

## NIMHANS-NH-SKAN Stroke Project Quarterly report (October 2025-December 2025)

### 1. Highlights of the study progress in the quarter

#### a. Key accomplishments-

##### i. House numbering:

Mulabagilu: 81 villages

Bengaluru: 1 ward

ii. **Community mobilization:** House to house mobilisations were done in 79 villages of Mulabagilu and 1 ward of Bengaluru.

##### iii. Field Data Collector's Training:

Trained a total of 17 field data collectors during this period. 16 were selected in training program.

##### iv. Stroke-free cohort:

Data collection and Sample collection during the current quarter

|                                 | Household questionnaire completed | Individual questionnaire completed | Blood sample collected |
|---------------------------------|-----------------------------------|------------------------------------|------------------------|
| <b>BASELINE</b>                 |                                   |                                    |                        |
| <b>Villages/wards completed</b> | 77/1                              | 75/1                               | 74/1                   |
| <b>Mulabagilu</b>               | 7184                              | 11685                              | 6938                   |
| <b>Bengaluru</b>                | 3563                              | 6285                               | 2854                   |
| <b>Total</b>                    | <b>10747</b>                      | <b>17970</b>                       | <b>9792</b>            |
| <b>FOLLOW-UP</b>                |                                   |                                    |                        |
| <b>Villages completed</b>       |                                   | 4                                  | 4                      |
| <b>Mulabagilu</b>               |                                   | 634                                | 366                    |

#### Response rate

|                   | Household questionnaire completed | Individual questionnaire completed | Blood sample collected |
|-------------------|-----------------------------------|------------------------------------|------------------------|
| <b>Mulabagilu</b> | 97.97%                            | 95.96%                             | 59.37%                 |
| <b>Bengaluru</b>  | 59.54%                            | 76.72%                             | 45.40%                 |

- v. **Stroke-cohort:** Baseline data collected for seven stroke patients, with appropriate follow-ups.
  - **October:** 2
  - **November:** 3
  - **December:** 2
  
- vi. **CASCADE:** 5 Hospital preparedness assessment completed and 73 CASCADE pre-intervention arm stroke cases recruited in the quarter
  - **October:** 26
  - **November:** 21
  - **December:** 26

**b. Brief summary of all activities, progress along with timelines.**

- Meetings: 5<sup>th</sup> Investigator's meeting (16/12/2025), 6<sup>th</sup> Independent Monitoring Team visit (18/12/2025 to 19/12/2025)
- Tool development: Nil
- Cohort enrolment – Numbers
  - Sample Size-~2 lakh
  - Current Recruitment size- Provided above
- List of Hypothesis being tested: Nil
- Publications/ poster/oral presentations if any of funded projects across different platforms (conferences, seminars, etc.)- Effectiveness of a district level Comprehensive Acute Stroke CARE moDEL (CASCADE) for management of acute stroke patients in Karnataka – A quasi experimental study-Submitted to BMC Health Services Research journal. Received comments from editors.  
Independent Monitoring Team methodology paper under production.
- Any other material worthy of being shared- Nil

## GALLERY OF ACTIVITIES



**Field Data Collector's Training**



**House numbering and sticking posters in prominent places**



**Mulabagilu community mobilization**



10, 3rd Cross Rd, 3rd Block East, LIC Colony, Jayanagar 4th Block East, Jayana Bengaluru, Karnataka 560011, India 🇮🇳

Latitude 12.930753333333334° Longitude 77.59050833333335°  
 Local 01:13:05 PM Altitude 910 meters  
 GMT 07:43:05 AM Sunday, 23.11.2025

**Community mobilisation during Kannada Rajyotsava celebration in LIC colony**



Kolar, Karnataka, India  
 S.n.r Circle, 22, Kanakanapalya, Kolar, Karnataka 563101, India  
 Lat 13.128298° Long 78.134218°  
 14/10/2025 11:19 AM GMT +05:30

