



भारतीय आयुर्विज्ञान अनुसंधान परिषद  
स्वास्थ्य अनुसंधान विभाग, स्वास्थ्य और परिवार  
कल्याण मंत्रालय, भारत सरकार

Indian Council of Medical Research  
Department of Health Research, Ministry of Health  
and Family Welfare, Government of India

## Inviting Expression of Interest (EOI) on Implementation Research to Accelerate Screening, Early Diagnosis and Treatment of Cancer

### Background

Cancer poses a significant and pressing public health challenge in India and is a top priority within the mandate of the Indian Council of Medical Research (ICMR). According to estimates from the Global Cancer Observatory, GLOBOCAN for the year 2020, there were 19.3 million new cancer cases worldwide, with India ranking third in incidence after China and the United States of America. Alarming, GLOBOCAN projections indicate that India is expected to witness a substantial 57.5 percent increase in cancer cases from 2020 to 2040. In alignment with the World Health Organization's (WHO) Sustainable Development Goal (SDG) 3.4, which seeks to reduce premature mortality from non-communicable diseases, including cancer, by one third through prevention and treatment. India launched the National Program for Cancer, Diabetes, Cardiovascular Disease, and Stroke (NPCDCS) in 2010, later renamed NP-NCD in 2023. This program has been instrumental in strengthening healthcare infrastructure, developing human resources, promoting health awareness, enabling early disease diagnosis, facilitating management, and ensuring timely referrals for common non-communicable diseases (NCDs), including cancer. It operates under the umbrella of the National Health Mission (NHM) with the overarching goal of reducing the mortality and morbidity associated with NCDs.

However, one notable challenge has been the low coverage of cancer screening, with only a minority of districts effectively implementing screening measures in accordance with the operational guidelines outlined by the Ministry of Health and Family Welfare (MoHFW). Research has indicated that frontline health workers, such as Accredited Social Health Activists (ASHAs), have the potential to play a crucial role in promoting and conducting home-based cancer screening. Home screening has resulted in higher compliance rates because it offers the privacy and convenience necessary for individuals to participate actively in the screening process. In the case of cervical cancer, HPV sampling Health Worker assisted/self, etc has emerged as an empowering approach, allowing women to collect their own specimens in private, at their preferred time and location, thereby addressing several barriers to accessing cytology-based screening, particularly in low- and middle-income countries (LMICs).

For the early detection of breast cancer, women are empowered through education on Breast Self-Examination (BSE), etc. as a vital part of this initiative. To enhance oral cancer screening and early detection, validated Point-of-Care (POC) systems, with a focus on detecting oral potentially malignant disorders (OPMDs).

Recognizing the need for a shift in cancer research priorities in India, ICMR formulated National Agenda on Cancer Research and invited research questions and ideas from national cancer experts, policymakers, and State Program Officers to cancer research initiatives. Implementation research to accelerate screening was one of the three top priorities.

Subsequently, ICMR is inviting implementation research proposals, with the primary goal of enhancing the coverage and quality of cancer screening and early detection within the framework of the public healthcare system under NP-NCD.

### **Priority Research Question**

**How to accelerate screening, early diagnosis and treatment of cancer, pre-cancerous /potentially malignant conditions at district level by implementing a package of interventions to:**

1. Improve coverage and quality of cancer screening through the existing healthcare system using accepted and validated methods.
2. Engage non-specialist physicians and other health care workers within a supportive healthcare system for screening of cancer and pre-cancerous conditions.
3. Ensure that all screen positive people are linked to facilities for early diagnosis and treatment.
4. Involve communities to encourage the target population to undergo screening early diagnosis and treatment.

### **Expected Outcomes of the study**

- Development of an optimized, effective, evidence based implementation model for screening, early diagnosis and treatment which can be integrated into NP-NCD programme in feasible and scalable manner in real world settings.
- Documentation of inputs required for the above implementation model including human resources, logistics and costs.
- A measure of effectiveness will be the proportion of cancers detected at early stage, or at precancerous/potentially malignant stage.
- Measure the district-wide coverage and quality of implemented screening interventions
- Ideas on how to scale up the developed implementation model in entire state(s), considering contextual factors.
- Other relevant outcomes suggested by research teams (to be discussed at proposal development workshop after selection process).

### **Outline of the study:**

#### Design

- Mixed methods implementation research design, including qualitative and quantitative approaches.
- An implementation science framework such as Consolidated Framework for Implementation Research would be used.

### Target Population

- Men and women aged 30 years and above.

### Setting

- District level health system including home and community, health and wellness centres, community health centres, district hospital (and, if applicable, medical college).

### Interventions

- Screening interventions and strategies included in national programme (NP-NCD).
- Newer interventions which have been shown to be effective.
- Facility and population level interventions to support the above.

### Duration of project

- The project duration will be four years. This includes up to 6 months for preparatory activities and 6 months for analysis and interpretation. It should include formative phase, implementation phase and evaluation phase.

### **Format of EoI to be submitted (max 4 pages)**

- A. Rationale of proposed work
- B. Study Description (using outline of study section above)
- C. Study Implementation Strategy
- D. Feasibility of Implementing Study
- E. Research Team
  - Expertise
  - Experience
  - Established Relationship with the health system

### **Illustrative Budget outline (additional to the 4-page limit)**

The final site budgets for the proposal will be developed by the selected research team(s) under the guidance of ICMR. In this EOI, provide an estimated budget outline (no budget justification required at this stage) under the following headings: staff, recurring contingency, data management, travel and equipment.

### **One-page CV of the principal investigator and other key investigators (additional to the 4-page limit)**

Please provide a one-page CV of the PI and other key investigators from each identified area. Each CV should include:

- Academic and professional qualifications
- Current position and affiliation
- Up to five most relevant previous research grants
- Up to five most relevant previous publications

### **Review process**

The EOI documents for this Implementation Research Study for the development of sustainable, scalable model of implementation strategies for prevention and treatment of cancer will be evaluated and shortlisted by the Indian Council of Medical Research (ICMR). The

ICMR team will screen the applications for technical accuracy and eligibility. The shortlisted teams will then collaborate to develop a detailed proposal, under the guidance of ICMR Hqrs. The proposal will be evaluated based on factors such as study design, feasibility, data management capabilities, prior experience, engagement with public health and potential for seamless integration. The feasibility and suitability of integration of the proposed methodology in the final proposal to be developed under the guidance of ICMR Hqrs shall also be considered while shortlisting the EOI.

### **Who can submit the EOI?**

The EOI can be submitted through ONLINE MODE ONLY by scientists/ professionals who have regular employment in Medical Institutes/ Research Institutes/ Universities/ Colleges/ Government and semi-government organizations and NGOs (documentary evidence of the recognition including a DSIR certificate should be available).

### **Points to be kept in mind while submitting the EOI**

1. The EOI must address the specific research question in the call text.
2. Collaborative, interdisciplinary research teams will be encouraged.
3. It does not include development of new technology/tools for early detection /screening.
4. Descriptive studies, systematic reviews and secondary data analysis will not be considered.
5. Foreign collaboration is not allowed under the call.

Interested investigators should fill out the **Google form at the below link** and submit **Expression of Interest (EOI)** as per the Format given above. Only shortlisted PIs of EOIs will be contacted.

Link: <https://forms.gle/B8j84bvssxM5SoqNA>

### **Timeline**

<b>Activities</b>	<b>Date</b>
Release of Call	29/09/2023
Last date for submission of EOI	30/10/2023
Short listing of EOIs	30/11/2023
Proposal Development workshop	20/12/2023

For any queries related to the call, please contact:

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