Expression of Interest for Agency to carry out Lot Quality Assurance Sampling Assessment of NCD Service Delivery in Delhi and Uttar Pradesh

Background:

Cardiovascular diseases (CVD) are now the leading cause of mortality in India and contribute to escalating health expenditure both within the health care system and by individuals. Further, CVD mortality, morbidity, and risk factors affect sub-populations variably in India: those with lower socio-economic status (i.e. lower incomes and education) are more vulnerable than those with higher socio-economic status. Given the growing burden of and inequalities in CVD nationwide, there is a need for India to incrementally build capacity at the state level- expanding the scope of health care delivery heretofore designed primarily to deliver Maternal and Child Health (MCH) and communicable disease interventions.

In 2016, the government launched a policy and guidelines for rollout of Comprehensive Primary Health Care including prevention and control of Non-Communicable Diseases (CPHC-NCD). The programme envisions a key role for frontline health workers – Auxiliary Nurse Midwives (ANMs) and community health workers (ASHAs) - in CVD prevention and control. They will enumerate populations, implement a risk profile checklist, motivate those over 30 years for screening and prevention of hypertension and diabetes, promote cessation of tobacco use and lifestyle modification, refer for treatment, and monitor uptake of services to minimize exclusion.

With the launch of CPHC under Ayushman Bharat in 2017-18, processes are in underway for adaptation and rollout of CPHC-NCD, mindful that most health systems are focussed on MCH service delivery, even as the burden of CVDs is emerging. In the case of a state like Uttar Pradesh, there will be multiple burdens, while in Delhi, it may be the case that the epidemiologic transition requires greater focus on CVDs, mindful of the complexities involved in urban health service delivery.

Currently, as monitoring and evaluation (M&E) frameworks for the above changes are being put in place, we need an appropriate and scalable M&E mechanism to determine the coverage achieved by frontline health workers, what key populations, if any, are being left out, among other issues related to rollout. This study intends to assess coverage, inequalities, and workflow of frontline workers involved with screening, treatment, and follow-up for hypertension and diabetes in the aforementioned two Indian states.

Key objectives:

1. To assess the coverage of screening, treatment and follow-up for hypertension and diabetes by frontline health workers in two Indian states (Delhi and Uttar Pradesh);

(Assuming that 80% coverage of screening will be achieved in half of the primary care facilities in each state, as determined by Lot Quality Assurance Sampling (LQAS) methods)

2. To determine inequalities in screening, treatment, and follow-up coverage by gender, poverty and caste status at facility level across these two states;

To achieve these objectives, we seek the services of a capable field agency to carry out LQAS assessments in Delhi and Uttar Pradesh.

Roles and Responsibilities:

The study design is enclosed as Annexure A; consultations are underway with state officials. Ethics approval has also been received. The field agency is required to:

1. Participate in/support district and facility selection processes in close collaboration with state nodal officers, as directed by study leads;
2. Carry out a rapid situational analysis of the rollout of CPHC-NCD, the use of tablet technology in each state, as well as other aspects relevant to fieldwork;
3. Participate/support training of fieldworkers in LQAS methodology (3-4 days);

4. Coordinate and collaborate with frontline health workers in clarifying the goals of the study, setting up fieldwork, and linking to other study components as necessary (i.e. the time motion study component with a subset of ANMs and ASHAs);
5. Pilot and finalise LQAS data collection tools using, as appropriate
6. Undertake LQAS assessments in selected facility catchment areas, in close alignment with the protocol with appropriate quality control measures in place;
7. Monitor and manage unidentified and unlinked data confidentially, which may involve data cleaning and recoding as appropriate;
8. Support local data analysis and dissemination of key findings with frontline health workers, and as needed, intermediate their initiation into other components of the parent study;
9. Share biweekly updates on project progress, delays, relevant information, as well as *ad hoc* requests for information;
10. Communicate through appropriate channels with local and state authorities, as needed, keeping NHSRC in the loop on all such communication

It is suggested that the team comprise 6-8 full time interviewers for the duration of 3.5-4 months to undergo training and carry out this fieldwork, with appropriate supervisory staff. It is ideal if interviewers are from the states in question and possess at least 2-5 years of experience in this or linked domains of work.

Project coordinators from NHSRC will be closely overseeing project implementation of the field agency.

Application Requirements:

The application should include -

1. Proposal for conducting the research with detailed field-plan, team size and composition, training requirements, days in the field, data collection and reporting protocols.

2. Background of organization, nature of organization, list of board members, demonstration of the necessary skill mix, experience, project management budgets handled, and infrastructure (for data management- data entry and analysis);

3. Details of past experience in conducting research: brief description of nature of research (topic and methodology) and outcomes (publications, dissemination) undertaken in last five years, details of research staff- (in house or demonstrate access to experts on a reliable basis), demonstrate track record of the research team, in data analysis and advanced writing skills. Emphasis should be given to use/application of LQAS and/or studies/fieldwork in Delhi and Uttar Pradesh

4. Copies of the most relevant work in recent years, preferably conducted by the research teams who are currently in place.