**Meeting doctors to report stroke cases in the hospital**



35th Cross, Near-Coffee Day, 418, 18th Ma Pattabhirama Nagar, Jayanagar, Bengaluru, India 🇮🇳  
 Latitude 12.9249914° Longitude 77.5896  
 Local 02:23:38 PM Altitude 92  
 GMT 08:53:38 AM Sunday, 3/11/2025

**Re-enforcing FDCs**



Alangur, Karnataka, India  
 5178+vc8, Alangur, Karnataka 563136, India  
 Lat 13.165241° Long 78.486005°  
 Saturday, 27/12/2025 03:09 PM GMT +05:30



Somarasanahalli, Karnataka, India  
 23hr+qccp, Somarasanahalli, Karnataka 563136, India  
 Lat 13.029292° Long 78.391151°  
 Saturday, 16/10/2025 07:35 PM GMT +05:30



B.hoshalli, Karnataka, India  
 3f46+976, B.hoshalli, Karnataka 563136, India  
 Lat 13.055973° Long 78.460878°  
 Friday, 28/11/2025 03:27 PM GMT +05:30

### Mulabagilu data collection



Sunangur, Karnataka, India  
 396k+3ph, Sunangur, Karnataka 563136, India  
 Lat 13.060163° Long 78.399669°  
 05/10/2025 07:41 AM GMT +05:30

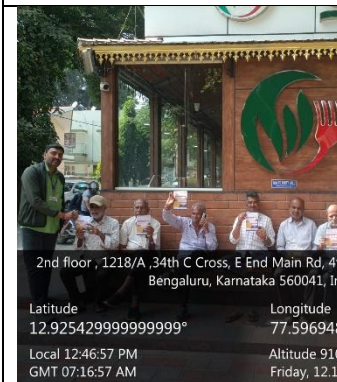


Tayalur, Karnataka, India  
 3c6h+h25, Tayalur, Karnataka 563136, India  
 Lat 13.061447° Long 78.427595°  
 11/10/2025 07:11 AM GMT +05:30



Belaganehalli, Karnataka, India  
 11 Mulbagal Main Road Mallanayakanahalli, Belaganehalli, Karnataka 563136, India  
 Lat 13.092367° Long 78.46712°  
 Saturday, 15/11/2025 07:35 AM GMT +05:30

### Mulabagilu blood sample collection



2nd floor , 1218/A ,34th C Cross, E End Main Rd, 4th Block East, Jayanagar, Bengaluru, Karnataka 560041, India  
 Latitude 12.925429999999999° Longitude 77.596941°  
 Local 12:46:57 PM Altitude 911 meters  
 GMT 07:16:57 AM Friday, 12/11/2025



Bengaluru, Karnataka, India  
 679, T Block, 4th T Block East, Jayanagar, Bengaluru, Karnataka 560041, India  
 Lat 12.927772° Long 77.591637°  
 Saturday, 01/11/2025 12:48 PM GMT +05:30



Bengaluru, Karnataka, India  
 Whgr+rjv, 4th T Block East, Jayanagar, Bengaluru, Karnataka 560041, India  
 Lat 12.927571° Long 77.591601°  
 Wednesday, 05/11/2025 10:34 AM GMT +05:30

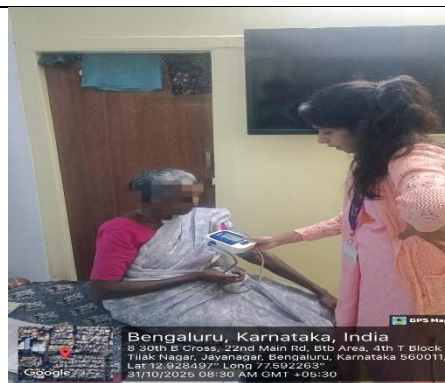
### Bengaluru community mobilisation



WHMR+Q93, Byrasandra Main Rd, Jaya Nagar 1st Block East, Jayanagar, Bengaluru, Karnataka 560011, India  
 Latitude 12.93421° Longitude 77.59090833333333°  
 Local 03:21:59 PM Altitude 925 meters  
 GMT 09:51:59 AM Wednesday, 06/10/2025



