

HEALTH CARE SYSTEM- WORKING TOWARDS A HEALTHIER INDIA

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Abstract: Health is a defining concern in public policy discussions in every mature society, often mandating the deployment of enormous populations. Inequalities in health, access to health care, and the quality/cost of treatment contribute to a nation's economic well-being, given a current biological understanding of health and illness. Health insurance covers all clinical quality, not only medical treatment. There cannot be a sole emphasis on publicly financed health care but also on incentives and disincentives for self-care and treatment funded by private individuals to recover from sickness. In countries such as India, where private out-of-pocket expenditure dominates health care expenses, the resulting repercussions are sure to be regressive. At its core, the healthcare system is viewed as general welfare. Consequently, its demand and supply cannot be determined by the market's invisible hand. Vulnerable people should be prioritized, such as children, women, and the elderly. The disparity in health status among rural and urban regions and across states is well established. As one age, inequalities between urban and rural areas grow more prominent, with a five age gap becoming more evident. Apart from the battle for survival, rural villages are infamous for their lack of access to almost every community service. The prevalent practice of female feticide is expected to exacerbate the disparities among rural and urban children. This paper discusses the present Indian health system. The research will concentrate on the health system and its prospects, including its problems and concerns.

Purpose: The purpose of this research is to determine the relevance of the country's health care system. This investigation will look at several sorts of health care providers from various sectors, including the public and private sectors.

Need of the study: The study's objective is to determine the profitability of medical systems as a sustainable, equitable, and traceable method of funding this sector.

Methodology: By definition, this research is exploratory, based on access to previous evidence and surveys from a government document on the health care system's investment, difficulties, and growth drivers.

Findings: The current state of the Indian health care system, its evolution since independence, service providers, investment opportunities, government initiatives, difficulties, and growth indicators are examined in this paper.

Implications: This research will contribute to future studies on the health sector's growth and development. It will assist researchers in appreciating the value and need for a solid health system for a healthy country.

1.1 Essence of Health Care System: Worldwide, health is a societal goal. Health is necessary for meeting fundamental human requirements and achieving a higher standard of living. In several developing countries, the development paradigm is centered on raising living standards. To mention very few, overall health, literacy, equal and expanded work possibilities for all, a reliable and fair people's perception, a healthy and cleaner atmosphere, integrity, consciousness, and life security all serve as important markers of growth's quality [1]. The WHO defines healthcare systems as "any institutions, individuals, and activities with the principal goal of promoting, maintaining, or preserving health." A health service is much more than a hierarchical organization of state-funded health care facilities [2].

1.1.2. Health Care Sector in India: Overview pre and post-independence

Traditionally, in India, health treatment has been dependent on volunteer effort. Since ancient times, traditional health care practitioners have contributed to society's medical requirements. A keen understanding of the medicinal virtues of plants and herbs was handed down from generation to generation for use in therapy [3]. British colonial authority and supremacy altered the landscape. Hospitals established by Christian missionaries gained prominence. Even India's intellectual elite, with their pro-Western prejudices, embraced Western ways. Before independence, India's healthcare system was in disarray, with a high mortality rate and rapid infectious illnesses. Following independence, the Indian government placed a premium on primary health care, and India has made persistent efforts to improve the country's health care system. The government endeavour proved insufficient to address the expanding need for primary, secondary, and tertiary health care. Alternative financing sources were essential to the health sector's viability [4].

1.1.3. India's health care system

A. Traditional Indian Healthcare Systems: Apart from modern medicine, traditional or indigenous health professionals continue to operate in India. Ayurveda, Siddha, Unani, Homeopathy, Naturopathy, and Yoga are popular traditional healthcare traditions. Ayurveda (literally "science of life") is a holistic health care approach that addresses causes, symptoms, diagnosis, and treatment based on all facets of well-being (mental, physical, and spiritual). The Siddha system describes sickness as a state in which the natural balance of the five components inside humans is disturbed, resulting in various types of suffering [5]. The diagnostic procedures used in the Siddha health service are more reliant on the physician's clinical acumen after examination of the patient's pulse, diagnosis, and clinical history.