5.Agency should give details of Firm/Institution s Registration, Copy of Service tax registration if applicable, Copy of PAN Card and Copy of last three years IT return.

The last date for receipt of applications is July 19th, 2018. Applications may be sent to The PAO, National Health Systems Resource Centre, NIHFW, Baba Gangnath Marg, Munirka, New Delhi - 110067.

Annexure A.

Design Summary of LQAS Study Component of Assessing coverage, inequalities, and frontline provider workflows for hypertension and diabetes screening, treatment, and follow-up in two Indian states

In each state, districts will be chosen based on three criteria: HMIS Composite Index score ranking of care for reproductive health, pregnancy care, child birth and newborn care; prior track record of health systems and/or CVD-related research; and concurrence with state and district officials. Facilities will be chosen in consultation with state, district and block officials to ensure that the CPHC-NCD programme rollout is already underway in these facilities. The intention here is to fulfil the ethical requirement that the quality of the programme will be assessed in contexts where basic health system building blocks are in place and that screening can feasibly lead to treatment and follow-up.

Screening, treatment and follow-up coverage for hypertension and diabetes will be assessed using the Lot Quality Assurance Sampling (LQAS) methodology. LQAS is a method that employs stratified random sampling to assess whether coverage/quality in a stratum exceeds a specific threshold. The benefit of this method is that it allows local use and application of data, while also not placing a high burden on data collection. LQAS has largely been used to monitor coverage of maternal, neonatal and child health services as well as communicable disease-related data collection in Uganda, South Sudan, Benin, Uzbekistan, Nigeria, and Turkey, as well as Tamil Nadu, Odisha, and Bihar in India.

For Lot Quality Assurance Sampling, lots have to be created at the appropriate unit. In our case, the unit is the population covered by one ANM, typically 5,000 people. In rural areas this is roughly equivalent to one Sub Health Centre (SHC); typically 6 SHCs are covered by one Primary Health Centre (PHC). In urban areas, there are no SHCs, rather one can find between 3 and 5 ANMs serving a single Urban Public Health Centre (UPHC), covering populations as high as 50,000 people.

Since we are interested in how care is given across the continuum in each site, we will try to cover populations under a single PHC per district in rural areas (around 6 ANMs per PHC-district) and up to 2 UPHCs per ward in urban areas (around 8 ANMs per ward). Therefore, we will have a larger sample in urban areas because ANMs in these UPHCs cover a larger population (see Figure 2).

According to LQAS sample size calculations, 19 lots per unit are required in order to detect a coverage of 80% (our quality threshold) with an alpha and beta of 10%, respectively (personal communication (08/11/2016), Joseph Valadez, 42). Moreover, at least 6 subgroup comparisons should be allowed per lot for equity analysis (by sex, poverty status, and caste) in each of the lot units, requiring (19*6=) 114 LQAS interviews per lot unit. Thus, we will be able to detect whether the 80% coverage threshold is being met for each population sub-group.

Our rural site has (6+6=) 12 units, requiring a sample of (114 x 12=) 1,368 individuals while our urban site has (8+8=)16 units, requiring a sample of (114 x 16=) 1,825 individuals. This results in a total sample size of (1,368+1,825=) 3,192 individuals.

The study will use enumeration data collected by ASHAs as its starting point. Drawing on this data, corresponding with each SHC/ANM, there will be 19 randomly selected villages or colonies (lots), where fieldwork will be initiated. Within each, one person in a different household will be randomly chosen across each inequality substratum (male, female, Below Poverty Line, Above Poverty Line, Scheduled Caste status, non-Scheduled Caste status). Following informed consent procedures, questionnaires containing no more than 35 questions will be administered to all consenting participants to determine socio-demographics, enumeration, screening, treatment and follow-up coverage, to enable programme redesign and course correction. The tool will be adapted from ongoing research as well as national guidelines.

The quality threshold of the Indian government, applied in our LQAS as well, is that screening coverage should be at least 80% of the eligible population. In our study, this will be tantamount to 91 individuals per LQAS lot unit. In each SHC/UPHC sub-population lot of 114, therefore, if any more than 23 eligible adults are identified who were not screened, coverage would be considered to be less than the 80% threshold level in that area. We will determine how many facilities per district have achieved 80%

coverage and also whether districts are meeting their target of coverage of sub-populations (of sex, poverty and caste status).

Through workshops, frontline health workers will be trained to compute ratio and difference measures for screening, treatment and coverage on their tablets, so as to be able to identify inequalities within populations, and develop strategies to bridge these gaps.