

## **Committee : The Telangana Legislative Assembly**



### **Agenda : Improving Healthcare Access in Rural Telangana: Telemedicine and Mobile Clinics**

---

Disclaimer: The authors of the document do not claim any copyright over it. All the details, information, and content mentioned in the document is only for educational purposes under the 'fair use' policy. The content established below is in no way related to the personal ideologies of the Executive board. This background guide is authored with a sole intention of giving delegates a direction in the committee and orienting them on the avenues of research.

## Letter From The Executive Board

Dear Delegates,

We extend our warmest greetings and a heartfelt welcome to each of you to the Telangana Legislative Assembly of the Excellencia Model United Nations. It is with immense pride and enthusiasm that we gather today, united by a shared passion for intellectual discourse and a commitment to addressing the pressing issues that shape the future of Telangana.

We commend your astute decision to participate in the Telangana Legislative Assembly, a committee that holds immense significance amidst the upcoming state assembly elections. This timely simulation provides a unique platform to delve into the intricacies of the legislative process, mirroring the vibrant debates and deliberations that occur within the corridors of power. As you immerse yourselves in this dynamic assembly, we encourage you to embrace the spirit of active citizenship. Your presence here signifies a willingness to engage with the challenges and opportunities that lie before Telangana, transforming mere observers into agents of change.

Throughout this enriching experience, we urge you to harness the power of diplomacy, collaboration, and critical thinking. Engage in meaningful dialogues, challenge perspectives, and forge alliances that transcend personal agendas. Remember, the strength of a democracy lies in the collective wisdom of its representatives.

As the Executive Board, we stand committed to fostering an environment conducive to intellectual exploration and constructive debate. We will guide you through the intricacies of parliamentary procedure, ensuring that your voices are heard and your contributions valued. We expect all the delegates to go through this background guide as it stands as the foundation of their preparation for the committee.

Together, let us transform this assembly into a crucible of ideas, a platform where diverse perspectives converge to shape a brighter future for Telangana. May your voices resonate with conviction, your arguments be rooted in reason, and your actions embody the spirit of true leadership.

We eagerly anticipate the vibrant discussions and groundbreaking solutions that will emerge from this assembly.

Sincerely,

Akash Degala - Speaker

Hasvi Pulakita Muriki - Deputy Speaker

The World Health Organisation (WHO) defines 'health' as a state of complete physical, mental, and social well-being, and not merely the absence of disease or infirmity. It emphasizes that enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being. It is well recognized across the world that a healthy population is at the heart of sustainable development, and for the creation of an equitable society with stable economic growth and prosperity.

The relationship between health status and standard of living has been widely discussed in development literature. Studies have identified a two-way causal relationship between economic growth and health status. For instance, economic growth enables higher health expenditure, and a healthy labour force contributes to economic growth. In other contexts, ill health may cause higher out-of-pocket expenditure that leads to impoverishment and indebtedness. Factors such as income, education and medical inputs have also been found to exert a positive impact on health. Compared to other areas, health remains one where India has achieved modest success in terms of commonly accepted parameters. At the same time, there exist sharp variation across states, between rural and urban areas, and along lines of gender, class, social and religious groups.

## Structure of Health Care System All Over India:

- **Primary Healthcare**

Primary healthcare denotes the first level of contact between individuals and families with the health system. Primary Health care was to serve the community it served; it included care for mother and child which included family planning, immunization, prevention of locally endemic diseases, treatment of common diseases or injuries, provision of essential facilities, health education, provision of food and nutrition and adequate supply of safe drinking water. In India, Primary Health Care is provided through a network of Sub centers and Primary Health Centres in rural areas, whereas in urban areas, it is provided through Health posts and Family Welfare Centres. The Sub center consists of one Auxiliary Nurse Midwife and Multipurpose Health worker and serves a population of 5000 in plains and 3000 persons in hilly and tribal areas. The Primary Health Centre (PHC), staffed by Medical Officer and other paramedical staff serves every 30000 population in the plains and 20,000 persons in hilly, tribal and backward areas. Each PHC is to supervise 6 Sub centers.

