EXPRESSION OF INTEREST FOR DEMONSTRATION OF INNOVATIVE, PORTABLE, AND COST-EFFECTIVE MEDICAL TECHNOLOGIES TO ENHANCE HEALTHCARE SERVICE DELIVERY

Advancing Accessible and Affordable Healthcare: Invitation for EoI in Transformative Medical Innovations

ANHRA PRADESH MEDICAL SERVICES AND INFRASTRUCTURE DELVELOPMENT CORPORATION
Government of Andhra Pradesh

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1. Introduction

1.1. Background

The Andhra Pradesh Medical Services & Infrastructure Development Corporation (APMSIDC), representing Department of Health, Medical and Family Welfare, Government of Andhra Pradesh (GoAP), is pleased to introduce a transformative initiative aimed at revolutionizing healthcare service delivery through the integration of cutting-edge, affordable, and portable medical technologies. Recognizing the critical need to enhance healthcare accessibility, particularly in rural and resource-constrained settings, this initiative seeks to leverage technological advancements to bridge gaps in diagnostics, treatment, and patient monitoring.

To achieve this, the GoAP is inviting EoI from reputed medical technology manufacturers, healthcare solution providers, research institutions, and innovators who possess the expertise to develop and demonstrate state-of-the-art healthcare solutions. This initiative is designed to explore innovative approaches that can be seamlessly integrated into public and private healthcare systems, thereby strengthening healthcare delivery mechanisms and ensuring that quality healthcare services reach even the most underserved populations. By fostering a collaborative ecosystem between government stakeholders, technology developers, healthcare institutions, and investors, this initiative aims to create a sustainable and scalable model for healthcare innovation, ultimately contributing to improved health outcomes and overall well-being across the state.

1.2. Rationale

Healthcare delivery in remote and underserved areas continues to face significant challenges, including inadequate infrastructure, a shortage of skilled medical professionals, and limited financial resources. These constraints often result in delays in diagnosis and treatment, leading to poor health outcomes and increased morbidity and mortality rates, particularly among vulnerable populations. Conventional healthcare models, which rely on centralized hospital-based care, are often unable to address the growing demand for quality medical services in geographically dispersed communities. Recognizing the urgent need to overcome these challenges, the GoAP has prioritized the adoption of innovative healthcare technologies that can be deployed in the Public health setting at health delivery centres and remote home setting

Advancements in portable medical devices, digital health solutions, and telemedicine platforms have the potential to redefine healthcare accessibility by enabling early disease detection, remote patient monitoring, and real-time decision-making for healthcare providers and enables self-monitoring and self-care. These technologies offer cost-effective alternatives to traditional diagnostic and treatment methods, ensuring that healthcare services can be extended to rural and hard-to-reach areas without requiring extensive physical infrastructure. Moreover, this initiative aligns with the government's broader vision of achieving universal health coverage by harnessing technology to make healthcare services more efficient, equitable, and responsive to the needs of the population. By inviting stakeholders to contribute their expertise and innovative solutions, the government aims to build a healthcare system that is resilient, adaptive, and capable of meeting the dynamic healthcare challenges of the future.

Details of Tender Process:

1	Publishing Expression of Interest (EoI):	22nd July 2025 Website- https://tender.apeprocurement.gov.in https://apmsidc.ap.nic.in
2	Virtual/Physical Workshop Clarification	29th July 2025 @ 11.AM at O/o, APMSIDC, Mangalagiri, Guntur
3	Deadline for submission of the response to Expression of Interest (EoI):	21-08-2025 @ 5.00 PM
	Shortlisting of Technologies for all the Expression of Interest (EoI) received	27-08-2025
4	Date of Presentation at APMSIDC	Will be intimated latter.

1.3. Overview of the Expression of Interest

The EoI serves as a formal invitation for medical technology developers, healthcare innovators, research institutions, and solution providers to showcase their pioneering healthcare solutions that align with the objectives of this initiative. The government seeks technologies that are not only cost-effective and portable but also scalable and adaptable

for use in diverse healthcare environments, including field settings, rural health centers, and mobile medical units. The technologies being considered under this EoI must demonstrate a tangible impact on improving healthcare accessibility, diagnostic accuracy, treatment efficiency, and patient outcomes.

