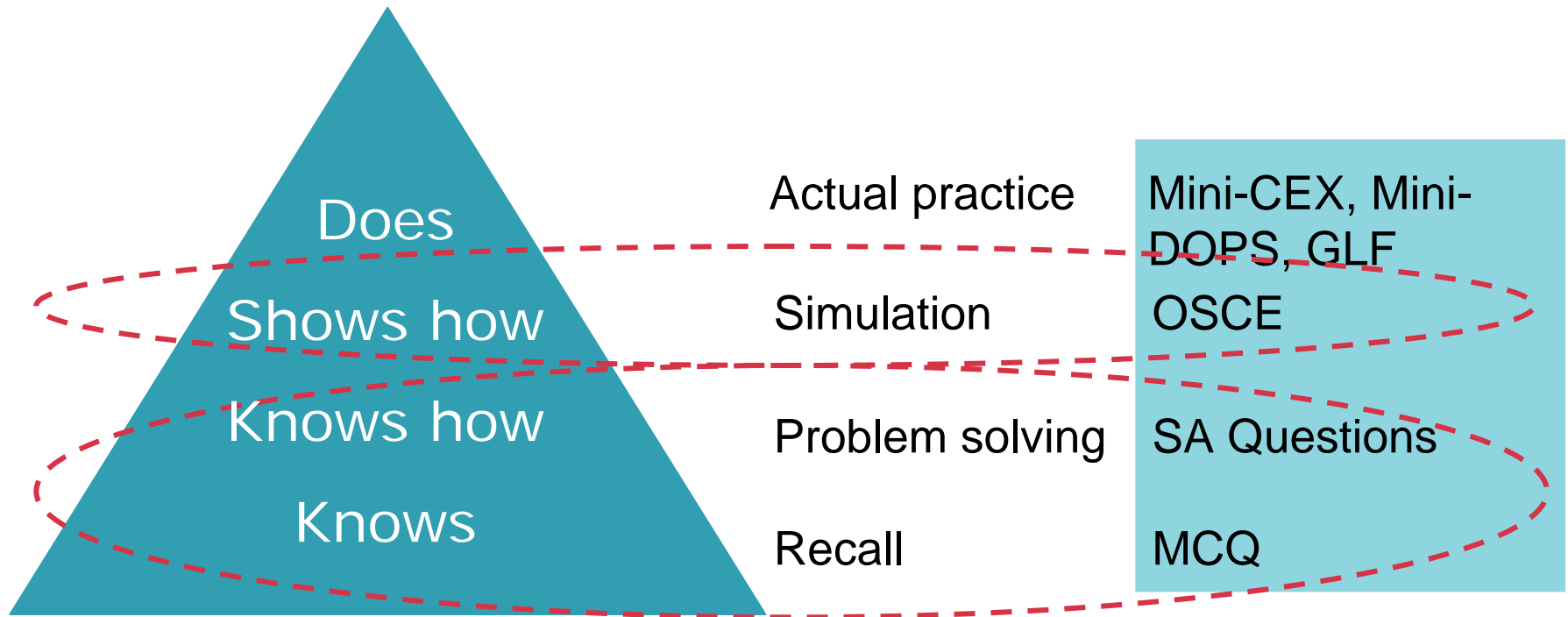
How do we assess prescribing?



