

Introduction

Background

The Royal College of General Practitioners (RCGP) curriculum together with General Medical Council's (GMC) generic professional capabilities framework, outlines the clinical, professional and communication skills GP trainees need to develop, integrate and apply in their day-to-day practice.

It is recognised that GP consultations are complex, with GPs managing greater uncertainty and risk, and do not follow a single model.

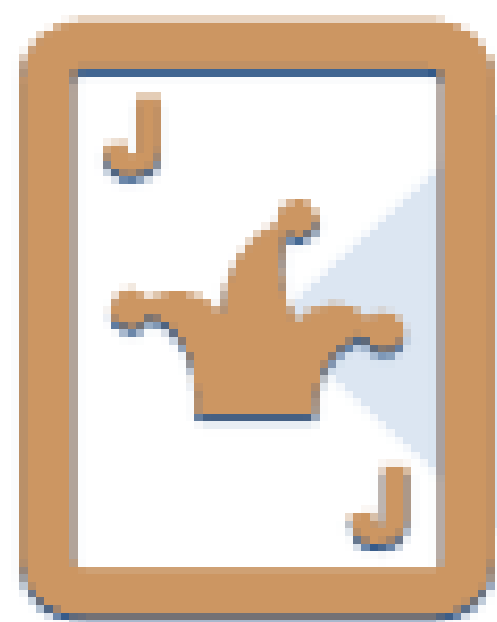
The use of gamification in clinical education has increased in recent times and presents an opportunity to reproduce some of the challenges of being a GP, in a safe learning environment.

Aims

- To develop and evaluate a novel gamified learning workshop for final year GP specialty trainees (GPST3s) in the West of Scotland
- To encourage the development of clinical reasoning skills, knowledge, as well as safe, pragmatic and wise attributes under time pressure.
- To appraise and evaluate the relative merits of different solutions and responses as a group.
- To consider the holistic and value-based approach of urgent care GP consultations.

Methods

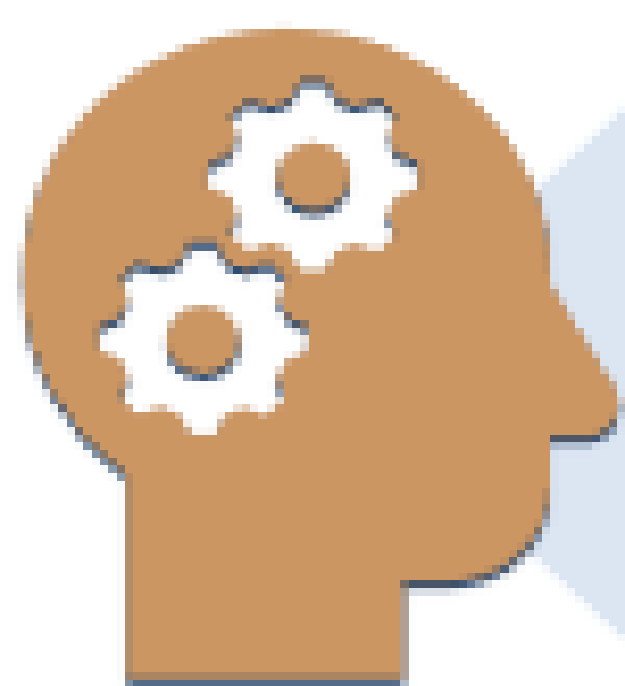
183 GPST3s across 5 health boards in the West of Scotland participated in this 'Duty Dr Dilemma' gamification workshop.



Gamification methodology was used to simulate a "Duty GP" experience in a classroom setting, a safe and supportive environment.

GPSTs play a competitive card game as a team, under time pressure

Each card represents an authentic General Practice scenario. Scenarios are mapped to the RCGP curriculum and GMC Good Medical Practice.



Each team discussed and presented their management plans across three domains:

Data Gathering and Diagnosis; Management (clinical management and medical complexity) and Relating to others.



Answers were facilitated and scored by an experienced GP tutor, based on the quality of their responses across domains

Feedback was provided by the GP tutor and a wider peer group discussion facilitated to encourage others to participate and share ideas and experience and enabled opportunities for benchmarking



GPSTs applied non-technical skills in the context of solving dilemmas as represented on the numbered cards: Problem-solving, time-management, and prioritisation, Teamwork and Leadership

GPSTs reported increased confidence and fun engagement in exploring challenges and complexity in a positive learning environment

We undertook evaluation of this new workshop using a mixed approach of qualitative and quantitative methods were used, including an online questionnaire and Likert Scales. Thematic analysis was carried out on written and verbal feedback from 143 GPST3s.

Outcomes

Results

Our analysis suggested that the intervention was viewed as a positive educational experience for all participants, and that this teaching approach broadened the learning experience for GP trainees.

Gamification of this case-based learning workshop provided a fun and engaging method for contextualising general practice learning to the reality of managing risk, complexity and uncertainty, under time pressure as a Duty Doctor.

The following themes emerged from **GPST Feedback**:



GPSTs enjoyed the interactivity, the gamified format, competition, and opportunity for peer-to-peer discussion the session provided. Gamification provided a fun and engaging method for contextualising urgent GP care learning, motivating GPSTs to participate and share ideas and experience in a safe and supportive learning environment



GPSTs reported that the workshop reinforced knowledge on clinical and professionalism topics and triggered critical reflection on their daily practice, as well as identifying areas for personal development to discuss further with their trainer and training practice



GPSTs were exposed to the uncertainty and complexity of authentic general practice and reported increased confidence in managing a broad range of scenarios that can challenge a GP. They described the benefits of benchmarking and feeling more confident in their own approach when sharing with peers



GPSTs valued being able to discuss and reflect on a variety of 'dilemmas' with their peers and receive feedback and support from a GP tutor, which they reported enhanced their knowledge, problem-solving and decision-making skills. GPSTs enjoyed socialisation aspect of the workshop format and described feeling of community and shared purpose and learning.

Conclusions

Using gamification, we delivered an interactive learning experience with innovative content delivery, integrating fun and excitement in the learning process and provided a safe space for collaborative learning, which broadened the training experience.

Feedback demonstrated the use of this educational game provided an authentic context and a promising activity to promote clinical reasoning, risk management and problem solving.

Developing the use of gamification in the context of primary care training has great potential a compassionate, skilled and sustainable workforce of the future.

References

- Royal College of General Practitioners. [Fit for the Future – a vision for General Practice](#) (PDF file, 1.1 MB) London: RCGP, 2019.
- General Medical Council. [Generic Professional Capabilities Framework](#) (PDF file) Manchester: General Medical Council, 2017
- Lumsden, L. Philip Cannon, P. & Wass, V. (2023) Challenge GP: using gamification to bring the reality and uncertainty of a duty doctor's surgery to early year medical students, *Education for Primary Care*, 34:2, 103-108, DOI: 10.1080/14739879.2023.2190936
- Elie A. Akl, Richard W. Pretorius, Kay Sackett, W. Scott Erdley, Paranthaman S. Bhoopathi, Ziad Alfarah & Holger J. Schünemann (2010) The effect of educational games on medical students' learning outcomes: A systematic review: *BEME Guide No 14, Medical Teacher*, 32:1, 16-27, DOI: 10.3109/01421590903473969
- Gómez-Ejerique C., López-Cantos F. (2019). Application of innovative teaching-learning methodologies in the classroom. Coaching, flipped-classroom and gamification. A case study of success. *Multidisciplinary Journal for Education, Social and Technological Sciences*, 6(1), 46-70. 10.4995/muse.2019.9959 - DOI