- **Secondary Health Care**

Secondary Healthcare refers to a second tier of health system, in which patients from primary health care are referred to specialists in higher hospitals for treatment. In India, the health centers for secondary health care include District hospitals and Community Health Centre at block level.

- **Tertiary Health Care**

Tertiary Health care refers to a third level of health system, in which specialized consultative care is provided usually on referral from primary and secondary medical care. Specialized Intensive Care Units, advanced diagnostic support services and specialized medical personnel on the key features of tertiary health care. In India, under the public health system, tertiary care service is provided by medical colleges and advanced medical research institutes.

## Telangana's New 5 Level Model

Traditionally, the entire healthcare delivery mechanism is based on three levels that include primary level consisting of Primary Health Centres (PHCs) and sub-centres that provide basic consultation and medicines, second level of District Hospitals, usually located in the district headquarters, with 100 to 200-bed capacity and providing services to patients referred from PHCs and sub-centres. At the tertiary level, there are teaching hospitals with over 500-bed capacity that provide multispecialty healthcare.

Telangana mooted two-more levels focused on preventive care through Basthi Dawakhana in cities and Palle Dawakhana in villages. The fifth level of healthcare delivery mechanism was the establishment of AIIMS-level super-specialty hospitals in the form of the Telangana Institute of Medical Sciences (TIMS) and the upcoming high-end medical hub in Warangal.

## What are the Challenges with the Health Sector?

- **Inadequate Access:**

- Inadequate access to basic healthcare services such as shortage of medical professionals, a lack of quality assurance, insufficient health spending, and, most significantly, insufficient research funding.
- One of the major concerns is the administrations' insufficient financial allocation.

- **Low Budget:**

- India's public expenditure on healthcare is only 2.1% of GDP while Japan, Canada and France spend about 10% of their GDP on public healthcare.
- Even neighboring countries like Bangladesh and Pakistan have over 3% of their GDP going towards the public healthcare system.

- Lack of Preventive Care:
  - Preventive care is undervalued in India, despite the fact that it has been shown to be quite beneficial in alleviating a variety of difficulties for patients in terms of unhappiness and financial losses.
- Lack of Medical Research:
  - In India, R&D and cutting-edge technology-led new projects receive little attention.
- Policymaking:
  - Policymaking is undoubtedly crucial in providing effective and efficient healthcare services. In India, the issue is one of supply rather than demand, and policymaking can help.
- Shortage in Professionals:
  - In India, there is a shortage of doctors, nurses, and other healthcare professionals.
  - According to a study presented in Parliament by a minister, India is short 600,000 doctors.
- Paucity of Resources:
  - Doctors work in extreme conditions ranging from overcrowded out-patient departments, inadequate staff, medicines and infrastructure.

## Shortcomings of The Rural Health Care System In Telangana:

The primary healthcare system in rural Telangana is in dire straits as the shortfall in primary health centers (PHCs) increased to 19 per cent in 2021-22, from 12 per cent in 2020-21, as per the Rural Health Statistics 2021-22 report released by the Union health ministry.

As per the Centre's report, there is an 84 percent shortfall of community health centers (CHCs) and a 3 percent shortfall of sub centers in rural areas, as of July 1, 2022.

While the national average shortfalls were 31 per cent for PHCs, 36 per cent for CHCs and 25 percent for sub centers, the situation in Telangana worsened from 2020-21, when there were 12 per cent and 53 per cent shortfalls in PHCs and CHCs, respectively.

As of March 31, 2022, 714 PHCs in the state had a 13 per cent shortfall of lab technicians and an 8.5 per cent shortfall of pharmacists.

According to the report, CHCs have a 12.5 per cent shortfall of specialist doctors, with the situation exacerbated when concerning anesthetists (57 percent shortfall) and pediatricians (21 percent shortfall). Also, against a requirement for 28 eye surgeons, there are none across Telangana's CHCs.

