

# Virtual on-call: Does a simulated on-call session increase the preparedness of final-year medical students?

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## Introduction

The start of August marks the changeover of doctors, and the time when final year medical students become foundation doctors. Many may feel inexperienced or underprepared for this transition, particularly regarding on-call shifts. Reports have, historically, shown a rise in inpatient mortality during this first week, and this has received much media scrutiny.<sup>1,2</sup> A wide range of schemes and programmes have been introduced to minimise the effect of change-over on patient safety, such as mandatory shadowing periods and e-inductions. More recently, the use of simulated on-call sessions, similar to the one carried out here, have been shown to improve students' preparedness for the step to foundation doctor.<sup>3,4</sup>

## Materials and methods

The session was run with six final year medical students. It ran for approximately 1 hour and started with a briefing. The medical students would then be given their communication devices (Vocera) and their first task as handovers. Students would then be tasked with going to the ward and carrying out the written tasks, including formulating a management plan, interpreting data, prescribing and escalating concerns as necessary to the facilitators. Throughout the session, the facilitators would contact them with further jobs including 'distractors'. The session ended with a mock handover and debrief. The students were asked to complete pre- and post-session questionnaires to identify the session's usefulness.

## Results and discussion

The students were required to rate their confidence in the following domains: clinical decision-making, working under pressure, prescribing, data interpretation, escalating care, confidence, preparedness and SBAR handover. Pre and post results were as follows.

The results show a positive increase in overall scores in all domains (Table 1). The most notable improvement was in students' self-rated scores of confidence and preparedness after the study. This was the main aim of the session and the results show that not only was it useful, but they felt more confident and prepared after the session. Despite the small sample size, the potential for the session's usefulness if provided at a larger scale must be considered.

**Table 1. Comparison of pre- and post-session questionnaire scores after the virtual on call**

	Pre-session (average scores rated from 1–5)	Post-session (average scores rated from 1–5)	Percentage change
Clinical decision-making	2.67	3.33	19.82%
Working under pressure	2.50	3.17	21.14%
Prioritisation	2.67	3.33	19.82%
Escalating	2.83	3.83	26.11%
Prescribing	2.33	3.00	22.33%
Data interpretation	2.83	3.50	19.14%
Confidence	1.33	3.17	58.04%
Preparedness	1.83	3.17	42.27%
SBAR	2.50	3.33	24.92%

## Conclusion

This different approach to using simulated teaching has the potential to make a great difference in students' preparedness for their first on-call, especially in the first week of starting, when mortality has the potential to be high. Moving forward, we plan to expand the programme from not only this hospital but to all the main teaching hospitals in the Aneurin Bevan Health Board by training medical educators to run expanded sessions. With continuous evaluation and auditing of the session we can evaluate on a larger scale how it is helping produce confident and safe doctors. ■

## References

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