

Olberon
VacudermTM
Optimising venous access



Results of Usability Study

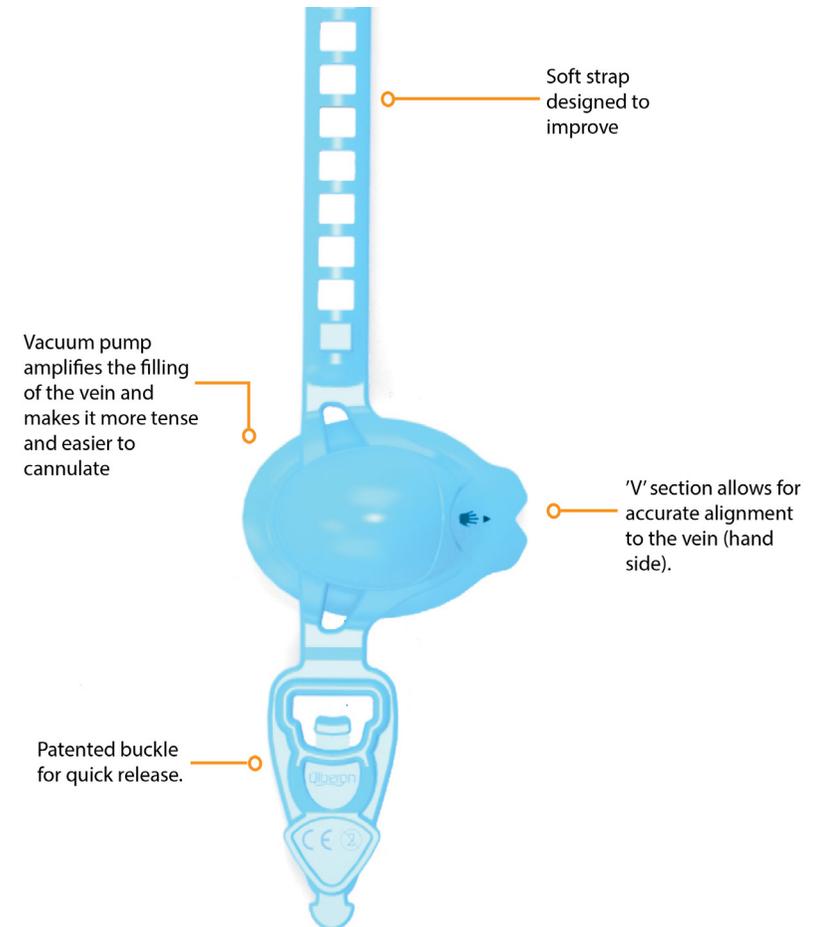
Queen Elizabeth Hospital Birmingham
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Study Overview