Telangana has a significant tribal area, which needs health centers as they are usually in remote locations. In such critical areas of the state, there is a 30 per cent shortfall of PHCs, a 76.5 percent shortfall of CHCs and a 32 percent shortfall of sub centers.

As per the report, one positive aspect of the state's health centers is that all PHCs in rural Telangana have labour rooms, an operation theater, at least four beds, a telephone and a computer.

Shortfall of health centers in rural areas in TS:

PHCs – 19%

CHCs – 84%

SCs – 3%

Shortfall of specialists at CHCs:

Total specialists – 12.5%

Anesthetists – 57%

Paediatricians – 21%

Shortfall in tribal areas:

PHCs – 30%

CHCs – 76.5%

Sub Centres – 32%

## **What is telemedicine?**

Telemedicine refers to the use of technology, such as video conferencing, remote monitoring, and mobile health apps, to deliver healthcare services remotely. This allows patients to receive medical care from the comfort of their homes and reduces the need for physical visits to hospitals and clinics. The advantages of telemedicine in India are numerous and significant.

# Advantages of telemedicine

It is important to understand the advantages that telemedicine has. Following are some of the advantages of this facility:

- **Increased Access to Healthcare**

In a country as large and diverse as India, many people living in rural areas have limited access to healthcare facilities. Telemedicine allows doctors and healthcare providers to reach patients in remote areas who may not have access to healthcare otherwise. Patients can receive consultations, diagnoses, and treatment plans from healthcare professionals without the need to travel long distances, thus saving time and money.

- **Improved Quality of Care**

Telemedicine also has the potential to improve the quality of care provided to patients. Doctors and healthcare providers can use technology to monitor patients remotely, track their progress, and adjust treatment plans as necessary. This can result in more personalized care and better outcomes for patients. Telemedicine can also improve communication between doctors and patients, reducing the risk of misunderstandings or miscommunications.

- **Cost-Effective Healthcare**

By reducing the need for physical visits to hospitals and clinics, telemedicine can save patients' time and money. Patients may also be able to avoid the costs associated with travel, such as transportation and lodging. This can be especially beneficial for patients living in remote areas who may have to travel long distances to receive medical care. Furthermore, with **health insurance** providers offering telemedicine coverage, the costs can be taken care of even more easily.

- **Reduced Waiting Times**

In traditional healthcare settings, patients may have to wait weeks or even months to see a specialist. Telemedicine can reduce wait times by allowing patients to receive consultations and diagnoses from specialists remotely. This can help ensure that patients receive timely care and can prevent conditions from worsening.

- **Improved Public Health**

By providing affordable and accessible healthcare to a larger number of people, telemedicine can help to prevent the spread of infectious diseases. It can also improve the management of chronic diseases, such as diabetes and heart disease, by allowing doctors to monitor patients remotely and adjust treatment plans as necessary.

# Challenges to Telemedicine in India

While the advantages of telemedicine in India are significant, there are also several challenges that plague it. The challenges include:

- **Lack of infrastructure**

One of the main challenges is the lack of infrastructure in many rural areas. In order for telemedicine to be effective, patients need access to high-speed internet, smartphones, and other technology. Without these resources, telemedicine may not be accessible to many people in rural areas.

- **Not enough manpower**

Another challenge is the need for trained healthcare professionals. In order to provide effective telemedicine services, doctors and healthcare providers need to be trained in the use of technology and remote healthcare delivery. This requires specialized training and resources, which may not be available in all areas of India.

- **Safety and security**

Finally, there are concerns about the security and privacy of patient information in telemedicine. Healthcare providers need to ensure that patient information is secure and protected, and that patient privacy is respected.

## What are Mobile Clinics:

Mobile clinics are healthcare facilities on wheels or vehicles that are designed to bring medical services to underserved or remote areas, often where access to traditional healthcare facilities is limited. These clinics are equipped with medical staff, equipment, and supplies to provide a range of healthcare services, including primary care, preventive care, vaccinations, screenings, and treatment for various health conditions.