Miller 1990



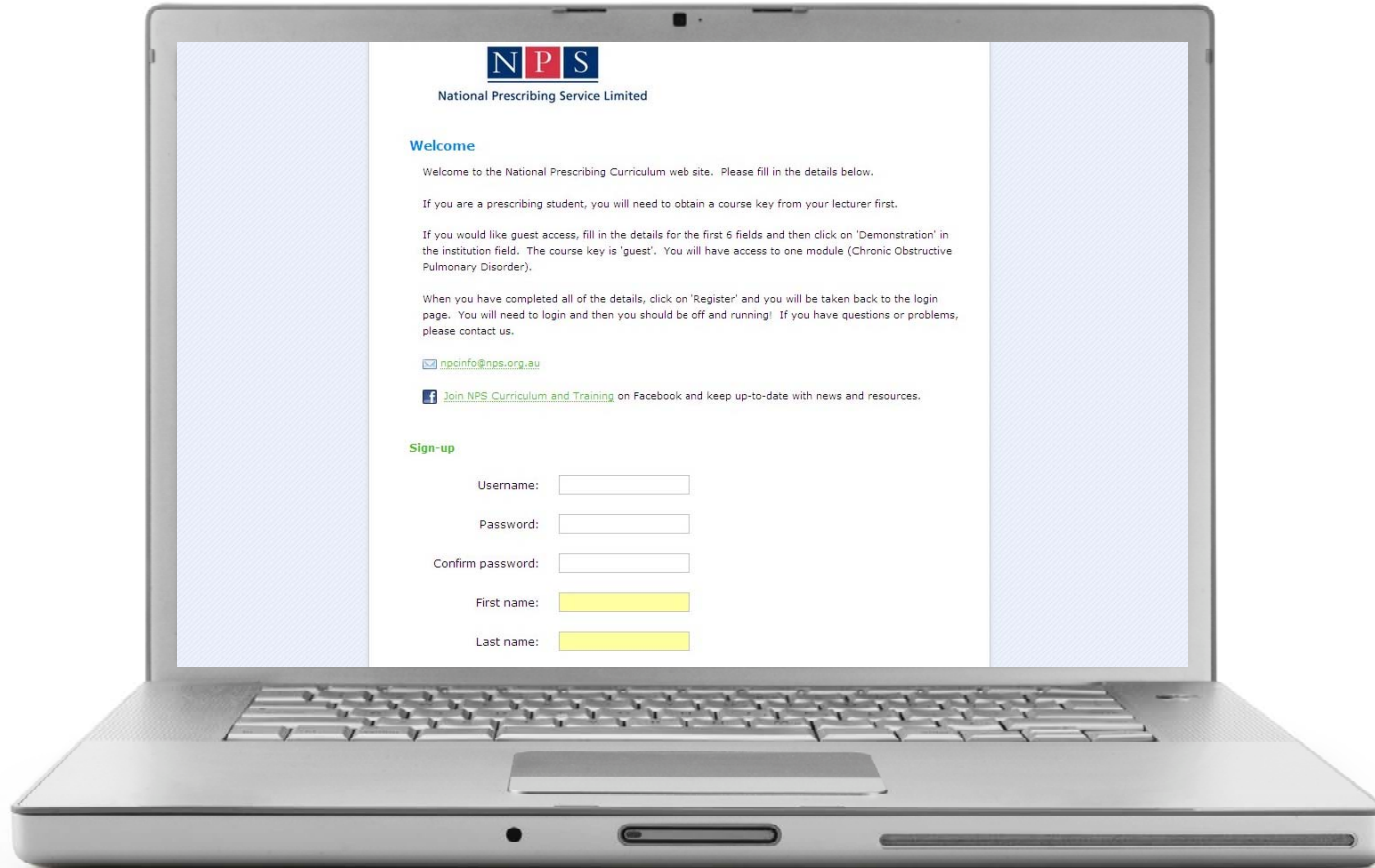
How do we assess prescribing?



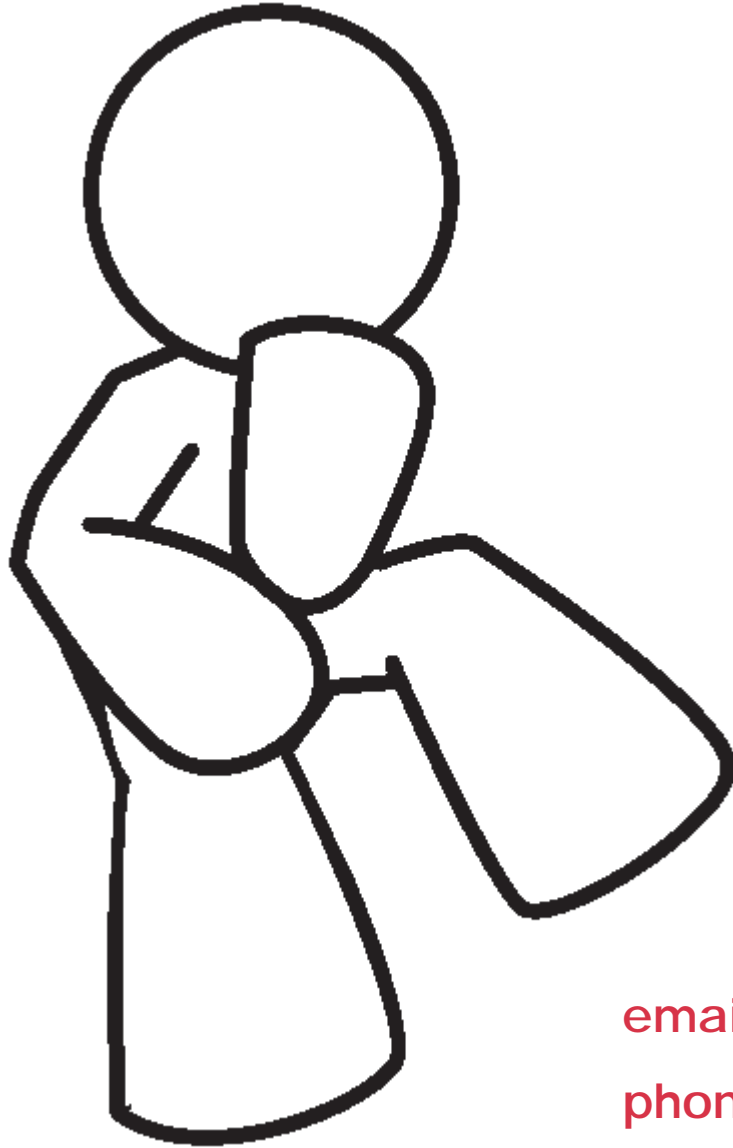
Miller 1990



How?



<http://npsprescribe.lamsinternational.com>



Thank
you!

email: npcinfo@nps.org.au

phone: 02 8217 8794

<http://npsprescribe.lamsinternational.com>