Translation and validation of the Dutch System Usability Scale

No registrations found.

Ethical review	Positive opinion
Status	Pending
Health condition type	-
Study type	Observational non invasive

Summary

ID

NL-OMON27796

Source
Nationaal Trial Register

Brief title
Translation and validation of the Dutch System Usability Scale

Health condition

Not relevant

Sponsors and support

Primary sponsor: Sint Maartenskliniek
Source(s) of monetary or material Support: Interreg (2 Seas Mers Zeeën)

Intervention

Outcome measures

Primary outcome

The main study parameter is the construct validity of the D-SUS according to the definition of the COSMIN Criteria. Correlations between D-SUS, D-QUEST, and the general usability question (‘Overall, how would you rate the application on a scale from 0 to 10?’) will be assessed by the Spearman Correlation Coefficient (level of significance $p<0.05$, correlation coefficient>0.8) as a measure of construct validity.

Secondary outcome

The secondary study parameter is test-retest reliability of the D-SUS. This will be determined by Blant-Altman plots, Intraclass Correlation Coefficient (ICC) and percentage of agreement between the results of the first and second moment of filling out the D-SUS, D-QUEST, and the general usability question.

Study description

Background summary

Rationale: Development of technology occurs at fast speed and new healthcare innovations find their way to modern hospitals and rehabilitation centers. The likeliness that these new innovations will actually be used in clinical practice increases when the intended users are positive about the use of the developed innovation. Therefore, assessment of the system usability is important both during and after development to improve and optimize the design, development processes, and implementation of such innovations. The System Usability Scale (SUS) is the international standard for measuring usability and can quickly be filled out within both the developing and evaluation phase for a certain (healthcare) innovation. However, the SUS is not yet available in Dutch. In order to use the SUS in rehabilitation care in the Netherlands, it is thus recommended to develop a Dutch version of the SUS.
Objective: The primary aim of this research is to develop a Dutch version of the SUS (D-SUS), and to determine the construct validity and test-retest reliability of the D-SUS in rehabilitation care.
Study design: Validity and reliability study.
Study population: Adults (18 years and older) who are familiar with rehabilitation innovations and understand the Dutch language.
Intervention: Participants are asked to fill out two questionnaires (D-SUS and D-QUEST) and a general usability question twice.
Main study parameters/endpoints: The main study parameter is the construct validity and test-retest reliability of the D-SUS.
Nature and extent of the burden and risks associated with participation, benefit and group relatedness: We will only include patients and therapist who already use the rehabilitation innovation in clinical practice. The questionnaires address general usability of these devices. Therefore, no risks are identified and no burden is associated with participation. Patients do not directly benefit from participating but participation contributes to the availability of a reliable, validated Dutch questionnaire regarding usability of future rehabilitation innovations.

Study objective

We hypothesize that the Dutch version of the System Usability Scale is a valid and reliable tool to measure usability of rehabilitation technology.

Study design

Baseline (T0) and 2-3 weeks after the baseline measurement (T1)

Contacts

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Eligibility criteria

Inclusion criteria

- Adult patient or therapist (18 years or older).
- Able to understand the Dutch language.
- Experience (for at least 4 different moments in time) with either walking assistance devices (ankle-foot orthosis, Rewalk), eHealth applications (Dr. Bart App) or training devices (GRAIL, C-Mill, Zero-G, Lokomat).

Exclusion criteria

None

Study design

Design

Study type: Observational non invasive

Intervention model:	Other
Allocation:	Non controlled trial
Masking:	Open (masking not used)
Control:	N/A , unknown

Recruitment

NL

Recruitment status:	Pending
Start date (anticipated):	10-01-2021
Enrollment:	60
Type:	Anticipated

IPD sharing statement

Plan to share IPD: Undecided

Ethics review

Positive opinion

Date:	05-01-2021
Application type:	First submission

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

Register	ID
NTR-new	NL9169

Register	ID
Other	CMO regio Arnhem-Nijmegen : 2020-6848

Study results