Bengaluru, Karnataka, India  
 105, 3rd Cross Rd, 1st Block East, 1st Block East, Jayanagar, Bengaluru, Karnataka 560041, India  
 Lat 12.934532° Long 77.589439°  
 Tuesday, 14/10/2025 11:17 AM GMT +05:30



Bengaluru, Karnataka, India  
 3-30th E Cross, 2nd Main Rd, 6th Area, 4th T Block Tilak Nagar, Jayanagar, Bengaluru, Karnataka 560011, India  
 Lat 12.928437° Long 77.592263°  
 21/10/2025 08:30 AM GMT +05:30

### Bengaluru data collection



**Bengaluru blood sample collection**



**Failed reports distribution**



**Monitoring by senior officers and investigators**



**6<sup>th</sup> Independent Monitoring Team visit**



**5<sup>th</sup> Investigator's meeting**

## 2. Challenges -

**i. Application Challenges:** From October to December 2025, number of application issues were reported to the Happiest Minds team across different modules like Household, individual, Stroke, Laboratory forms,

Reports, and Dashboards. These problems included wrong member details opening, incorrect status showing as completed, failure in auto populating, missing or incomplete data, duplicate IDs, delayed or missing follow-ups, and mismatches in reports and dashboard numbers. Because of these issues, field teams were unable to start or complete interviews on time, some follow-ups were missed, data had to be fixed manually from the backend, and reports could not be fully trusted, affecting overall work and data quality. The repeated occurrence of similar issues in report generation indicates ongoing inconsistencies. As a result, the data team is unable to adequately focus on other field and monitoring responsibilities. This requires immediate attention.

- ii. Baseline and follow-up data collection:** Both baseline and follow-up data collection are being conducted simultaneously at the Mulabagilu study site. As the baseline and follow-up villages are located in different directions, allocating data collectors and phlebotomists has become challenging. Additionally, simultaneous activities are resulting in the division of the existing FDCs, thereby slowing progress in both activities. The project is exploring budget reorganisation and optimisation of core team resources to facilitate the addition of more Field Data Collectors and support to strengthen field-level implementation.
- iii. Blood Sample Collection:** In Mulabagilu, the house-to-house approach for blood collection required substantially greater effort compared to camp-based methods, as individual household visits demand more manpower and time. To optimize efficiency, a combined strategy is now being followed: organizing camp-based collections followed by house-to-house mop-up visits two days later based on population size.
- iv. Participant Refusals:** The IQ refusal rate is notably higher in Bengaluru (23.17%) compared to Mulabagilu (4.02%). This variation may be due to several contextual and operational factors. As an urban site, Bengaluru has a population with greater time constraints arising from work commitments, commuting, and shift-based employment, which reduces availability for longer assessments. Urban respondents may also exhibit increased caution regarding surveys, including concerns

related to privacy and perceived benefits. In addition, logistical challenges such as restricted access to households, gated communities, and frequent interruptions further contribute to higher refusal rates. To address these challenges in the urban setting, the field team has intensified community engagement efforts, adjusted visit timings, and adopted more flexible scheduling approaches to improve participation and reduce refusals.

- v. **Increased Travel Time:** Extended commuting distances to peripheral villages have constrained daily field schedules, limiting the number of interviews that can be covered per day. To mitigate this, field teams have started departing for their shifts earlier than usual to maximise effective interview time at the village level.
  
- vi. **Blood Sample Refusals:** A notable number of participants in study sites are declining blood sample collection. To minimise data gaps, the questionnaire has been modified to allow recording of recent blood test results for individuals who have had tests done within the last three months.

### 3. SWOT analysis of planned study along with plans to mitigate the same



#### **4. Proposed plan for next quarter**

- i. Completion of CASCADE pre-intervention arm stroke case recruitment and hospital preparedness assessment in one more hospital.
- ii. Development of CASCADE model.
- iii. Establishment of the Community Advisory Board (CAB) to support community engagement and project oversight.
- iv. 4<sup>th</sup> Expert Advisory Group meeting and 7<sup>th</sup> Independent Monitoring Team visit.
- v. Independent Monitoring methodology paper to be submitted.