

# That'll teach 'em! Integrating behavioural science and adult learning principles into a JMO orientation program

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## Background

Orientation programs for new Junior Medical Officers (JMOs) are notoriously crowded in terms of content, with limits to the amount of information that is able to be retained for direct translation into practice. The pharmacy department of a 660 bed principal referral hospital was invited to contribute to medication-related content within the orientation of 75 Junior Medical Officers (JMOs), with an allocation of one 45 minute didactic lecture, followed one week later by the delivery of small group tutorials during a JMO Skills Day.

## Aim

To develop a strategic approach to delivering medication-related content within a short JMO orientation program, informed by behavioural science and adult-learning principles.

## Methods

The pharmacist responsible for JMO orientation content reviewed literature on adult-learning and decided to focus on three predictive factors for success; practical and immediately relevant content, self-directed application of key learnings and mechanisms for constructive feedback (see Table 1). Recommendations from research into early-career medical officer personalities and targeted behaviour change was integrated into the lecture content (see Figure 2), emphasising that a JMO's investment in conscientious prescribing practices and commitment to developing requisite knowledge of medications can have a lasting impact on career progression. Cultural and system barriers to safe prescribing were discussed, and advice provided on overcoming these barriers with support from the pharmacy service. Each JMO received a 'Safe Prescribing Test' to be attempted overnight and returned the next day. This problem-based learning exercise was designed as a patient admission scenario requiring JMOs to chart medications appropriate to clinical context, with the deliberate inclusion of multiple high-risk medicines issues. Tests were returned during the Skills Day tutorials with extensive written feedback, and learning points were discussed in detail.

Figure 1: Prescribing Test Sample & Feedback Sheet

Table 1: Incorporation of Adult Learning Principles into JMO Orientation

Adult Learning Principle	Incorporation into JMO Orientation
A focus on practical, immediately-relevant information	<ul style="list-style-type: none"> <li>Strong emphasis placed on constructing an appropriate attitude and approach to prescribing medications, rather than delivery of heavy informational or procedural content</li> <li>Problem-based learning scenario designed to prompt self-reflection and highlight challenges that a JMO might encounter from their first day</li> </ul>
Opportunity for self-directed application of key learnings	<ul style="list-style-type: none"> <li>Take-home prescribing exercise provided autonomous yet safe opportunity to put new skills into practice</li> <li>Supporting resources supplied to guide prescribing, with the convening pharmacist also available to answer queries via email</li> </ul>
Mechanism(s) for providing constructive, individualised feedback	<ul style="list-style-type: none"> <li>Prescribing exercises returned with chart annotations and a comprehensive feedback sheet</li> <li>Small group tutorials dedicated to interactive discussion of the 'test' scenario, including implications of poor prescribing decisions and explanation of a best practice approach</li> </ul>

Figure 2: Examples of key messages incorporating behavioural science insights

Career progression as a strong motivational factor for early-career medical professionals

*"Working a little bit harder now (to understand what you are prescribing and why) will soon give you an advantage over those peers who choose to simply rote-learn a process as fast as possible."*

Use of social norms to deconstruct potential stigma around ideal safety behaviours

*"We pharmacists don't worry about the JMOs that call us with questions everyday. We worry about the JMOs that don't ask any questions. Asking for advice simply means you are engaging with medication-related tasks in a careful and constructive way."*

JMO personality type responds best to clear and specific insights, and is sensitive to career hazards

*"Prescribing on 'autopilot mode' or adopting the 'just-tell-me-what-to-write' mentality puts your career in jeopardy. These behaviours will eventually lead you to make a major error, with potentially major implications."*

## Results

All 75 JMOs attempted the Safe Prescribing Test and received individual feedback. On evaluation, 93.4% of JMOs rated the didactic lecture as 'Very Good' or 'Excellent' and 100% of JMOs rated the pharmacy tutorial as 'Very Good' or 'Excellent'. The pharmacy tutorial was also the top-rated session delivered as part of the JMO Skills Day.

Figure 3: Evaluation results for 45min didactic lecture

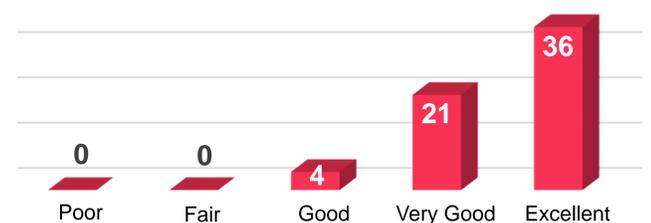
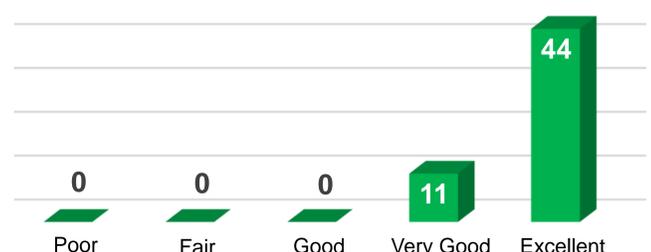


Figure 4: Evaluation results for Skills Day group tutorials



## Conclusion

Principles of behavioural science and adult-learning can be strategically integrated into the delivery of medication-related content during JMO orientation, to great success.



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