Inside The Black Box
An inter-professional education session on how to teach clinical reasoning in others

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The thought process that guides practice

Thinking about thinking

“A process in which clinicians collect cues, process information, come to an understanding of a patient problem or situation, plan and implement interventions, evaluate outcomes and reflect and learn on the process.”

A learnt skill not assumed knowledge
The Current Gap

We are not taught to teach
Program Development

1. Literature Search
2. Stakeholder engagement
3. Expert consultation
<table>
<thead>
<tr>
<th>Program Content</th>
<th>Program Modality</th>
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<tbody>
<tr>
<td>1. • Clinical reasoning definitions</td>
<td>✓ 2.5 hours</td>
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<tr>
<td>2. • Clinical reasoning types</td>
<td>✓ Face to face</td>
</tr>
<tr>
<td>3. • Different CR teaching methods</td>
<td>✓ Pre-reading</td>
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<tr>
<td></td>
<td>✓ Case study and role play</td>
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How to teach clinical reasoning

- Role Modelling
- Coaching Questions
- Story Telling
- Making Thinking Visible
Role Modelling

Level 1 – Thinking out loud

Level 2 – Engaging the learner to think out loud
Coaching Questions

How, what, when, where and why

Encourages learner to make explicit their thinking process
Tell a story about a previous patient that you saw that was similar or that was successful or unsuccessful.

Helps learner understand links to your decision making process and act as a trigger for future patients.
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<td>Reducing complex expert thinking to a thinking routine, form of simplification of knowledge to reduce cognitive load</td>
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<tr>
<td>Utilises self reflection as the first step. How would I do this and why?</td>
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<td>Makes expert thinking visible and accessible to students/learners</td>
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Evaluation

Continuum of care

54 attendees 2017-2018

Inpatients 25
Community 16
Outpatients 8

Nurses 4
Physio 9
OT 6
Medical 4
Dieticians 5
Speech Path 7
Qualitative Feedback

- Interprofessional nature
- Interactivity / Modality
- General satisfaction
- Engaging presenter
- Bridging the knowledge gap
Kirkpatrick's levels of training evaluation

- **Results**
  - Did it impact the business?

- **Behaviour**
  - Did learners change behaviour on the job?

- **Learning**
  - What skills, knowledge, or attitude changed?

- **Reaction**
  - Did learners like the training?
4 week follow-up

14 Made a Change to my practice for the better

5 No change to my practice
Self Reflection

“I reflected on the importance of assessing my own style and questioning ourselves”

“It is our responsibility to facilitate learning and finding gaps in knowledge”

“I reflected upon how much assumption I do”
“Spent more time with students to make my own thinking visible, to enable their thinking to become more visible also”

“Practiced the talking out loud method, instead of asking students 'why' straight away asking them how they got there, made me actually assess my own clinical decisions and how I came to that conclusion”
Future Direction

- Rigorous evaluation
- Potential research project
Summary

- We need to teach Clinical Reasoning to our learners!!

- We need to teach our teachers how to teach Clinical Reasoning to their learners
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References