Through this EoI, the selected technology providers will have the opportunity to conduct live demonstrations of their innovations before key stakeholders, including senior government officials, healthcare policymakers, public and private healthcare institutions, investors, and non-governmental organizations (NGOs). These demonstrations will serve as a critical evaluation phase, allowing stakeholders to assess the feasibility, usability, and cost-effectiveness of the proposed technologies. The government's objective is to facilitate the seamless adoption of these innovations into mainstream healthcare delivery systems by ensuring that they meet stringent quality, safety, and performance standards. Additionally, the EoI provides a platform for fostering public-private partnerships, encouraging collaborative research, and scaling up successful interventions to maximize their impact across the healthcare ecosystem.

1.4. Objectives

The overarching objective of this initiative is to identify, evaluate, and integrate innovative medical technologies using rubric that enhance the efficiency and reach of healthcare services in Andhra Pradesh, with a particular focus on field-based and resource-limited settings. By promoting the adoption of portable and affordable healthcare solutions, the government aims to empower healthcare providers with the tools necessary to deliver high-quality care, irrespective of location or infrastructural limitations. The initiative seeks to foster a dynamic environment where technological innovation meets healthcare needs, ultimately improving service delivery mechanisms and health outcomes at scale.

Specifically, the EoI aims to:

- **Identify Viable Medical Technologies:** The government seeks to assess innovative healthcare solutions that have the potential to address key healthcare challenges, such as diagnostic delays, lack of timely treatment, and limited patient monitoring capabilities in underserved areas.

- **Stakeholder Engagement and Collaboration:** The initiative creates a collaborative platform where technology providers, healthcare institutions, investors, and policymakers can come together to evaluate, refine, and implement healthcare innovations.
- **Scalability and Integration of Proven Technologies:** The government aims to identify technologies that can be seamlessly integrated into the existing healthcare system, ensuring their long-term sustainability and widespread adoption.
- **Enhance Public-Private Partnerships for Sustainable Healthcare Delivery:** By engaging private sector innovators, research institutions, and funding agencies, the initiative aims to drive investment in healthcare technology and strengthen the overall health infrastructure of the state.
- **Align with Government Priorities for Universal Health Coverage (UHC):** The EoI aligns with the broader vision of making healthcare services more inclusive, equitable, and responsive to the needs of the population, particularly those residing in remote and marginalized communities.

2. Scope of Medical Technologies

GoAP is actively seeking innovative, cost-effective, and scalable medical technologies that can be seamlessly integrated till remote healthcare settings. This initiative aims to identify and evaluate advanced medical solutions that enhance diagnostic capabilities, improve patient monitoring, and facilitate effective healthcare delivery in underserved regions. The emphasis is on portable, affordable, and user-friendly technologies that empower frontline healthcare workers, optimize medical interventions, and strengthen the overall healthcare infrastructure in resource-limited settings. By leveraging cutting-edge medical advancements, the government seeks to bridge healthcare gaps and ensure equitable access to quality healthcare services for all citizens.

The scope of this EoI encompasses a wide array of medical technologies specifically designed for field deployment, ensuring timely and efficient diagnosis, treatment, and patient management. The initiative targets solutions that enhance healthcare accessibility, improve diagnostic accuracy, and facilitate real-time patient monitoring. The key areas of interest include, but are not limited to, the following categories:

A. Advancing Healthcare with Portable Diagnostic Devices: The integration of portable diagnostic technologies has significantly transformed modern healthcare by enabling early disease detection, promoting preventive measures, and facilitating timely medical interventions. These compact, user-friendly devices are particularly beneficial in decentralized healthcare settings, where access to advanced laboratory infrastructure is limited. The GoAP has recognized the potential of these innovations and is actively seeking to adopt portable diagnostic solutions that can perform essential health assessments with high accuracy and efficiency. These devices aim to enhance diagnostic capabilities, ensuring precise and immediate medical evaluations even in remote and resource-constrained environments. Several diagnostic tests are of primary importance due to their role in early detection, disease management, and monitoring of chronic conditions:

- *Serum Creatinine Testing – Assessing Renal Function:* This test is crucial for evaluating kidney health. Elevated creatinine levels can indicate renal impairment, prompting timely medical intervention. Portable devices for this test must ensure high sensitivity and precision to support informed decision-making in diverse clinical settings.

- *Lipid Profile Analysis – Monitoring Cardiovascular Health:* A comprehensive lipid profile is essential for assessing cholesterol levels and cardiovascular risk. Portable analyzers can improve community-based screening programs, enabling timely interventions to mitigate risks associated with hyperlipidemia and heart-related conditions.

- *Complete Blood Picture (CBP) – Identifying Blood Disorders:* The CBP test is fundamental for detecting infections, anemia, and hematological disorders. Portable CBP analyzers facilitate rapid blood analysis, aiding prompt medical decisions, especially in emergency and field settings.

