

## **Open Call for Expression of Interest (EoI) by individuals and organizations to establish Population Health Registry Consortium (PHR-C) as Opensource Healthcare IT Platform**

Greetings from the National Health Mission, Tamil Nadu (NHM-TN)!

The Honourable Minister for Health, Medical Education and Family Welfare on the floor of assembly has made an announcement that the state will establish the Population Health Registry (PHR) and a Health Information Technology Platform as a health security initiative by providing a Unique Health Identification (UHID) number to all the residents of the State for data driven decision making.

In this context, the State is developing a Population Health Registry (PHR) as 'Single Source of Truth' for all health and related applications which aims to bring in a common denominator to ensure effective service delivery. Developing an Open, Non-Proprietary, Encrypted, Technology & Data Neutral Information and Communication Infrastructure for integrating all health data and applying advanced Big Data analytics for decentralized evidence-based data driven decision support systems/tools (DSS/DST) is the cornerstone of PHR initiative.

The State of Tamil Nadu has taken a proactive approach in transforming the healthcare system in the State through a data driven approach as stated in the recently released IT Strategy Document 2020-21 for implementing Population Health Registry (PHR) under National Health Mission, Tamil Nadu (NHM-TN).

Presently, 132 Health Programme activities are documented in 304 registers, monitored through 194 monthly reports and 100 review presentations for improving 169 key performance indicators. Bridging the gap between the health system and citizens by using digital technologies to improve efficiency, transparency, and trust at point of care are the key priorities focused by the Population Health Registry. The sustainable and scalable implementation of Population Health Registry will enable the State's vision of data-driven healthcare for all and help fulfil the Government of India's objectives under the National Digital Health Mission (NDHM).

Through a workforce of public health cadres at district level and women health volunteers, the State has achieved significant milestones in equitable immunization and low mortality rates, with the goal of three community level workers per 5,000 population. Building upon these

strengths and to codify the State's public health experiential learnings on disease classification and population-based health outcomes, we need robust digital infrastructure to establish an independent data fiduciary that will enable care coordination across the vast spectrum of healthcare providers and associated schemes.

The State is committed to establish an open-source development consortium for Population Health Registry aiming to create reference architecture with open standards like FHIR, ensuring interoperability of health data, data accessibility with differential privacy policy of individual, family, staff and state health data. This will enable organizations to contribute to establishing open-source healthcare IT platforms/stack which can be repurposed for larger humanitarian responses. The State will govern the data access and assure the citizen is the owner of his/her data generated in both Government & Private health facilities.

The Mission Director, NHM, TN is the nodal officer for Population Health Registry, for bringing organizations as one forum for synergistic effort. The IT Infrastructure like server, SMS gateway and maintenance will be made available by the PHR SPMU under the guidance of MD, NHM, TN. The services of organizations regarding deployment, training, and field implementation will be supported with existing infrastructure and assurance to use the solution appropriately based on the need.

The contributions (architecture, licenses, credits, software codes, APIs and IT systems) received from organizations will be considered based on state-wide sustainability and scalability. Proprietary IT solutions offered as Pro bono services and piloting of information and communication technology (ICT) solutions will be accepted on need basis after review by State PHR Team. Any additional financial requirements will follow the existing NHM norms. NHM-TN will own Intellectual Property (IP) of Population Health Registry and its outputs. All the partners of the development consortium will co-own their contributions along with NHM-TN and will also be encouraged to replicate the PHR platform as a whole or in modules at other Indian States and Countries.

In this regard, we would like to invite your collaboration and participation towards the State's vision over the following key areas:

- 1) Technology support for building Community Health Worker and Medical Staff applications to create Population Health Registry (PHR) architecture and baseline data.

- 2) Help building Open, Non-Proprietary, Encrypted, Technology and Data Neutral Architecture ingesting and interconnecting demographic, disease, faculty, facility, environment, research, family & personal health data aiming to make health data interoperable and reusable.
- 3) Enable a platform for scalable computing, process automation, security, analytics & Artificial Intelligence to build and use PHR, helping to improve population-based healthcare outcomes in compliance with prevailing information communication technology (ICT) standards and guidelines in the State.
- 4) Partnering with non-profit organizations, domain experts, technologists, academicians and research institutions working at community level for training, deployment, implementation, data collection, data management, data analysis, documenting the experiential learnings to improve health security.

In addition to PHR, for addressing the immediate challenges posed by COVID-19, the NHM-TN is actively executing the first phase of PHR as a COVID-19 patient profiling program in preparation of any future state-wide occurrences of COVID-19 and/or other pandemics. We are seeking both humanitarian aid and digital collaboration to establish the Population Health Registry.

We would like to collaborate with your organization to strengthen the State health system through IT driven real-time data driven decision making. Please evaluate this state-wide health security initiative on an urgent basis and let us know how we can jointly build and strengthen the health ecosystem of the State of Tamil Nadu.

### **Attachment**

- IT Strategy Document - Population Health Registry (PHR), 2020-21

### **Contact Details**

- Dr. B. Viduthalai virumbi, Nodal Officer (Technical), PHR & SDHM  
v.virumbi@gov.in, cc to: rchpcni@nic.in, nohmis.nhm@tn.gov.in  
+91 9894726160, 044-29510304, Fax: 044-29510301

### **Reference**

- R.C.No. 7522/NHM/NCD/P14/2021, Circulation note approval for PHR consortium, dated:17.08.2021