Mobile clinics play a vital role in improving healthcare access, especially in areas with limited infrastructure or during emergencies. They can adapt to changing needs and locations, making them a versatile resource for healthcare providers and organizations working to reach underserved populations. These clinics are often operated by government health agencies, non-profit organizations, or healthcare providers who aim to address healthcare disparities and improve public health.



## **Advantages of Mobile Clinics-**

### **1) Improved Access to Healthcare**

India's vast geographical diversity makes it challenging for many people, especially those in rural and remote areas, to access healthcare facilities. Mobile clinics can bridge this gap by bringing healthcare services directly to these areas, ensuring that people receive timely medical attention without the need for long journeys to distant hospitals or clinics.

### **2) Cost-Effective Care**

In a country where many individuals and families struggle with limited financial resources, mobile clinics help reduce the economic burden of healthcare. By eliminating travel expenses and making healthcare services available at or near people's homes, mobile clinics make healthcare more affordable for lower-income populations.

### **3) Preventive Services**

Mobile clinics often prioritize preventive care, such as vaccinations and health screenings. This proactive approach helps detect and address health issues early, reducing the long-term healthcare costs and the burden of disease on the population.

### **4) Timely Response to Outbreaks**

During public health emergencies, such as disease outbreaks or natural disasters, mobile clinics can be rapidly deployed. They serve as a crucial resource for conducting testing, providing immediate care, and controlling the spread of infectious diseases.

### **5) Maternal and Child Health**

Mobile clinics play a significant role in improving maternal and child health in India. They offer antenatal care, postnatal care, and child healthcare services, reducing maternal and child mortality rates in underserved areas.

### **6) Dental and Eye Care**

Oral and visual health are often overlooked, especially in rural areas of India. Mobile dental and eye clinics offer services like screenings, treatments, and education, addressing these important health issues.

## **7) Reduced Healthcare Disparities**

India faces significant healthcare disparities based on geographical location and socioeconomic status. Mobile clinics work towards reducing these disparities by bringing healthcare to marginalized communities, ensuring that all citizens have equal access to medical services.

## **8) Community Engagement**

Mobile clinics are often deeply integrated into the communities they serve. They work closely with local leaders and community members, fostering trust and community engagement in healthcare initiatives.

## **9) Flexible and Adaptable**

Mobile clinics can be moved to areas with the most pressing healthcare needs. This adaptability allows healthcare providers to respond to changing health challenges, such as shifting disease patterns or natural disasters.

## **10) Data Collection and Health Surveillance**

Mobile clinics often gather valuable health data, contributing to health surveillance efforts. This data helps authorities and healthcare organizations better understand health trends, allocate resources efficiently, and plan targeted interventions.

## **11) Health Education**

Mobile clinics provide health education and awareness campaigns. By empowering individuals and communities with knowledge about health and wellness, they promote healthier lifestyles and improved healthcare decision-making.

## **Challenges to Mobile Clinics-**

### **1) Limited Scope of Services**

Mobile clinics are typically smaller in size and may not have the space or equipment for complex medical procedures or specialized care. Patients with severe or uncommon conditions may require referral to larger, stationary healthcare facilities, which can delay treatment.

### **2) Resource Constraints**

Mobile clinics may have limitations in terms of staffing, medical equipment, and supplies. A shortage of resources can lead to reduced services and less comprehensive care.

### **3) Sustainability**

Mobile clinics often rely on external funding sources, which can be inconsistent and subject to budget cuts or donor priorities- Ensuring long-term sustainability and financial stability can be challenging.

### **4) Geographical Limitations**

Even though mobile clinics can reach remote areas, there may still be regions that are inaccessible due to extreme terrain, adverse weather conditions, or lack of proper roads and infrastructure.

