

Uncovering Usability Issues Using the **Think Aloud Method**:

A Mobile e-Health Solution to Support the Care of Older Adult Stroke Survivors with Multiple Chronic Conditions in Home Care



USABILITY STUDY OBJECTIVES

To test the acceptability and usability of a mobile health solution to support an integrated team approach to community-based stroke rehabilitation in home care for older stroke survivors with multiple chronic conditions.

Usability testing can:

- ✓ Identify technical bugs in MyST
- ✓ Identify areas that require MyST revisions
- ✓ Identify areas to enhance MyST training
- ✓ Obtain provider, care coordinator and patient perceptions of the usability of MyST

BACKGROUND

Challenges exist in providing community-based stroke rehabilitation for older adult stroke survivors.



DEVELOPMENT

The Aging, Community and Health Research Unit (ACHRU) developed a mHealth solution, My Stroke Team (MyST), to support an integrated team approach to stroke rehabilitation in home care for older stroke survivors with multiple chronic conditions.



2013-2014

Focus Groups with end users informed the design of MyST

SUMMER 2015

Usability Study to test the usability and acceptability of the mHealth Solution My Stroke Team (MyST) using the Think Aloud Method

WINTER 2015

A Pilot Feasibility Study

- to explore the feasibility and acceptability of implementing MyST
- to explore its effects on health-related quality of life in older adult stroke survivors

'THINK ALOUD' METHODOLOGY

Participants were potential end users of MyST including: nurses, occupational therapists, physiotherapists, home care coordinators, personal support workers currently working in home care, as well as a stroke survivor (n=14).

Activities included:

- A MyST training session including an overview of the intervention that MyST supports (monthly case conferences with the team; home visits by nurses, rehabilitation professionals, home care coordinators and personal support workers; monthly full team teleconferences).
- 'Think Aloud' testing with individuals a few weeks after training. Participants' voices- thinking aloud- and cursor movements were recorded as they completed a list of common tasks in MyST.

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'THINK ALOUD' RESULTS

SIX BUGS



21 navigation issues

18 suggestions to enhance training

21 suggestions for future versions of MyST

40 positive comments about the usability of MyST



Conclusion:

- ✓ The think aloud revealed that the mHealth application is generally usable by providers working in home care and pointed to a number of areas for improvements.
- ✓ Think aloud testing with end users in the field was extremely valuable to conduct before launching a mHealth intervention as it exposes usability problems.

PARTNERS

Canadian Association of Occupational Therapy
Canadian Centre for Activity and Aging
Canadian Institutes of Health Research Canadian Stroke Network

Hamilton Niagara Haldimand Brant Community Care Access Centre
Hamilton Niagara Haldimand Brant Local Health Integration Network
Heart and Stroke Foundation of Ontario

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Seniors' Health Knowledge Network
Toronto Central Community Care Access Centre

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