

Health Care and Assistive Technology

Affordable Quality Healthcare for all

As our country's socioeconomic progress continues, the demand and focus on quality healthcare – physical and mental wellbeing of our citizens – continues to increase. The recent COVID crisis acted as natural test to the healthcare system bringing out its strengths and weaknesses at scale. Currently, India spends nearly 3.8% of its GDP on health care, of which the share of Government is about 1.2%. Among the various sources of financing health care, government sources (including both central and states share) account for 32%, while the out-of-pocket payment from households is the largest source at 63.2%. The public healthcare delivery system in India is almost entirely financed through tax, both at central and state level. Our goal as a country must be to provide access to quality healthcare at an affordable price to every citizen of ours. Today, around 25% of our population does not have quality health coverage at affordable cost, which to many of them is essentially close to zero. This is the primary challenge of healthcare in India.

There are four key pillars of healthcare delivery – infrastructure, healthcare workers, medical equipment and consumables, drugs and vaccines – all of which need to be strong for the country to succeed in its mission of healthcare for all.

India has 0.5 public hospital beds per 1,000 population and 1.4 beds, including public and private hospital beds per 1,000 persons. Specifically on the public healthcare front, there are 155404 and 2517 Sub Centres (SC), 24918 and 5895 Primary Health Centres (PHCs) and 5183 and 466 Community Health Centres (CHCs) respectively which are functioning in rural and urban areas of the country. The density, quality and access of public healthcare facilities is highly variable across states, with the socioeconomically lagging states well below par in all metrics. Even overall as a country, the infrastructure requirements are about 2X short. A major weakness of the primary health care system is the weak gatekeeping mechanism for referring patients through levels of delivery system. A very large section of outpatient care takes place in secondary and tertiary care facilities. This not only crowds out the valuable and limited secondary and tertiary care facilities, but it also reduces efficiency and trust in the public primary care system. Ensuring the primary-tertiary funnel requires inducing major behavior changes through innovation and governance, backstopped by assurance of outcomes throughout the funnel.

There are around 5.76 million health workers which included allopathic doctors (1.16 million), nurses/midwives (2.34 million), pharmacist (1.20 million), dentists (0.27 million), and traditional medical practitioner (AYUSH 0.79 million). Around 70% of them are actively employed in the healthcare system. This is further skewed in terms of distribution across states, rural–urban and public–private sectors. For example, there is a shortfall of 78.9% of Surgeons, 69.7% of Obstetricians & Gynecologists, 78.2% of Physicians and 78.2% of Pediatricians in CHCs across the country...! This problem is difficult to solve, and it is directly linked to the reluctance and inability of qualified healthcare professionals to reside and work in rural areas. While telemedicine can provide certain degree of relief, this requires a creative solution through some form of PPP or differential-mode public service where specialists are indeed available in non-urban areas. Without solving for this problem, quality healthcare cannot reach rural and remote regions of the country.

India is strongly self-reliant in drugs and vaccines, and a significant player in the global pharmaceuticals sector. India is the world's largest supplier of generic medications, accounting for 20% of the worldwide supply by volume and supplying about 60% of the global vaccination demand. Over 80% of the antiretroviral drugs used globally to combat AIDS are supplied by Indian pharmaceutical firms. One critical dependency India faces in growing and sustaining its self-reliance and exports of pharma drugs is its import of active pharmaceutical ingredients (API). India is also weak in new drug discovery that would make it a global leader in new drugs in addition to generics. The country's large pool of scientists and engineers should be put to expand the current industry to developing cutting-edge drugs, including niche leadership in biopharmaceuticals. The biopharma sector also has an indirect impact in building capacity for the biotechnology area that includes bio-services, bio-agriculture, and bioinformatics.

The country imports around 80% of its medical equipment requirements, in particular, the high-tech category. As our overall healthcare expenditure increases organically, and with increased coverage across the country, this is an important area that needs attention. Limited R&D, weakness in high-tech manufacturing, nascent domestic regulatory system that is not of global standards, poor adoption of home-made innovations and products by public healthcare system are key factors limiting progress on this front. Our healthcare systems are yet to take critical advantage of internet, communication, and digital technology ecosystem, like the way other public service delivery systems have successfully done in the country. In recent years, digital health technologies have been used to enhance the coverage of health service delivery, improve the quality of services and to assist in monitoring and supervision. There are also several examples of digital technology being used in payment for secondary and tertiary health care services as part of the public funded health insurance schemes. This needs to move wider and deeper to fully take advantage of the digital infrastructure which is steadily maturing in the country.