Yoga is a science and art of physical, mental, moral, and spiritual well-being. Yoga is thought to have been developed some thousand years ago by Indian saints and sages. Yoga derives from the Vedas, and its doctrine is a science and art of being in harmony with the natural world. Yogis rationalised their experiences with Yoga and made a realistic, scientifically prepared approach accessible to everyone [6].

Naturopathy is mentioned several times in the Vedas and other ancient literature, indicating extensively adopted in old India. Naturopathy holds that all illnesses develop due to the buildup of harmful materials in the organism and that allowing for its evacuation results in treatment or alleviation. Furthermore, it believes that the person can make self and self-repairs. Naturopathy varies significantly from another medicine system in that it does not assume only one cause of disease or a specific treatment method, but instead considers the entirety of factors that contribute to infection, including one's abnormal lifestyles, opinions, functioning, sleeping, or comforting, as well as ecological factors that interrupt the body's proper functioning [7].

The Unani school of medicine believes that the body is formed of four primary elements: earth, air, water, and fire, and each has a particular temperament, i.e. dry, hot wet and cold. After mixing and reacting with the four components, a unique chemical with a particular melting point is formed: wet-hot, dry-hot, cold-wet, and cold-dry [8]. The body comprises intricate and simple organs that are supplied by four humours: blood, phlegm, yellow bile, and black bile. Unani medicine is built on health promotion, disease prevention, and treatment principles.

B. Modern (Allopathic) Healthcare Systems in India: In India, the current (allopathic) national healthcare system comprises the public sector, the commercial sector, and an informal network of healthcare professionals [9]. The country's size, scope, and dispersion prevented total compliance with a plethora of well-intentioned norms and laws. While there are standards and rules, compliance is patchy. In actuality, the industry works completely uncontrolled, with few restrictions on the kind of services that may be supplied, from whom, in what way, at

whatever cost. As a result, significant variations in access, price, level, and healthcare quality exist throughout the nation. The Indian health system is divided into three main eras:

Between 1947 and 1983, the care plan was founded on two basic principles: (i) that no one should be refused treatment due to a lack of financial means, and (ii) that the state was responsible for providing healthcare to the populace. This period witnessed some modest accomplishments [10].

In the second phase, from 1983 to 2000, a National Health Policy was unveiled for the first time 1983, articulating the importance of encouraging private enterprise in health care delivery and encouraging the private sector investment in the healthcare system through subsidies. Additionally, the programme improved access to publicly-funded primary healthcare by supporting healthcare facilities in rural regions through National Health Programs [11] (NHPs). Post-2000, the third phase is undergoing another change and expansion of emphasis; the present phase covers critical topics such as public-private partnerships, insurance sector reform, and the government as a funder.

1.2. The Health Care System's Importance:

Physical property and natural wealth cannot be used appropriately without an adequate human capital base, and progress cannot be sustained or increased. As definition of WHO, health is "a state of full bodily, mental, and social well-being, not only the lack of sickness or incapacity." Birth longevity, infant mortality, fertility rate, crude fertility rate, and crude rate of death are widely used to quantify a person's health condition [12]. Numerous factors influence numerous health indices, including per capita income, nutrition, housing, sanitation, clean water, infrastructures, connect directly to government-provided healthcare coverage, topographical environment, employment status, and poverty level (Reddy, 1994). Human health is vital because it directly affects an individual or group's capacity to achieve life goals and objectives and the ability of a community or nation to do so. Health and development growth are inextricably linked: while wellbeing significantly contributes to development, economic development enhances the health of a country's people.

