

# 'Going Professional': using point-of-view filming to facilitate preparation for practice in final year medical students

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## INTRODUCTION

First person or point-of-view (POV) filming is well established in the social sciences field to facilitate the study and systematic recording of human cultures, known as ethnography.<sup>1</sup> However, few reports exist regarding POV video applications in medical education. Lynch *et al*<sup>2</sup> describe how POV video vignettes filmed in a simulated environment can be used to teach clinical skills to student paramedics,<sup>2</sup> while Leslie *et al* report using recordable video sports glasses to record trainees performing central neuroaxial blockade to serve as an acceptable method of workplace-based assessment.<sup>3</sup> We describe how POV filming was used to deliver an *en masse* ward simulation exercise at the University of Aberdeen for final year medical students as a means of preparing them for life on the wards as a foundation doctor.

## 'GOING PROFESSIONAL': DEVELOPING THE GOPRO WARD ROUND

The General Medical Council (GMC) specify that medical students must have access to technology enhanced and simulation-based learning opportunities, while a recent Best Evidence Medical Education (BEME) systematic review on high-fidelity medical simulations also acknowledged that 'simulation-based medical education is best employed to prepare learners for real patient contact'.<sup>4</sup> Small group ward simulation exercises are employed in a number of institutions to replicate patient contact in a realistic, yet safe learning environment. The theoretical framework that underpins such simulations is that of experiential learning. However, for large cohorts of students, repeated small group simulations are costly in terms of time, staffing and use of clinical areas, often posing timetabling issues. The idea for 'Going Professional' came about by considering how to overcome these challenges and was influenced by the rise of digital media and popularity of first person filming techniques in modern cinema and computer gaming. Our aim was to create an interactive learning event that would foster a readiness to practise by addressing areas of clinical practice that graduates are mostly underprepared for including:

- ▶ safe, legal prescribing
- ▶ clinical reasoning and decision making
- ▶ early management of emergency conditions.<sup>5</sup>

We designed a series of scenarios around the traditional ward round where the POV camera, in this case a GoPro HERO4, was worn on a head strap by

a member of faculty playing the role of the foundation doctor. Additional faculty members portrayed various other roles including patients and members of the clinical team (see figure 1). A workbook and accompanying PowerPoint presentation was developed in conjunction with the scenarios and students encouraged to perform tasks in real time in relation to the videos (see online supplementary video). Topics included:

- ▶ participating in a ward handover
- ▶ documenting a ward round entry
- ▶ writing a discharge letter and prescription
- ▶ interpreting X-rays and ECGs
- ▶ making decisions about treatment and prescribing medication in mock drug charts
- ▶ dealing with interruptions
- ▶ responding to medical emergencies.

Examples of model answers were incorporated into the presentation. The session was delivered to the whole year group by the three faculty members (lead for year 5, clinical teaching fellow and simulation faculty) with pauses for discussion of important issues and reinforcement of salient learning points. The interactive lecture lasted 2 hours.

## BENEFITS AND CHALLENGES

The first-person perspective of the GoPro ward round immerses learners in scenarios enabling final year students to see themselves in their future role as foundation doctors. The session received overwhelmingly positive feedback from the student group in terms of enjoyment, interactivity and utility. Students felt it was a good introduction to in situ ward simulation exercises and prepared them for student assistantships. Many also commented that it gave them newfound insight into the responsibility and pressures that they will experience as foundation doctors. When asked how prepared for practice the students felt, 80% described themselves as 'prepared to some extent', however when ranking individual skills, weighted averages revealed four areas where our final year students felt least confident:

1. decision making
2. emergency clinical situations
3. prescribing and administering drugs
4. prioritisation

This is in keeping with findings of the 2014 report to the GMC on UK graduate preparedness for practice.<sup>5</sup> When asked to list skills that benefited most from 'Going Professional' and ward simulation exercises, prioritisation and decision making were the most prevalent answers.



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**Figure 1** 'Going Professional'—a screenshot showing the first person perspective of the GoPro ward round (all members of faculty in the image have been fully informed and consent to their faces being published in this journal).

As with any high-fidelity simulation exercise, 'Going Professional' required a significant amount of time in planning. However, filming on the simulated ward was completed in a single day and the footage now exists as a permanent resource. Although the session was highly rated in terms of interactivity, we felt that student engagement in the lecture theatre could be improved through integration of an audience response system. This would also allow live feedback to aid development of future sessions.

## CONCLUSIONS

Our experience of the GoPro ward round is that POV filming can facilitate immersive and reproducible educational experiences for large cohorts of students, requiring considerably less time and resources than traditional in situ small group simulation. We propose that the concept of POV filming could be applied to many areas of medical education with emphasis during periods of transition as demonstrated here with final year medical students developing skills required for the workplace as junior doctors. POV filming offers an opportunity to enhance teaching on curriculum items that learners find difficult to access, for example achieving

close-up, purposeful observation of practical procedures, surgical or endoscopic techniques with potential applications in both undergraduate and postgraduate training. Use of digitally enhanced learning spaces remote from the clinical environment could also enable distribution of POV videos, thus conveying a first-person perspective in situations where it is otherwise difficult to guarantee equity of educational experience.

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