**Conclusions.** Database screening tools are the most commonly used digital tool for recruitment, with clear success criteria and certainty about effectiveness. Our detailed definition of what constitutes a digital tool, with examples, will inform the NIHR research community about choices and help them identify potential tools to support recruitment and retention.

## VP55 Trial Recruitment & Retention Using Digital Tools: A Qualitative Study

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**Introduction.** Recruitment of participants and their retention in randomized controlled trials (RCTs) is key for research efficiency. However, for many trials, recruiting and retaining participants meeting the eligible criteria is extremely challenging. Digital tools are increasingly being used to identify, recruit and retain participants. While these tools are being used, there is a lack of quality evidence to determine their value in trial recruitment.

**Methods.** The aim of the main study was to identify the benefits and characteristics of innovative digital recruitment and retention tools for more efficient conduct of RCTs. Here we report on the qualitative data collected on the characteristics of digital tools required by trialists, research participants, primary care staff, research funders and Clinical Trials Units (CTUs) to judge them useful. A purposive sampling strategy was used to identify 16 participants from five stakeholder groups. A theoretical framework was informed from results of a survey with UKCRC registered CTUs. Semi-structured interviews were conducted and analysed using an inductive approach. A content and thematic analysis was used to explore the stakeholder's viewpoint and the value of digital tools.

**Results.** The content analysis revealed that 'barriers / challenges ' and 'awareness of evidence' were the most commonly discussed areas. Three key emergent themes were present across all groups: 'security and legitimacy of information', 'inclusivity', and 'avail-ability of human interaction'. Other themes focused on the engagement of stakeholders in their use and adoption of digital technology to enhance the recruitment/retention process. We also noted some interesting similarities and differences between practitioner and participant groups.

**Conclusions.** The key emergent themes clearly demonstrate the use of digital technology in the recruitment and retention of participants in trials. The challenge, however, is using these existing tools without sufficient evidence to support the usefulness compared to traditional techniques. This raises important questions around the potential value for future research.

## VP57 Using Capital Bids For Hospital-Based Health Technology Assessment

Jamie Erskine (jamie.erskine@kcl.ac.uk) and Anastasia Chalkidou **Introduction.** The Evelina London Children's Hospital (ELCH) is undergoing a period of growth, including a new building planned to be completed within the next five years. Due to limited space and ambitions to be a state-of-the-art hospital, Horizon Scanning (HS) was considered important to 'future-proof' new facilities. As the aim of HS is to identify signals of coming change, 'scanning' the previous five years' trends may be beneficial to an iterative HS methodology. Thus, it was thought that capital bids could provide a range of useful information required to make procurement decisions.

**Methods.** King's Technology Evaluation Centre (KiTEC) provided hospital-based HTA and HS support for the expansion of a London-based paediatric hospital. KiTEC focused on imaging technology due to its large spatial requirements and high-costs and assessed all capital bids made over the previous five years. A capital bidding system is used within GSTT to allocate funding for medical equipment that costs more than GBP5000 (USD 6540.70). Information was collated for all imaging equipment bid for over the previous five years and assessed for trends in imaging modalities and purchase costs.

**Results.** A total of 135 bids were made in the period 2013-2018, eight of which were by ECLH. Bids for ultrasound equipment were most common and rose over the period. Bids for CT scanners also rose, while bids for MRI scanners and x-ray technology were consistent and bids for fluoroscopy fell. The total cost of imaging bids over the interval rose steadily from GBP5.4 million to GBP6.9 million.

**Conclusions.** Due to the lifespan of imaging technology, some trends may not emerge within a five year window. While some interesting findings were made, a ten to fifteen year period may require to be scanned for a robust analysis. This methodology is best applied in an iterative fashion along with standard HS techniques.

## VP59 The MedicineWise App: Extended Applications Beyond Medicine Management

Kitty Yu and Jonathan Dartnell (jdartnell@nps.org.au)

**Introduction.** The MedicineWise app is a free consumer health and medicine management app developed by NPS MedicineWise. With 107,000+ downloads and 78,000+ active sessions per month, the MedicineWise app's core functions include: keeping track current medicines lists, medicine dose reminders and recording health conditions, allergies, test results and other health information. Recent enhancements also enabled the app to deliver featured health- and medicine-related content to users based on their medicineWise app's capabilities by personalizing to users' needs and combining with health professional interventions when needed, to encourage better delivery of health and medicines information and improve medication adherence and health outcomes.

**Methods.** A number of personalized medicines management service offerings were created by combining a technology solution using the MedicineWise app (including the app's core functions as well as added targeted content delivery capability) with a humanistic solution (a health professional-mediated phone-based