1.3. SERVICES INCLUDED IN THE HEALTH CARE SYSTEM:

The medicare system enables services to be delivered, health data to be managed, medications, vaccines, technologies to be developed, and health care to be funded.

1.4. Public Health Sector:

A) *Primary healthcare* : Auxiliary Nurses Midwives (ANMs) offer treatment in communities, subordinate hospitals, and primary care facilities. In India, the public health system is organised into four tiers: sub-centres at the village level, primary health care serving various rural areas and health centres serving the governmental unit known as a block. This concept was developed to expand medical coverage within available resources and gently transfer patients from lower to higher levels of treatment depending on their needs and the operating system's accessibility. The national government invests in building technological platforms to enhance therapy for hypertension inside this system via its society NCDs Prevention, Screening, Management, and Monitoring Initiative, which is part of India's Comprehensive Primary Care Treatment Program. These public-private collaborations are crucial in rural regions, which have witnessed consistent rises in cardiovascular diseases and other chronic co morbidities such as hypertension, but whose health care system has historically concentrated on maternity and child health and infectious disease management [14]. As is the case with any complicated intervention, digital technology procedures must be customised to the local environment, and contextual changes may be necessary to attain comparable digital technology outcomes in past scenarios. Districts, which are organizational segments within states, have been imposed with the operational responsibility of providing health care and sustaining healthcare facilities; consequently, the contextual properties of medical facilities and the

surrounding communities at the district level could provide valuable insights into the areas of strength and weaknesses of the existing healthcare system as the country is going toward scaling up high blood pressure care through advanced technology-supported approaches [15].

b) Centers of community care and health: Located across the nation, as well as hospitals that specialise in a particular area of medicine and academic institutes. This category includes universal health insurance programmes and state employee insurance schemes. Medical Assistance Program (Medicaid) and other third-party payment services, such as the Yashaswini and Arogya Bhadratha Schemes, and public sector organisations and private companies that provide healthcare benefits to their workers via their own .

1.5. THE PRIVATE SECTOR COMPRISES: This group includes health care facilities, polyclinics, skilled nursing homes, dispensaries, and offices of health workers and clinics. There are outpatient and inpatient services available.

2. AN OVERVIEW OF THE SECTOR OF HEALTH CARE: India's healthcare business is comprised of hospitals, medical devices, healthcare coverage, diagnostic trials, internet-based services, and health tourism. The healthcare industry has grown significantly over the previous five years, with an average compound annual rate of over 22% since 2016. During the past several decades, the healthcare system has been a critical source of money and jobs in India.

Table 1 growth trends in helath care sector (usd billion)

Table 1A growth trends in health care sector USD Billion	
Year	Investment
2008	45
2009	52
2010	60
2011	68
2012	73
2014	81
2015	104
2016	110
2017	160
2020	280
2022	372

2.1.1. Employment and health care system: According to the (2021) Niti Ayog India's health industry has grown rapidly and sustainably, creating many job prospects over the past several years. In 2015, the US employed a projected 4.7 million healthcare professionals, according to KPMG and the FICCI. Ayushman Bharat's implementation in 2018 resulted in the creation of employment. The NSDC projects that the health business will employ 7.4 million people by 2022, increasing 2.75 million jobs. Additionally, the health industry indirectly supports employment and prosperity in

non-health sectors. Insurance expansion and the digitalization of the Indian health industry will result in new jobs. Each of the approximately 150,000 Health and Wellness Centers (HWCs) will be controlled by a multidisciplinary team of (MLP) Mid Level Practitioners, ANMs, ASHAs, and healthcare (male) staff. To manage HWCs, about 150,000 MLPs with the relevant training and certification will be required [13].

2.1.2. Trade and Investment atmosphere: India increased its ease of doing business rating by 79 positions, which was 63 comes down from 143 from 2014 to 2019 respectively. India was also rated first in the Central and South Asian region of the Global Innovation Index, climbing 33 positions it's coming down 48th from 81st from 2015 to 2020. During the last two decades, pharmaceuticals accounted for two-thirds of any foreign capital in the healthcare business (Niti Ayog report 2021).