- *Liver Function Tests (LFTs) – Evaluating Hepatic Health:* LFTs are vital for diagnosing hepatic conditions such as hepatitis and cirrhosis. Portable LFT devices ensure rapid diagnosis and continuous monitoring, enabling timely therapeutic interventions.

- *Kidney Function Tests (KFTs) – Monitoring Renal Health:* KFTs assess kidney performance and detect renal diseases early. Portable KFT devices offer reliable and efficient assessments in primary healthcare settings, improving disease management and patient outcomes.

To achieve maximum effectiveness, portable diagnostic devices should have the following essential characteristics: (a) Compact and Lightweight Build – Enables easy portability, making them suitable for use in remote, rural, and emergency situations, (b) Intuitive User Interface – Ensures ease of operation, allowing healthcare professionals of varying expertise to use them efficiently, (c) High Accuracy and Precision – Delivers reliable results, supporting accurate clinical decision-making, (d) Fast Turnaround Time – Speeds up diagnosis and treatment, enabling prompt medical interventions, and (e) Low Infrastructure Dependency – Functions effectively in resource-constrained settings with limited access to power and laboratory facilities.

B. **Handheld and Mobile Screening Solutions: Transforming Healthcare Accessibility:** Handheld and mobile screening solutions are revolutionizing healthcare delivery, particularly in remote and resource-constrained areas. These advanced, compact devices empower frontline healthcare workers to conduct swift and accurate disease screenings at the community level. Their ability to function with minimal training ensures accessibility for community health workers, expanding early diagnostic services to marginalized populations. These tools facilitate on-the-spot health assessments, enabling timely diagnosis, early intervention, and efficient patient triaging. Additionally, they strengthen public health surveillance by providing real-time data for strategic health planning and epidemic control.

C. **Advancement in Non-Invasive and Rapid Testing Technologies:** Non-invasive and rapid testing technologies are enhancing patient comfort and diagnostic efficiency. These solutions provide quick and reliable results, making them valuable for early detection and timely intervention. Designed for point-of-care applications, they are accessible across diverse healthcare settings, including hospitals, clinics, and remote facilities. Their user-friendly nature eliminates the need for specialized training or complex infrastructure, making them ideal for resource-limited environments. These technologies streamline healthcare workflows, reduce diagnostic delays, and improve patient outcomes.

D. **Wearable Health Monitoring Solutions: Transforming Patient Care:** Wearable health monitoring technologies are revolutionizing patient care by enabling real-time, continuous tracking of vital health parameters. These devices monitor blood glucose levels, Electrocardiogram (ECG), blood pressure, and oxygen saturation, providing valuable insights for disease management and preventive care. Designed for user

comfort and ease of use, they integrate seamlessly into daily life. Advanced features such as automated alert systems and real-time data synchronization with electronic health records enhance remote patient monitoring and personalized medicine.

E. AI-Powered Medical Diagnostic Tools: Transforming Healthcare Delivery: AI-powered diagnostic tools are enhancing medical accuracy and efficiency by enabling real-time, data-driven decision-making. These tools leverage machine learning and deep learning algorithms to analyze medical images, laboratory results, and patient histories with exceptional speed and precision. They facilitate early disease detection, risk stratification, and personalized care, particularly in rural and underserved areas. AI diagnostics reduce dependency on specialist consultations, ensuring timely and effective healthcare interventions.

F. Telemedicine and Remote Healthcare Solutions: Transforming Healthcare Accessibility: Telemedicine is bridging geographical disparities in healthcare delivery by enabling virtual consultations, remote diagnosis, and cloud-based patient data management. These solutions ensure timely medical interventions for individuals in remote and underserved regions. Virtual consultations eliminate the need for physical visits, while remote diagnostics and treatment planning enhance healthcare reach. Cloud-based data management ensures continuity of care and improves coordination among healthcare providers, fostering a more inclusive and equitable healthcare environment.

G. Exploration of Other Innovative Medical Technologies: These include disruptive innovations such as AI-driven diagnostics, remote patient monitoring, and advanced point-of-care solutions. Smart medical devices and portable diagnostic tools The Priority areas identified are Maternal Health, Child Health, Malnutrition, and Anemia. TB and AMR Anemia, Blood Sugar, Serum Creatinine, GFR, Lipid Profile, Renal function, TB Diagnostics and Cancer for their cost-effectiveness, portability, and scalability. By fostering an ecosystem of revolutionary medical technologies, the government aims to set new benchmarks in healthcare delivery, ensuring equitable access to state-of-the-art medical advancements.

