

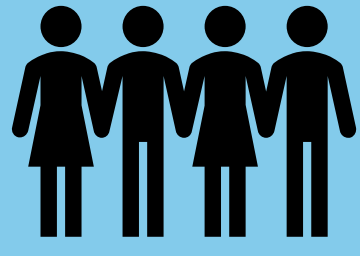
Resident Doctors’ Perceptions of the Educational Value of Virtual Fracture Clinics (VFC).

Mr. Paul Cotter Fonseca, Mr. Prashant Awasthi, Prof. Bhaljinder Dhinsa
East Kent Hospital University NHS Foundation Trust

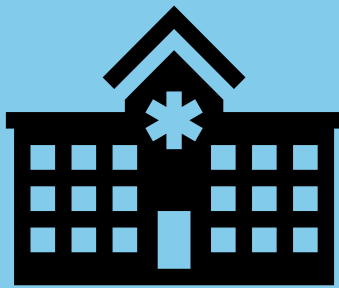
Introduction

- Since 2011, VFC have been used by orthopaedic departments for consultant led triage of minor injuries attending ED or UTC.
- VFC format, attendance, and frequency varies from trust to trust.
- The aim of this study is to explore one trust resident doctors’ perceptions of the educational value of the Virtual Fracture Clinic (VFC) and identifies the factors that contribute to its effectiveness as an educational tool.

Methods



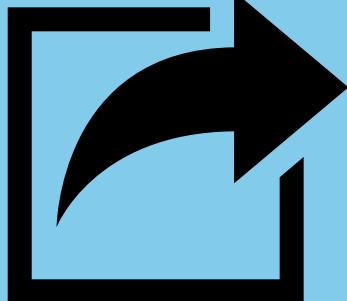
Google forms questionnaire created and iteratively improved based on feedback of 4 doctor focus group.



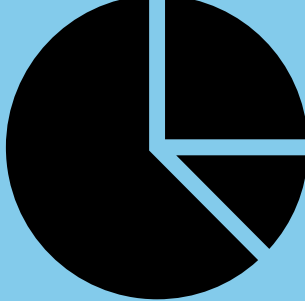
Final draft of questionnaire circulated amongst orthopaedic SHOs and Specialty Trainees in one Trust (East Kent Hospital University NHS Foundation Trust)



Reminder email sent to maximize response rate.

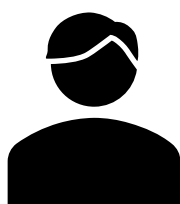


Responses were measured using a 5-point Likert scale, and free text answers which underwent thematic analysis as per Bran and Clarke’s six-phase thematic analysis framework to identify themes.

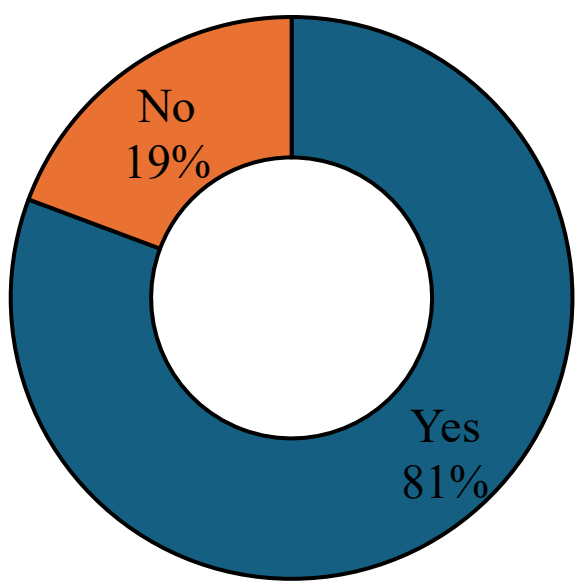


Questionnaire responses were collected using Google Forms software and data analysed using Microsoft Excel.