As part of its Sustainable Development, India is committed to attaining Universal Health Coverage. In this year's Budget Speech, health and welfare got INR 2,23,846, representing a 94% increase over the previous year. Government health spending would climb to 2.5 per cent of GDP by 2025 as part of India's National Health Policy. "Prime Minister's Mission," which was established, focuses on developing a management system for service data and allowing its seamless interchange, increasing enrollment in government and non-government facilities, and facilitating medical decision-making using telemedicine. The National Digital Health Mission (NDHM) may help to ensure that the health system operates in scientific proof, transparent, and efficient manner. Strict implementation of the NDHM is expected to contribute about USD 200 billion to the health sector's economic value over the next decade. The country received \$6.8 billion in foreign capital (FDI) in health centres between April 2000 and June 2020. A completely automated system to FDI in health and medical equipment is permitted up to 100%. Additionally, the AYUSH sector is 100 per cent open to foreign direct investment in health and medical tourism. The necessary statistics are shown in Table 3.

2.1.3. a. Tax Rebates: Section 80-IB of the tax law has been expanded to include non-governmental healthcare providers that run non-metropolitan health services with at least 50 beds. For the first five years of operation, health centres with more than 100 beds are now eligible for a 100 per cent profit deductible of 80-IB. Telemedicine and remote radiography are made feasible by deducting up to 250 per cent of authorized operational technology expenditures.

2.1.3.b. Health Diplomacy: It is anticipated that when existing global chains are gradually phased out, and local "aatmanirbhar" counterparts form in resource-scarce nations, the consequences of government-to-government collaboration with independent nations or regional blocs would be mutually beneficial. India's deal with the 50-nation bloc may provide a unique chance to co-create/collaborate and service captive markets while incorporating health security into a larger national security agenda.

3. DRIVERS OF GROWTH

3.1 Demographic and epidemiological changes, as well as health care transitions, are anticipated to boost demand for healthcare in the coming years. By 2026, it is anticipated that 8% of Indians would earn over \$12,000 per year on average. Two more critical developments to be aware of are increases in average lifespan and the accompanying population ageing. India will be the world's biggest and most populated country by 2028, with a predicted life expectancy of 70 years and a forecasted population of 1.45 billion people. Worldwide, infectious illnesses continue to be a substantial cause of mortality and disability [14].

3.2. Medical Value Travel (MVT): India is rapidly gaining popularity as a destination for healthcare tourists from throughout the globe. As more travellers incorporate well-being into their holiday planning, the expansion of well-being tourism is accelerating. MVT is another significant factor in India's healthcare progress [15].

3.3. Enabling Policy Environment: India's healthcare sector is likely to grow in the following years due to recent legislative reforms. This would be accomplished by increasing public health expenditure to 2.5 per cent of GDP by 2025, using innovative and large-scale programmes like Ayushman Bharat, the goal of the government of India for spending USD 200 billion on health care by 2024, and implementing other Aatma Nirbhar Bharat Abhiyaan projects [16].

3.4 Supply-Demand Gap: According to a Niti Ayog (2021) report, roughly 5% of mammograms available in the United States of America are conducted in India. Approximately 30% of cancer hospitals for cancer use advanced imaging methods. By 2025, the country will need an extra 3 million beds to reach the target of 3 beds per thousand inhabitants. Additionally, India would need an extra 1.54 million physicians and 2.4 million nurses to address the country's expanding healthcare demands. Strengthening Ayushman Bharat (PM-JAY), which increases the growth of this market practitioner in urban areas, Tier 2 and Tier 3 towns, and rural areas would also raise the relevance of health professionals [17].

