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.



LIMITED USE OF **BEST PRACTICES BY PROVIDERS**



LIMITED CLIENT/CAREGIVER **INVOLVEMENT IN HEALTHCARE DECISION MAKING**



COLLABORATION

DIFFICULTY NAVIGATING COMMUNITY SUPPORTS



FRAGMENTED COMMUNICATION

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.



RESOURCE LINKS TO COMMUNITY-BASED PROGRAMS AND SERVICES



POINT OF CARE ACCESS TO **BEST PRACTICES**



REAL TIME COMMUNICATION



ALERTS TO THE CIRCLE OF CARE



INCLUSIVE OF CLIENT/ FAMILY CAREGIVERS

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

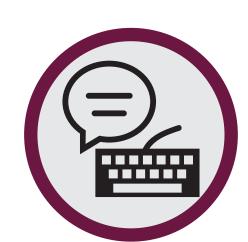
'THINK ALOUD' METHODOLOGY

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.

Funders:

This work is part of a program of research (Aging, Community and Health Research Unit) supported by the Canadian Institutes of Health Research Catalyst Grant: eHealth Innovations (Grant #134162) and the Ontario Ministry of Health and Long-Term Care Health System Research Fund Program (Grant #06669)

'THINK ALOUD' RESULTS



navigation issues



suggestions to enhance training



suggestions for future versions of MyST



positive comments about the usability of

think out loud.

Don't forget to



I am confused when to use a timeline item, a task, and an alert.

> Odd that you cannot see additional details: I would like a summary of concerns in the "details" button.



so obvious, awesome!

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

Ministry of Health and Long-Term Care Mohawk College Applied Research Centre and iDeaWORKS, Mohawk College of Applied Arts & Technology

Ontario Association of Community Care Access Centres

Ontario Home Care Association Registered Nurses' Association of Ontario Saint Elizabeth Health Care

Seniors' Health Knowledge Network Toronto Central Community Care Access Centre

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