Results

 26 resident doctors completed questionnaire.
(13 SHO + 13 Registrars)

In your role, do you have access to observe/participate in your departments VFC? (n=26)



In your opinion, which format of VFC would be most educationally valuable? (N=26)

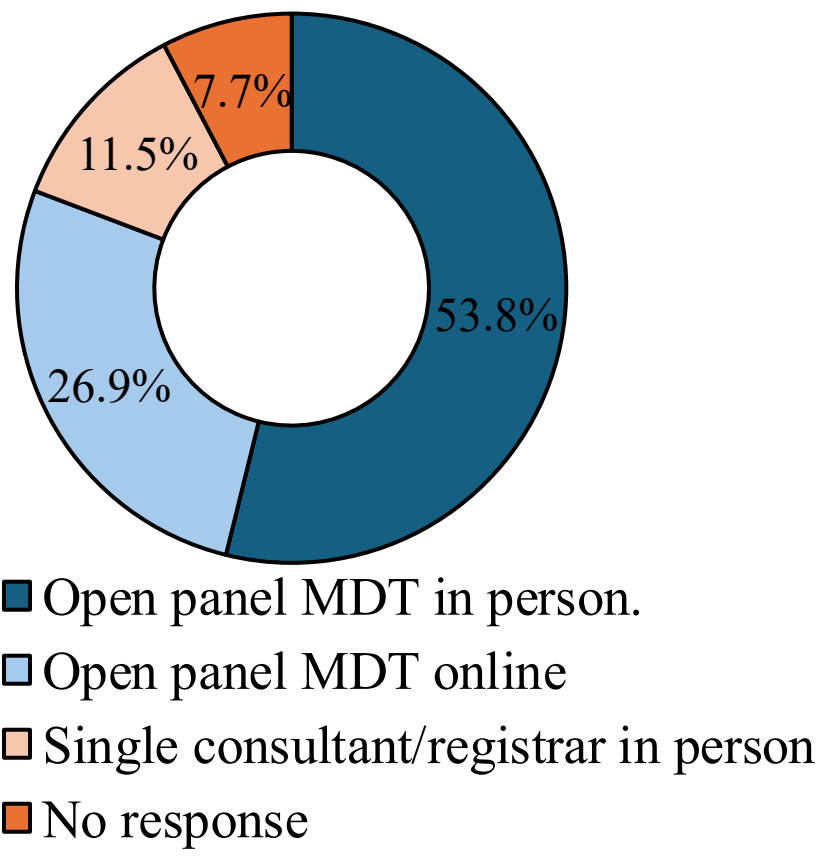


Figure 1 Divergent stacked bar chart comparing REG and SHO Likert scale responses