3.5. Additional Factors: The increasing use of telemedicine and other modern technology and the adoption of the PPP framework in healthcare contribute to India's healthcare industry's accelerated expansion. Accreditation and innovative healthcare systems are becoming increasingly prevalent in the private sector [18]. Private hospitals are increasingly establishing hospitals outside large urban regions, in smaller, less populated cities and rural locations. Through creative programmes, numerous governments are also encouraging PPP investments in healthcare.

4. Key Segments of the Health Care Sector:

4.1. Healthcare and Infrastructure: Hospitals account for around 80% of the health sector of the Indian industry's overall revenue. In India, hospital beds are concentrated in UP, Maharashtra, TN, WB, Karnataka, Kerla, Telangana, and West Bengal, which account for over half of the population. Annual income for the hospital business is predicted to expand significantly over the next few years as public demand for treatment and healthier tourism increases. This was 61.79 billion in 2017 and is expected to reach 132 billion by 2023, growing at a compound annual growth rate of between 16 and 17 per cent [19].

4.1.1. Specific Enabling Policies: In 2006, the Government of India's Department of Economic Affairs unveiled "The Plan for Financial Assistance to PPPs in Infrastructure." Sixty-four projects have received final clearance under the current framework. The first sub-scheme encompasses treated wastewater, water system, solid waste disposal, public health, and education.

4.1.2 Investment Opportunities: Local and foreign investors are likely to invest in India's health care system. Hospitals will gain from the government's ambition to boost health care expenditure to 2% of GDP by 2025. Mainly speciality hospitals are in great demand as providers of tertiary hospitals. There is a massive discrepancy between both the bed capacity available and the level that must be given at this time. Globally, the average hospital bed density is three beds per 1,000 inhabitants; so, India will need an extra 2.2 million beds over the next 15 years [20].

4.2. Health insurance: As per Brand Equity Foundation of India's reports, overall direct premium income from health insurance climbed 17.16% year on year to INR 516.37 billion in FY2020. India's private medical insurance sector accounts for less than 10% of the entire market. India's private insurance sector accounts for less than 10% of the whole market[21].

4.2.1. Specific policy enabling measures: Health insurance uptake in India is expected to increase from 34% to 50% due to the government-founded Ayushman Bharat project. Additionally, the COVID-19 pandemic has facilitated the growth of the insurance industry.

4.2.2 Prospects for investment: Previously, just a tiny fraction of the Population in India was insured. Over the years, there has been an increase in the number of persons enrolling in health insurance. Demand for programmes that address previously uninsured ailments has increased. There has been a growth in the lower and middle classes and an increase in illness burden, which is pushing the healthcare insurance industry's investment prospects.

Thirdly, India's pharmaceutical industry is the world's most enormous volume. Pharmaceuticals are expected to earn a maximum of USD 130 billion in India by 2030, up from USD 41 billion presently. In India, the biosimilars market is expected to be valued at approximately USD 3 billion in 2015 and grow to USD 12 billion by 2025. By 2025, India's biotechnology sector is predicted to surpass USD 100 billion, growing at a compound annual growth rate of more than 30%. Additionally, manufacturing costs for the pharma companies are around 33% cheaper in China than in the United States and continue to decline. India is the largest provider of generic medicines globally, accounting for 20% of global generic pharmaceutical exports. India is home to eight of the world's top twenty generic pharmaceutical businesses. India exports drugs to almost 200 nations, the USA being the primary client. According to the World Trade Organization, India placed 3rd in global trade and 9th in terms of global value in 2019. (WTO). India's pharmaceutical exports increased at a CAGR of 5.98 per cent between 2016 and 2020, reaching Us\$ 16.29 billion in FY20. India's pharmaceutical imports climbed by 9.21 per cent compound annual growth rate to USD 2.3 billion in FY20 [16].

Around 2,500 biotechnology enterprises in India employ over one million people. Each year, approximately 15,500 biotechnology students graduate and join the sector.

