**Using Delphi methodology in the development of a new patient reported outcome measure for stroke survivors with visual impairment**

To ascertain what items stroke survivors and stroke care professionals think are important when assessing quality of life in stroke survivors with visual impairment.

Items were sourced from a systematic review of instruments relevant to visual impairment caused by stroke. The number of items were reduced and adapted following a pilot of version one of the new instrument, leading to version two (62 items). Items from version two were evaluated in a Delphi survey. Stakeholders (stroke survivors/clinicians) were invited to take part in the process. The Delphi method involved three rounds of an electronic-based questionnaire. A consensus definition of ≥70% was decided *a priori.* The survey asked participants to rank importance on a 9-point scale and also categorise the items by relevance to types of visual impairment following stroke or whether items were considered not relevant. Analysis of consensus (percentage response rate), stability (mean/SD) and agreement (weighted Kappa) were conducted.

In total, 113 participants registered for the Delphi survey of which 47 (41.6%) completed all three rounds. Response rates to the three rounds were 78/113 (69.0%), 61/76 (81.3%) and 49/64 (76.6%) respectively. The participants included orthoptists (45.4%), occupational therapists (44.3%) and stroke survivors (10.3%). Consensus was reached on 56.5% (n=35) of items in the three round process, all for inclusion of the item. A consensus was reached for 83.8% (n=52) in the categorisation of items. The majority (82.6%) of the consensus were for relevant to ‘all visual impairment following stroke’; two (3.2%) items were deemed ‘not relevant’.

If this Delphi survey had been the primary method for further development of the new instrument, a reduction of two items would have been achieved. A further 27 items would require discussion at a consensus meeting. It was identified a hub and spoke model for the questionnaire based on the categorisation of items would not be possible due to a large number of core items (n=40) and few (n=13) additional items across four spokes. Psychometrics using Rasch analysis will be assessed prior to a consensus meeting. The consensus meeting will consider all data through facilitated clinical and patient input on the important items to assess quality of life with visual impairment following stroke.

Layman Abstract (optional): Provide a 50-200 word description of your work that non-scientists can understand. Describe the big picture and the implications of your findings, not the study itself and the associated details.

Around two-thirds of stroke survivors have a visual impairment. There are currently no questionnaires specifically for measuring the impact of visual impairment following stroke on quality of life. Some questionnaires have been used with stroke survivors with visual impairment, however, none have had the input of stroke survivors when they were first developed. This piece of work incorporates the views of both stroke survivors and stroke clinicians in the development of a new questionnaire. It has highlighted which questions they consider most important when measuring quality of life of stroke survivors with visual impairment. By involving stroke-survivors the final version of the questionnaire is more likely to tackle the issues which concern them.