### **5) Maintenance and Upkeep**

- Mobile clinics require regular maintenance and servicing to remain operational and meet healthcare standards.
- Neglecting maintenance can result in equipment failures and disruptions in healthcare services.

### **6) Community Engagement and Trust**

- Building trust and engagement within communities can take time, especially in areas where there is skepticism or resistance to healthcare services.
- Effective communication and community outreach efforts are essential to gain acceptance.

### **7) Infection Control**

- Ensuring proper infection control measures in the confines of a mobile clinic can be more challenging compared to a stationary facility.
- This can increase the risk of healthcare-associated infections, especially in densely populated areas.

### **8) Data Collection and Record Keeping**

- Mobile clinics may not have the same level of infrastructure for data collection and record keeping as larger facilities.
- Maintaining accurate patient records and ensuring continuity of care can be more difficult.

### **9) Regulatory Compliance**

- Meeting regulatory requirements, obtaining necessary licenses, and adhering to healthcare standards can be more complex for mobile clinics.
- Compliance with healthcare regulations may require extra effort and resources.

### **10) Transportation Costs**

Operating mobile clinics involves ongoing transportation costs, such as fuel, vehicle maintenance, and logistics. Rising fuel prices or vehicle breakdowns can strain the operational budget.

### **11) Dependence on Limited Funding**

- Many mobile clinics heavily rely on external funding sources, which can be unpredictable and may not cover all operational costs.
- A decrease in funding can significantly affect the availability of healthcare services.

### **12) Lack of Continuity of Care**

Mobile clinics often provide episodic care, and there may be a lack of structured follow-up care. Patients who require ongoing treatment or specialist care may face challenges accessing these services.

### **13) Competition with Existing Facilities**

In some cases, mobile clinics may unintentionally compete with established local healthcare facilities, potentially drawing resources and healthcare personnel away from these institutions.

Balancing the roles and collaboration between mobile clinics and existing facilities is essential.

## Key Health Care Initiatives Of The Telangana Government:

### 1) Basti Dawakhana

‘Basti Dawakhana’ are an innovative initiative of the Government of Telangana to bring healthcare services close to the urban poor. 342 Basti Dawakhana have been established by the State in urban areas so far, with one Basti Dawakhana serving 5,000 to 10,000 persons. These centers provide 53 different kinds of free health services including outpatient consultation, medicines, basic lab diagnosis, antenatal/postnatal care, and screening for non-communicable diseases. Specialist consultation is also provided at Basti Dawakhana through Telemedicine. Basti Dawakhana reduce travel and waiting time for patients, reduce out-of-pocket expenditure for patients by serving as an efficient platform for convergence with other NHM programmes, and reduce the burden on secondary and tertiary health care facilities.

### 2) Palle Dawakhana

To ensure that people residing in rural areas have access to the same quality healthcare services as their urban counterparts, including round-the-clock access to doctors, the Government has started the process of converting sub-centres to “Palle Dawakhana”. The Palle Dawakhana will deliver comprehensive primary healthcare services to the local population, will stock medicines for common ailments, and have a fully-equipped laboratory to conduct basic diagnostic tests. Specialist consultations would be available through telemedicine facilities.

### 3) Telangana Diagnostics Scheme

Even though the costs associated with getting diagnostic tests done for medical examinations are very high, most government hospitals do not have facilities for inexpensive diagnostic testing. To bridge this gap, the Government of Telangana launched the ‘Telangana Diagnostic Scheme’ in 2018, as a hub and-spoke model, to provide low-cost pathological diagnostic services and imaging services to the 121 people, with an apex laboratory acting as the hub, and the Urban Primary Health Centres (UPHCs), Community Health Centres (CHCs), Area Hospitals (AHs), etc. serving as the spokes. This model was developed in Hyderabad district, and was subsequently expanded to the entire State.

### 4) Telangana Dialysis Scheme

Telangana is one of the few States in the country to provide quality dialysis services free of cost to its citizens through non-reusable equipment. 104 dialysis centers have been established at district and sub-district hospitals in a hub and spoke model under Public-Private Partnership, with the aim of providing dialysis services in a decentralized manner in all districts in the State. Every year, approximately 6 lakh dialysis sessions are conducted across these centers benefitting an average of 8,500 patients per year.