4.3.1. Special Facilitating Policies: The pharmaceutical sector has made several efforts to accelerate clinical studies and product approvals. Institutions for animal and biocompatibility testing will be established to help promote India as a clinical trial centre. Additionally, the government has made steps to increase medication accessibility. In collaboration with BIRAC and the DBT, the National Biopharma Mission funded the development of ZyCoV-D, India's first indigenously synthesised DNA vaccine candidate against COVID-19. It brings together industry and academics and supports interactions for effective information sharing, technical and entrepreneurial mentorship, and incubation of start-ups via Bio-NEST [22].

4.3.2 Investment Prospects: India produces over 500 different kinds of APIs. The World Health Organization's prequalified list of APIs is given by 57 per cent of the country's production. Indian businesses submitted a third of all Abbreviated New Drug Applications in 2020. (ANDAs). APIs have historically been a substantial source of India's reliance on China. Up to 80% of India's API is imported from China [23].

4.4 Medical Devices, Equipment, and Diagnosis

India's economy is booming due to a spike in the manufacture of medical equipment. The Indian medical equipment business has far fewer barriers to entry than other industries, and the industry is estimated to reach \$50 billion by 2025. During the previous three years, the medical device business has risen at a compound annual rate of 15%. India presently has a diagnostics industry of around \$4 billion. About two-thirds of this class is divided into subcategories. Diagnostics revenue is predicted to double to more than \$32 billion by 2022, growing at a CAGR of 20.4 per cent. By 2025, India aims to export \$10 billion worth of medical products to the rest of the world. Japan, China, and South Korea are Asia's largest markets for medical devices, with India coming in fourth. Orthopaedics and Prosthetics: Knee Implants, Artificial Joints Hearing Aids, Pacemakers, and Disposables & Consumables: Needles, syringes, syringes Diagnostic Imaging: Magnetic Resonance Imaging (MRI), X-Ray, and Ultrasound are the Medical devices [24].

4.4.1. Specific Policy Enabling: According to the government, the Jan Aushadhi shops presently stock 204 various kinds of surgical equipment; this number will be expanded to 300 even by the end of March 2024. Additionally, individuals may obtain free diagnostic treatments at Health and Wellness Centers as part of the Ayushman Bharat initiative. The government has launched a 'Production Ecosphere Cluster Development' policy to boost indigenous medical device manufacturing. Various medical equipment parks are being built around the country in five industrial clusters. Firms are likely to 'plug and perform' in these parks, which also have the necessary infrastructure.

4.4.2. Investing Possibilities: The government has imposed a 5% tax on various medical items to fund health services and infrastructure. Importing medical devices into India will become more costly, benefiting indigenous companies. India's diagnostics sector is ready for growth. The rate of development is likely to accelerate in the following years. Cardiology and neurology are two sectors in which diagnostic and pathology laboratories diversify their services.

4.5. Medical Travel

The medical tourism sector in India, commonly known as MVT, is growing. India's medical tourism sector was predicted to be valued between USD 5 and USD 6 billion by 2020. India was placed seventh in the world's top twenty health travel market a year ago and third in Asia-Pacific. India's desirability as a medical tourism destination is attributed to various factors. Additionally, worldwide demand for health services such as yoga and meditation is increasing, as is available to world-class clinics and competent healthcare experts and cheap treatment costs compared to other nations.

Table: Prices for routine medical treatments in key medical value travel locations.