3. Eligibility Criteria for Participation

The eligibility criteria below outline the key requirements for organizations to qualify for this EoI. Bidders should demonstrate their ability to deliver cost-effective, scalable, and impactful healthcare solutions. Submit the details as mentioned in the table below.

Criteria	Description
1. Registration and Proven Expertise	
Legal Registration	Applicants must be legally registered entities (e.g., medical technology manufacturers, distributors, research institutions, healthcare service providers).
Industry Experience	Minimum 3 years of experience in designing, developing, and deploying innovative medical technologies. Expertise in one or more of the following areas is required: • Cost effective Portable diagnostic devices • Handheld screening solutions • Patient monitoring systems • Non-invasive testing technologies • Wearable health monitors • AI-powered diagnostic tools • Telemedicine solutions • Other innovative medical technologies.
Track Record	Evidence of prior successful implementations in the healthcare sector, showcasing alignment with industry needs and regulatory expectations.
2. Cost-Effectiveness and Scalability	
Affordability	Technologies must be cost-effective, ensuring accessibility in rural, remote, and resource-constrained healthcare settings.
Scalability	Solutions must demonstrate potential for large-scale deployment across diverse healthcare settings while maintaining consistent performance and reliability.
Integration	Ability to integrate seamlessly with existing medical infrastructure and adapt to varying healthcare demands, including interoperability with telemedicine and electronic health record systems.
3. Compliance with Regulatory Standards	
Regulatory Certifications	Compliance with Indian and international regulatory frameworks is mandatory. Relevant certifications include: • FDA (Food and Drug Administration) – For U.S. standards • ISO 13485 – Quality management for medical devices • BIS (Bureau of Indian Standards) – For Indian product standards • ICMR (Indian Council of Medical Research) – For diagnostic devices

	• AERB (Atomic Energy Regulatory Board) – For radiation-emitting devices (if applicable). • CDSCO (Central Drugs Standard Control Organization) – Mandatory for Indian market (if applicable).
Safety and Efficacy	Technologies must meet established quality and safety standards for patient use, ensuring reliability and accuracy in diagnostic, monitoring, and treatment applications.

4. Readiness for Demonstration and Pilot Implementation

Live Demonstration	Ability to provide real-time demonstrations showcasing functionality, usability, and impact in healthcare settings, particularly for portable diagnostic devices, wearable monitors, and AI-powered tools.
Pilot Implementation	Willingness to participate in pilot projects in designated healthcare settings (e.g., Andhra Pradesh) to validate feasibility, user-friendliness, and sustainability.

5. Alignment with Scope of Work

Domain Expertise	Applicants must demonstrate expertise in at least one of the following areas: • Portable diagnostic devices (e.g., serum creatinine, lipid profile, CBP, LFTs, KFTs) • Handheld screening solutions • Patient monitoring systems • Non-invasive testing technologies • Wearable health monitors • AI-powered diagnostic tools • Telemedicine solutions • Other innovative medical technologies.
Innovation and Adaptability	Willingness to explore and deliver innovative and adaptable solutions that align with the initiative's objectives, particularly for underserved regions.

4. Submission Requirements

Organizations interested in participating in the evaluation process must submit a comprehensive proposal that provides a detailed insight into their capabilities, technological expertise, and regulatory compliance. The proposal should be well-structured and include the following key components:

Section	Description
Organization Profile	- Provide a brief overview of the organization, including its background, mission, and vision - Highlight key achievements and expertise in medical technology development. - Summarize prior experience in designing, developing, or implementing portable or field-deployable healthcare solutions. - Mention any strategic partnerships, collaborations, or recognitions relevant to the field.
Overview of Proposed Technology	- Provide a high-level description of the proposed technology, Its TRL, including its purpose, key functionalities, and innovative aspects. - Briefly explain how the technology enhances healthcare delivery, particularly in remote, underserved, or resource-constrained settings. - Mention scalability, adaptability, and cost-effectiveness at a conceptual level.
Certifications and Regulatory Approvals	- List relevant certifications or regulatory approvals (e.g BIS, FDA clearance, ISO certifications etc.) that validate the technology's safety, Performance - Sensitivity, specificity, accuracy, reproducibility, and efficacy etc. - Indicate compliance with national or international medical device regulations (if applicable).
Relevant Experience	- Provide a summary of past case studies, pilot projects, or deployments that demonstrate the organization's capability to deliver similar solutions. - Highlight measurable outcomes or impacts achieved (if available).
Contact Information	- Provide contact details (names, designations, email addresses, phone numbers) of key representatives for communication during the EOI process.