### **5) Aarogyasri Scheme (now Ayushman Bharat - Pradhan Mantri Jan Arogya Yojana (AB PM-JAY) - Aarogyasri)**

The Aarogyasri Health Care Trust in Telangana is implementing the Arogyasri Scheme (AS), a distinctive State Government-sponsored health insurance programme. The goal of this programme is to assist the Below Poverty Line (BPL) households in the State by lowering catastrophic medical expenditure through equitable and cashless access to high-quality healthcare. The programme offers financial protection for recipients up to Rs. 5 lakh per household each year and an extra Rs. 10 lakh for expensive operations. The Telangana government integrated this programme with the Government of India's Ayushman Bharat - Pradhan Mantri Jan Arogya Yojana (AB PM-JAY) in May 2021. All existing Aarogyasri beneficiaries and benefits were brought under the converged scheme. Additionally, Government hospitals in the State are providing access to the 646 treatments that are covered under PMJAY.

### **6) Rs. 5/- Meal Programme**

The Government has launched a Rs 5/- per meal programme for attendants of patients, jointly with Hare Rama Hare Krishna Mission, which will provide three-time meals every day to the attendants of patients for Rs 5 per meal in 18 major hospitals in Hyderabad / Greater Hyderabad Municipal Corporation (GHMC).

### **7) AYUSH (Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homeopathy)**

The Telangana Government along with the National AYUSH Mission (NAM) has supported AYUSH medical systems since its inception. Telangana has implemented a number of programmes to upgrade AYUSH dispensaries and hospitals, making it the only State with pharmacies in all three AYUSH systems (Ayurveda, Unani, and Homoeopathy). AYUSH Wellness Centers are currently operating in the districts of Warangal and Hyderabad, and AYUSH wings are being expanded in other district hospitals.

## **HealthCare Spending By The Government Of Telangana -**

The budget for the financial year 2022-23 marks a significant increase in the allocation for the Health, Medical, and Family Welfare department in Telangana. The allocation for this department has been raised by ₹924 crore compared to the previous fiscal year. Specifically, the budget for the Health, Medical, and Family Welfare department for 2022-23 has been set at ₹12,161 crore, which is notably higher than the ₹11,237 crore allocated in the 2022-23 fiscal year.

Over the course of a decade, the per capita health budget in Telangana has seen remarkable growth, surging from ₹925 to ₹3,532. This substantial increase reflects the state's commitment to enhancing healthcare services. The healthcare sector in Telangana is experiencing a much-needed boost, with a substantial budget allocation for the financial year 2022-23. In the 2021-22 fiscal year, ₹6,295 crore was allotted to the health sector, and this allocation has seen a remarkable increase to ₹11,237 crore for 2022-

23. This surge represents an increase of ₹4,942 crore in absolute numbers. Moreover, the allocation for the health sector in 2022-23 is not only greater than the allocations in the past two fiscal years but is also a higher percentage of the total state budget.

For the 2022-23 fiscal year, the budget allocation for the health sector constitutes 4.37% of the total budget, which amounts to ₹2.56 crore. The allocation is further divided into ₹5,743 crore under the 'Scheme Expenditure' category and ₹4,968 crore under the 'Establishment Expenditure' category. Typically, the focus is on the 'Scheme Expenditure' category to gauge if there have been increased expenditures on specific projects.

In the 'Scheme Expenditure' category for 2022-23, there has been a notable increase, including ₹1,000 crore for the 'Construction of Medical Colleges and Hospitals' and another ₹1,000 crore for the 'Construction of Super Specialty Hospitals.' It's worth noting that the allocation for these two categories in the previous fiscal year was zero, signaling a significant shift in investment towards healthcare infrastructure and services in the state.

\*\*\*\*\*