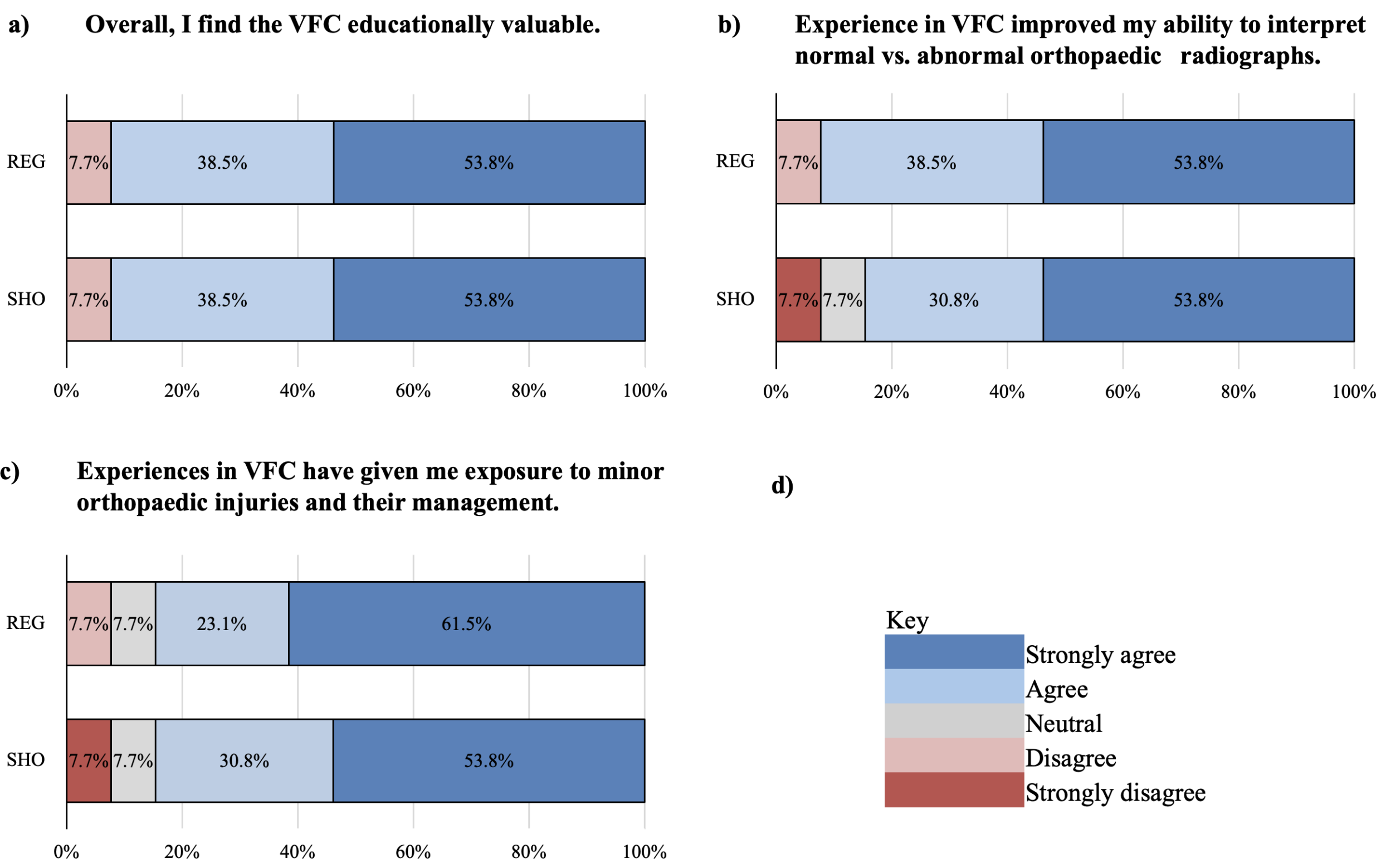


TABLE 1 Themes Derived Through Thematic Analysis of Free-Text Responses

	What aspects of the VFC have positive educational impact?	What aspects of the VFC have negative educational impact?	What would you improve to optimise the educational value of the VFC?
Themes	- Discussion on radiology interpretation - Discussion on conservative management of fractures.	- Poor referral quality - Time constraint	- Interactivity - Regular allocation
	- Decision making rationale - Case based discussion format.	Efficiency prioritised over teaching	- MDT approach - Consultant oversight

Discussion

- First study exploring resident doctors' perceptions of the educational value of the VFC.
- Overall, registrars and SHOs alike found the VFC to be overall educationally valuable.
- VFC is felt to be useful in developing radiographic interpretation, and in furthering experience of minor orthopaedic injuries.
- This study is limited by inclusion of a single centre with limited total numbers. It also relies on qualitative and thematic analysis to capture RDs perceptions on VFC.
- Next steps will be to approach trainee associations to develop and distribute the questionnaire at a regional/national level and increase sample size.

Conclusion

Based on our questionnaire findings, we recommend the following to optimize the educational value of VFCs:

- Open-panel, multi-grade, and multi-disciplinary VFC meetings
- Consultant-led sessions
- Interactive, case-based discussion format
- Regular, timetabled resident doctor allocations to facilitate attendance

References

- Vardy J, Jenkins PJ, Clark K, Chekroud M, Begbie K, Anthony I, et al. Effect of a redesigned fracture management pathway and ‘virtual’ fracture clinic on ED performance. *BMJ Open*. 2014 June 13;4(6):e005282.
- Khan SA, Asokan A, Handford C, Logan P, Moores T. How useful are virtual fracture clinics? *Bone Jt Open*. 1(11):683–90.
- Dey S, Mohammed R, Gadde R, Abraham A, Trivedi V, Unnithan A. Clinical efficacy of the virtual fracture clinic: analysis of 17,269 referrals by type of injury. *Ann R Coll Surg Engl*. 2023 May;105(5):441–5.
- McAuliffe O, Lami M, Lami T. The impact of virtual fracture clinics on medical education – a medical student perspective. *Med Educ Online*. 2016 Mar 15;21:10.3402/meo.v21.30950.
- Haider Z, Hunter A. Orthopedic Trainees’ Perceptions of the Educational Value of Daily Trauma Meetings. *Journal of Surgical Education*. 2020 July 1;77(4):991–8.
- Braun V, Clarke V. Using thematic analysis in psychology. *Qualitative Research in Psychology*. 2006 Jan 1;3(2):77–101.
- Ahmed SK, Mohammed RA, Nashwan AJ, Ibrahim RH, Abdalla AQ, M. Ameen BM, et al. Using thematic analysis in qualitative research. *Journal of Medicine, Surgery, and Public Health*. 2025 Aug 1;6:100198.
- Dey S, Mohammed R, Gadde R, Abraham A, Trivedi V, Unnithan A. Clinical efficacy of the virtual fracture clinic: analysis of 17,269 referrals by type of injury. *annals*. 2023 May;105(5):441–5.