

# MODULE 3-P1: The longitudinal outcome of quality of life for the individual with stroke: A sequential exploratory approach

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## 1 Background

- The impact of stroke significantly alters a person's Quality-of-Life (QoL) [1,2].
- Stroke survivors continue to report poor functional, cognitive, and QoL long after stroke [3,4].
- Evidence revealed a dynamic interaction between bodily changes, participation, environment, and personal factors that characterizes post-stroke recovery [5].
- **Aims:**
  - To explore the longitudinal outcome of QoL post stroke in Singapore
  - To develop a QoL assessment tool that can capture changes that are meaningful to the Singapore population.

## 2 Method: sample & analysis

**Recruitment:**  
Stroke survivors will be recruited from the Rehabilitation Centre and Centre for Advanced Rehabilitation Therapeutics (CART), Tan Tock Seng Hospital (TTSH). Inclusion criteria include: (1) first-time stroke survivor, (2) aged 21 years old and above, and (3) have the capacity to communicate.

**Data collection:**  
Data collection materials will include (1) semi-structured interviews at 6-, 12- and 24 months, and (2) health-related QOL scales (HRQOL), namely EQ-5D and SSQOL.

**Data analysis:**  
Transcripts generated from the qualitative interviews will undergo thematic analysis. Factor analysis, regression models and other statistical tools will be used to validate and refine the scale.

## 3 Method: study design & expected outcome

Using a mixed method, sequential exploratory approach (see Figure 1), this study seeks to develop a stroke-specific QoL assessment tool. In the qualitative phase, data from semi-structured interviews will be synthesized to form a theoretically-informed QoL framework. In the quantitative strand, an item generation phase will produce an item bank pool. Following this, a scale will be refined in an iterative manner. Finally, the QoL tool will be validated in a new sample of stroke survivors.

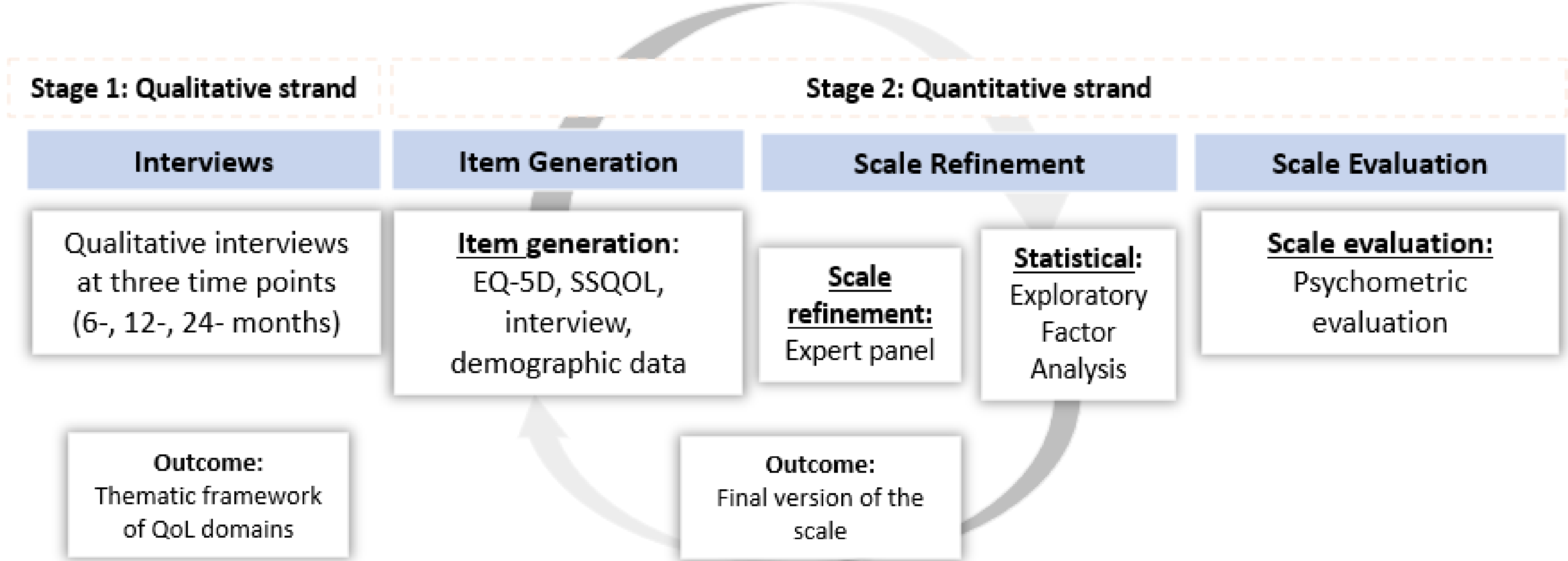


Figure 1: Sequential exploratory approach combining qualitative and quantitative strands.

## 4 Current status & timeline

- 2022 (key milestones)**
- **Stage 1:**
    - Preparation and finalization of the protocol. This includes literature review and clinical discussions for the methodology and selection of assessment tools.
    - DSRB approved.
  - **Stage 2:**
    - Evidence synthesis on item generation and consultation with relevant clinical experts.
    - Data analysis on pilot work.
- 2023 (next milestones)**
- Data collection, concurrent qualitative and quantitative data analysis on data collected.
  - Steps surrounding scale refinement.

**References:**

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