

What is needed in clinical practice to offer virtual reality as a pain management option for people living with advanced cancer?

Nicola White¹, Lorna Leaston², Caitlin Cahil³, Olivia Lavery⁴, Claire Spurling⁵, Sarah Combes⁶, Mark Taubert³, Ami Nwosu⁴, Sarah Yardley¹, Victoria Vickerstaff⁷, Ollie Minton⁵

1. Marie Curie Palliative Care Research Department, UCL; 2. PPI Co-applicant; 3. Velindre University NHS Trust; 4. Marie Curie Hospice, Liverpool; 5. University Hospitals Sussex NHS Foundation Trust; 6. St Christophers Hospice, London; 7. Queen Mary's University London.

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1. BACKGROUND

Many people living with advanced cancer experience pain, which is often poorly controlled.¹

Virtual Reality is a non-drug alternative that could help manage pain.²

Virtual reality (VR) has rapidly advanced over the last twenty years. Its role in pain management has been explored, but there are no guidelines about how to implement this as part of routine practice.

2. AIM

To develop guidelines that describe the inputs, processes, and outputs required to implement VR as a pain management option for people living with advanced cancer.



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3. METHOD



PHASE 1

January 2025 – May 2025



Interviews with people living with advanced cancer, experiencing any pain (Pain score >0) (n=37)

PHASE 2

May 2025 – Sept 2025



Focus groups with staff at each site (n= 37)

PHASE 3

Oct 2025 – Nov 2025



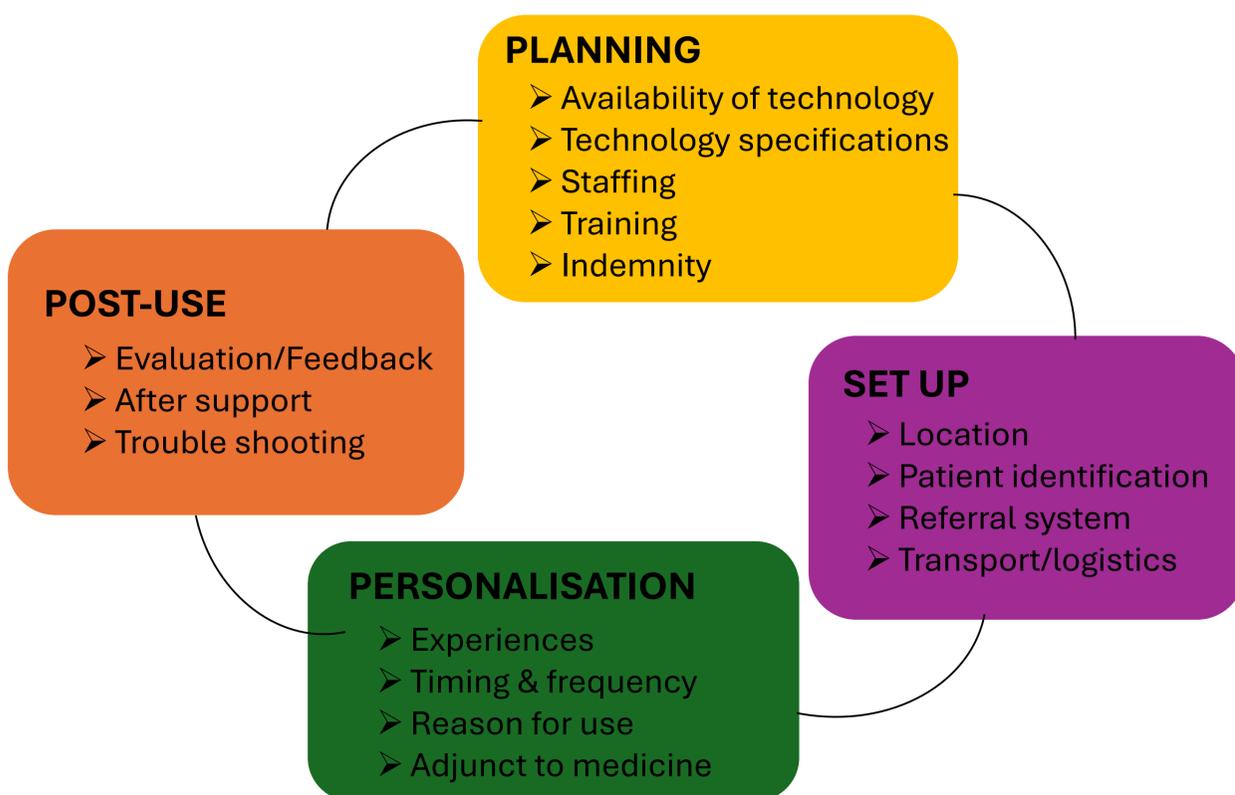
User-testing (at two sites) for up to 8 weeks to refine the manual



GUIDANCE MANUAL

4. RESULTS

The guidance document describes a cyclical process from planning to post-use.



REPORTED OUTPUTS

- Less pain
- Physiological improvements
- Psychological improvements
- Facilitates conversation with the clinical team
- Connection with family

OUTCOME

- VR contributes to pain relief through a combination of pharmacological and non-pharmacological management

IMPACT

- Holistic and better pain relief for people living with cancer

5. CONCLUSION

We have developed a theory of change model and guidance that could help sites that are interested in offering VR as a pain management option. The offering of VR could help to provide a more holistic approach to pain management for those living with advanced cancer.

6. REFERENCES

1. Greco MT, Roberto A, Corli O, et al. Quality of cancer pain management: an update of a systematic review of undertreatment of patients with cancer. *J Clin Oncol.* 2014;32(36):4149-54
2. Austin PD, Siddall PJ, Lovell MR. Feasibility and acceptability of virtual reality for cancer pain in people receiving palliative care: a randomised cross-over study. *Supportive Care in Cancer.* 2022;30(5):3995-4005.