Strokes affect over 795,000 Americans annually and 80% of those affected survive. It is necessary to develop interventions that aid the recovery of stroke survivors to regain their function and improve their quality of life. This project’s long-term goals are to create interventions and resources that support the sensory health and participation in meaningful activities of adult stroke survivors. To achieve this long-term goal, we engaged in collaborative participatory methods with stakeholders to achieve the following objectives and aims:

1. Identify the sensory health needs of stroke survivors including specific knowledge gaps in the literature
   - Umbrella review of literature

2. Develop research questions and study protocols that look into the impact of sensory health needs on recovery and participation in daily activities
   - Focus groups to gain insight into the sensory health of adults post-stroke

Team 1: Umbrella Review

**Methods**

- **Inclusion Criteria**: “Stroke”, “adults”, “sensory”, “systemic or scoping review”, “focus or function or participation.”
- **Exclusion Criteria**: “animals”, “minors”, not a systematic/scoping review, not focused on sensory health & function.
- **Databases Searched**: Medline, Embase, CINAHL.
- **Search Terms**: Visual, tactile, olfactory, vestibular, proprioceptive, gustatory, participation
- **Analysis**: Covidence was used to review articles and for data extraction.
- **Two reviewers independently screened each article and completed data extraction.**
- **Data extraction completed in Excel**

**Preliminary Results and Conclusions:**

- 7 articles summarized: 4 somatosensory dysfunction, 2 visual impairment, 1 multisensory (e.g., tactile, olfactory, auditory).
- Vision and somatosensory impairments were prevalent post-stroke; impacting functional performance, participation in valued activities and motor ability.
- More research is needed about the sensory health of adults post-stroke

Team 2: Focus Groups with Stakeholders

**Methods**

- **Inclusion Criteria**: Able to participate in a virtual focus group, no severe aphasia, experience with stroke as survivor, therapist or caregiver.
- **Method**: Four 90-minute focus groups on zoom
- **Analysis**: Focused coding using NVivo software
- **Four independent coders completed 6 hours of transcription. Iterative discussions for consensus**

**Preliminary Results:**

- Sensory changes were common for adults post-stroke
- Sensory changes were not sufficiently addressed in the clinic or in therapy.
- Adults post stroke became aware of many sensory health issues post-discharge while engaged in activities of daily living
- Clinicians do not have adequate tools or knowledge to address sensory health.

**Implications:**

- Clinicians should screen for sensory health in adults post-stroke
- Research is needed to develop protocols for assessment and intervention to address the sensory health in stroke