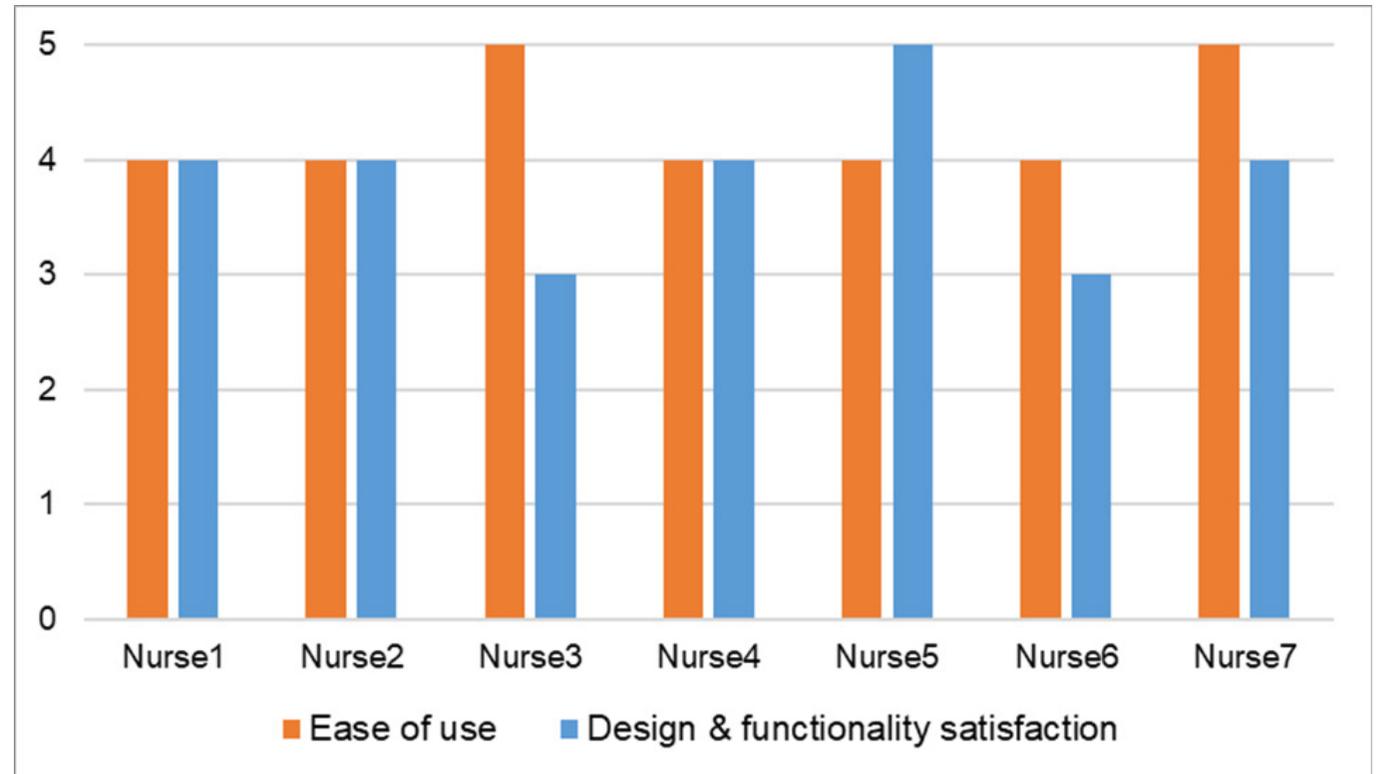
- MD-TEC ran a formative usability study for Vacuderm with 7 nurses (Queen Elizabeth Hospital, Birmingham) and 5 healthy volunteers (as “patients”)
- The aim of the usability study was to assess the acceptability, ease of use and training needs of Vacuderm for its introduction in the clinical environment
- Each nurse was exposed to a “worst” and “best” case scenario in terms of vein visibility / accessibility i.e. 2 “patients”
- The study took 30 minutes per participant, including a brief training session (which was led by a company employee), hands-on session, feedback questionnaire and semi-structured interview (led by the MD-TEC team)

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Study Results

- Vacuderm ease of use ranking: average 4.29 out of 5.00
- Participant satisfaction with Vacuderm design and functionality required as a tourniquet: average 3.86 out of 5.00 (1-minimum, 3-neutral, 5-maximum)



Study Observations

- The participants successfully interacted with Vacuderm and applied it on the healthy volunteers
- Only 1 in 7 participants (who had the least amount of experience) showed limited interest in Vacuderm
- 4 out of 7 nurses were reluctant to apply the Vacuderm tourniquet tightly enough as they were concerned about hurting / “pinching” patient’s skin

Olberon Comment

The study has reaffirmed the importance of initial training when first using the Vacuderm and the significance of practicing on themselves or colleagues to gain complete confidence.

The Vacuderm has been designed to be comfortable on application and the material allows for tightening, to ensure maximum tourniquet effect. Practising on each other before using it on a patient, will allow the nurses to gain confidence in how comfortable the Vacuderm is for the patient when tightened fully.



Study Feedback

- The use of single-use tourniquets in hospitals is problematic due to patient discomfort (as pinching), reason for which some nurses have “their own” textile strap-based tourniquet. The nurses reported that Vacuderm seems to have addressed this problem
- The main advantage of Vacuderm is its adherence to patient skin i.e. it does not slip once fitted
- Based on current practices, the training session should involve nurses practicing on themselves or colleagues in order to have a better appreciation of Vacuderm

Olberon Comment

It is reassuring to gain feedback which is positive towards the Vacuderm when we have been made aware of the negative feelings towards existing single-use tourniquets currently being implemented within the NHS.



Study Conclusion

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- This presentation includes preliminary results and a full results analysis is in progress
- 86% (6 out of 7) nurses provided a good feedback on Vacuderm design and functionality
- Overall, Vacuderm is easy to use, but the product would require careful introduction in clinical environment due to limited performance and interest in the currently available single-use tourniquets