5. Evaluation and Selection Criteria

Proposals submitted in response to this Expression of Interest (EOI) will be evaluated by a committee of healthcare and technology experts based on the following criteria:

Relevance and Effectiveness
- Addresses healthcare challenges in rural, remote, and resource-constrained settings.
- Improves diagnostics, treatment outcomes, and operational efficiency.
- Demonstrates versatility across emergency, primary, and specialized care.
- Provides evidence of impact (e.g., pilot studies, case studies).
- Integrates seamlessly with existing healthcare systems.

Affordability and Scalability
- Cost-effective and accessible within budget constraints.
- Maintains quality and reliability despite affordability.
- Scalable across urban and rural settings without major modifications.

Compliance with Healthcare Regulations
- Meets national and international regulatory standards (e.g., FDA, WHO).
- Adheres to safety, data privacy (e.g., GDPR, HIPAA), and ethical guidelines.
- Includes cybersecurity measures and pre-existing regulatory approvals.

Portability and Ease of Deployment
- Easy to transport, install, and operate in field conditions.
- User-friendly with minimal technical expertise required.
- Functional in resource-limited environments (e.g., poor electricity, internet).
- Adaptable for use by frontline healthcare workers.

Potential for Widespread Adoption
- Integrates with public and private healthcare systems.
- Interoperable with digital health records and telemedicine platforms.
- Includes mechanisms for maintenance, upgrades, and user training.
- Fosters collaboration among stakeholders (e.g., governments, NGOs).

6. Submission Process for EoI and the Deadlines fixed.

Entities interested in participating in the EoI for demonstrating innovative portable medical technology are required to submit their proposals electronically. To ensure a structured and efficient review process, all submissions must be sent electronically only with the subject line clearly stated as **"RESPONSE TO EXPRESSION OF INTEREST FOR**

DEMONSTRATION OF INNOVATIVE, PORTABLE, AND COST-EFFECTIVE MEDICAL TECHNOLOGIES TO ENHANCE HEALTHCARE SERVICE DELIVERY."

The deadline for submission of the response of this EoI is on or before 21st Aug, 2025. Interested applicants are advised to regularly check for updates and announcements at the official website of the department of Health, Medical & Family Welfare, Government of Andhra Pradesh to stay informed about important timelines.

To streamline the evaluation process, all submitted proposals must be comprehensive, well-structured, and clearly articulated. Each submission should provide a detailed and thorough description of the proposed portable medical technology, outlining its primary purpose, technical specifications, anticipated benefits, and potential for seamless integration into healthcare facilities. Supporting documentation as mentioned in the document above such as relevant case studies, research findings, user testimonials, and any other evidentiary materials, should be included wherever applicable to substantiate the technology's effectiveness and viability.

7. Post-Demonstration Deliberations and Pilot Implementation

Following the successful completion of the demonstration, selected applicants will be invited for further deliberations to discuss potential strategies for pilot implementation. These discussions will focus on practical aspects of integrating the technology within existing healthcare infrastructure. Key areas of consideration will include deployment logistics within medical facilities, training requirements for healthcare personnel, regulatory and compliance aspects, and long-term sustainability of the technology.

Based on these deliberations, a structured roadmap will be developed to facilitate pilot testing and potential large-scale adoption of the most promising innovations.

8. Clarification Process

Bidders may seek clarifications regarding the EOI document by submitting written queries to the designated contact person. It is important that bidders review the EOI thoroughly and reach out for clarifications at the earliest to avoid delays in the submission process. Bidders must submit their proposals in both electronic and physical formats. All submitted

documents should be complete, accurately filled out, and well-organized to facilitate an efficient evaluation process. It is recommended that bidders carefully review their submissions to ensure completeness and clarity before submission.

Submission Address:
All proposals should be submitted to the following address:

The Managing Director
Andhra Pradesh Medical Services & Infrastructure Development Corporation (APMSIDC)
Department of Health, Medical and Family Welfare (DoHM&FW)
Government of Andhra Pradesh (GoAP)
2nd Floor, Survey No.09, It Park, Phycare Building
Mangalagiri, Guntur – 522503

Website:
https://tender.apeprocurement.gov.in & https://apmsidc.ap.nic.in/
Email:
aphmhidc@gmail.com, ed.apmsidc16@gmail.com

Mobile Phone: 9340950191
For Any clarification bidder may contact in the number given.
Please ensure that all required documents are submitted to the address specified above, following
the outlined submission format, to ensure that the proposal is accepted and processed in a timely manner.