INTRODUCTION
Stroke is one of the leading causes of death and acquired adult disability in most countries (Warlow, 2008). Following a stroke, individuals require rehabilitation that is appropriate for their specific needs to reduce disability and aid in their recovery (Budden, 2008). The benefits of engaging the patient in the home program include: care planning in their own environment, increased active role of the family and patient in the recovery process, and potentially enhance autonomy (Lafferty, 1996). Compliance rates with home programs range from 30-55% and decrease over time (Shuijs & Knibbe, 1991). More research is needed to understand patient compliance in a self-directed rehabilitation home program (Shuijs & Knibbe, 1991).

Mobile technology is electronic equipment that is portable and allows a wide variety of tasks to be performed using wireless internet networks (Shong, Nah, & Sau, 2003). The use of technology may improve efficiency and aid to provide a quality service to the patient (Standing, 2008). A number of trends suggest that mobile technology adoption in healthcare should increase rapidly due to the reduced costs and telecommunication features (Standing, 2008). Mobile technology may be a potentially powerful tool to then facilitate rehabilitation at home.

Can the use of mobile technology increase compliance of a home program? As a first step to answer this question, we created a survey to better understand what patients are doing at home and how mobile technology adoption in healthcare should increase rapidly due to the reduced costs and telecommunication features (Standing, 2008).

STUDY AIM
To establish content and face validity for a survey exploring the attitudes and usage of mobile technology and home exercise programs in individuals with stroke living in the community.

METHODOLOGY
An initial questionnaire addressing attitudes, usage of home exercise programs and mobile technology for individuals with stroke was already drafted.

We assessed content and face validity of the questionnaire by gathering feedback from experts in the field of stroke rehabilitation.

The experts completed an online assessment form developed through Qualtrics of our initial questionnaire.

Experts provided demographic details about their professional background, rated individual survey questions on an ordinal scale for relevance to topic, and provided optional comments/feedback on individual questions.

Survey contained 29 questions in total and was organized into 4 categories: 1. Demographics, 2. Functional Mobility 3. Home Program, and 4. Mobile Technology.

Data analysis: Expert ratings of individual items were summed and calculated for agreement rate to determine face and content validity.

Criteria for content/face validity: agreement rates >50% for items scored mostly or very relevant.

Criteria for agreement rate to determine content validity: agreement rates >50% for items scored mostly or very relevant.

Survey refinement: existing questions were refined based on expert comments and consensus of research group.

RESULTS

N = 17
Average amount work in neuro-rehab = 16.35 years

PARTICIPANTS:

Common expert comments included consistency in terminology, removing misleading options, and rephrasing questions to layman's terms.

TABLE 1

DISCUSSION

• We established content and face validity of our survey based on high scores on experts ratings of relevance

• Content validity—for 16 out of 18 questions, experts stated that the item was mostly or very relevant at a rate of 96.3%.

• Face validity—100% of experts stated that the 2 items were mostly or very relevant.

• With feedback obtained from experts who work in the stroke rehabilitation field, we were able to improve the overall questionnaire: determine which questions were relevant to the purpose of the survey and which were not.

• Out of the 29 questions, 26 were maintained, 3 were omitted 2 were reordered, and 16 were refined.

Future Directions

• The next step, is the administration of the questionnaire to individuals with stroke living in the community.

• Ultimately, we hope that the survey data collected and analyzed from the stroke population will contribute to the development of future treatment approaches addressing self-directed rehabilitation within the home setting.

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REFERENCES

See attached document