# Physical and Technological Infrastructure for Specialized Care in Remote and Hard-to-Reach Areas

#### **ISSUES NOTE**

#### **BRICS 2025**

## 1. Background Information

The challenges in specialized healthcare demand innovative solutions tailored to the population's needs while fostering greater alignment with public programs and policies.

Sustainable infrastructure solutions and technologies for implementing health units guided by the Health 4.0 concept require integrating resources to deliver care, focused on optimizing processes and services, standardizing and improving diagnostic and treatment efficiency, enhancing assistance, and refining clinical and management decision-making through advanced technologies.

In this context, establishing horizontal international cooperation that enables co-development and high-level technical, scientific, technological, and productive exchanges is crucial for creating innovative solutions adapted to local realities. Thus, it is essential to develop solutions that connect the demand for specialized healthcare with the capacity to drive local technological development and innovation. This approach would broaden access to healthcare, reduce technological vulnerabilities, and address health inequities.

The BRICS countries share several public health challenges despite their diverse socioeconomic and cultural realities. These include areas with high population density, remote and hard-to-reach regions, inequities in access to healthcare services, and quality issues that disproportionately affect rural, Indigenous, and vulnerable populations. These factors limit the impact of health policies and lead to significant disparities in life expectancy and quality of life. Additionally, these countries face shortages of qualified professionals and, in most cases, struggle to strengthen the physical and technological health infrastructure to meet the demands of their growing and aging populations.

This agenda, to be discussed within the BRICS framework, can reinforce a commitment to sustainable development by expanding access to high-complexity treatments with innovative yet more affordable technologies. It also aims to strengthen local production capacities while contributing to global health objectives. The proposed approach seeks to advance national physical and technological health infrastructure and build a platform for international collaboration, impacting the group's economic-industrial development of health and public health.

### 2. Priorities

2.1. Sustainable Infrastructure: Evaluation of the physical and technological resources



necessary to support healthcare delivery;

- **2.2. Environmental and Cultural Characteristics:** Consideration of factors impacting healthcare access and outcomes, including climate, geography, and cultural practices;
- **2.3**. **Specialized Care:** Identification of specific healthcare needs requiring advanced expertise and resources;
- **2.4**. **Network Care:** Integration of healthcare services across different levels and regions for continuity and efficiency;
- **2.5. Health 4.0 Technologies:** Utilization of advanced technologies such as AI, IoT, and data integration to enhance care delivery;
- **2.6. Logistics:** Planning for the distribution of resources, personnel, and services to reach all regions effectively;
- **2.7. Specialized Technical Support:** Ensuring the availability of expert assistance to sustain operations and improve healthcare outcomes.



