

# VERA Virtual Engagement Rehabilitation Assistant (VERA): feasibility, usability and acceptability of a novel digital health technology in complex rehabilitation

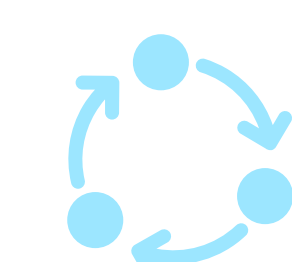
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## BACKGROUND & AIM

- The Virtual Engagement Rehabilitation Assistant (VERA) is a novel, app-based **digital health technology** to **increase engagement in rehabilitation**
- VERA was developed through **co-design** with service-users and clinicians
- Study aim: to evaluate VERA's feasibility, usability, and acceptability on a complex rehabilitation ward.



## METHODS

- Purposively sampled service-users on a UK NHS Complex Rehabilitation Unit used VERA in their rehabilitation
- Engagement data, demographic information and health-related measures were collected
- Interviews with service-users and focus groups with staff, were undertaken and analysed using the Non-adoption, Abandonment, Scale-up, Spread and Sustainability (NASSS) framework<sup>1</sup>.



## FINDINGS

### OVERVIEW

- 13 service-users and 9 staff participated in the study.
- Physiotherapy, speech & language therapy and occupational therapy staff used VERA to provide resources to 12 service-users.
- Staff want to keep using VERA.
- 14 videos and 39 pdfs were uploaded.
- 12 participants received a VERA and 11 were able to access the resources.

### 7. EMBEDDING

There is scope for adaptation including a community-based version of VERA

### 6. WIDER CONTEXT

Potential benefits of VERA being used at home (weekends) and following discharge to community

### 5. ORGANISATION

Staff training was helpful, but more time needed

'Expert' staff were on hand if assistance was needed

Changes to routines needed to use VERA to full potential

### 1. CONDITION

VERA needs to be accessible to people with different communication and cognitive needs

### 2. TECHNOLOGY

VERA was easy to use

The key features need to work smoothly and accurately every time

When developing technology, the design brief has to be very clear

There is potential for more functions to be built into VERA

### 3. VALUE PROPOSITION

It provided an opportunity to:

- 'Break up the day'
- Do exercises and meet goals
- Collate documentation in one place

Being able to plan the day using the appointment function was important to patients

### 4. ADOPTERS (SERVICE-USERS)

Facilitators to use were:

- Electronic reminders
- Spare time e.g. weekends

Reasons for not using:

- Fatigue
- Using paper or memory instead
- Limited knowledge of digital technology (knowledge & confidence)

Initial findings using 7 NASSS Framework Domains<sup>1</sup>



## CONCLUSION

VERA was both feasible and acceptable to staff and patients on a complex rehabilitation unit. Areas for development were identified to improve usability.

- Ensure staff are equipped to use all functions within VERA
- Enhance specific aspects of VERA (goals and appointments) to ensure maximum utility
- Develop a community-based version of VERA

# VERA is feasible, acceptable and engages therapy staff and service-users



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## Reference:

1. Greenhalgh T, Wherton J, Papoutsi C, Lynch J, Hughes G, A'Court C, Hinder S, Fahy N, Procter R, Shaw S. *Beyond Adoption: A New Framework for Theorizing and Evaluating Nonadoption, Abandonment, and Challenges to the Scale-Up, Spread, and Sustainability of Health and Care Technologies.* J Med Internet Res. 2017 Nov 1;19(11):e367. doi: 10.2196/jmir.8775.