Medical Procedure	India	Thailand	Malaysia	Singapore	Turkey	South Korea
Heart Bypass	7500	15000	12100	17200	13900	26000
Angioplasty	5700	9200	8000	13400	8300	17700
Heart Value Replacement	9500	17200	13500	16900	17200	39900
Hip Replacement	7200	17000	8000	13900	13900	21000
Hip Surfacing	9700	13500	12500	16350	10100	19500
Knee Replcement	6300	14000	7700	16000	10400	17500
Spinal Fusion	10300	9500	8000	12800	16800	16900
Dental Implant	900	1720	1500	2700	1100	1350
Lap Band	7300	11500	8150	9200	8600	10200
Gastric Sleeve	8000	9900	8400	11500	12900	9950
Gastric Bypass	7000	16800	9900	13700	13800	10900
Hysterectomy	5200	3650	4200	10400	7000	10400

Breast Implant	3000	3500	3800	8400	4500	3800
Rhinoplasty	2400	3300	2200	2200	3100	3980
Rhytidectomy	3500	3950	3550	4400	6700	6000
Liposuction	2800	2500	2500	2900	3000	2900
Abdominoplasty	3500	5300	3900	4650	4000	5000
Lasik (Both Eyes)	1000	2310	3450	3800	1700	1700
Ivf Treatment	2500	4100	6900	14900	5200	7900

Sources: Niti Ayog Report 2021

Green figures indicate cheap costs and blue figures indicate moderate pricing, and yellow figures indicate the highest prices in the table above. In 2019, India would get over 697,000 FTAs on pharmaceutical visas, up from 495,056 last year. Numerous medical tourists arrive from nations including Afghanistan and Pakistan, Pakistan and Oman, and Bangladesh and the Maldives. India anticipates housing 697,000 FTA medical visa holders in 2019, a considerable increase from the 495,056 issued in 2017. MVT is commonly used in India for cardiovascular, orthopedic, organ transplantation, cancer therapy and bariatric surgery [16].

4.5.1. Specific Policy Enabling: The e-tourist visa was extended to cover medical appointments in September 2014. A medical attendant's e-tourist access has also been permitted. Numerous entrance ports and the ability to remain longer on a medical visa have been improved. The Indian government is now promoting Ayurveda, yoga, and other old Indian medicinal traditions worldwide.

4.5.2 Investment Possibilities: Capital investment opportunities have opened up due to the increase in demand. Numerous healthcare professionals are expanding their facilities to serve patients requiring more critical or specialized care. Multiple well-known hospital systems are constantly pursuing more money to support future expansion. Medical tourism enables investment in new diagnostic technologies and training grounds for nurses and paramedics.

4.6. Health Treatment: Home healthcare may save patients between 15% and 30% on hospital expenditures, reducing the need for extra real estate and infrastructure to provide the same quality of medical care as a hospital. India is predicted to minimize hospitalization by up to 65 per cent with home healthcare, which has three primary components: in-home healthcare technology, health screening, assertion, self-diagnosis, and telehealth and telemedicine alternatives. These three categories include in-home health services such as patient care and medical consultation sessions. Following the lockdown period, it is anticipated that the usage of telemedicine to examine and treat patients would gain popularity [25].

4.6.1 Investment Prospects: Telemedicine is becoming a more viable option to conventional medical treatment due to the isolation and loneliness associated with hospital visits. By 2020, hospitals, businesses, and e-pharmacies in India will all use telemedicine services in some way.

4.7 Telemedicine and other health-related technologies: Telemedicine is expected to generate over \$ 830 million in revenue in 2019 in India. It is expected to grow at a rate of 31% between 2020 and 2025, reaching USD 5.5 billion.

4.7.1. Specific Policy Enabling Measures: The Guidelines post-covid 19 and the teleconsultation programmes e-Sanjeevani OPD and e-Sanjeevani have enhanced the quality of disease diagnosis, treatment, and management. According to e-projected Sanjeevani's completion timeline, approximately 1 million teleconsultations would be conducted in 550 Indian districts by the beginning of December 2020.

4.7.2. Investing Possibilities: Many individuals in rural and semi-rural regions cannot get medical treatment due to physician scarcity in such areas. There are possible answers to telemedicine and e-accessibility health's difficulties, owing to India's widespread usage of smartphones and increased mobile connection. Additionally, it can save lives and money in the future by offering 5-minute consultations through telemedicine. Telemedicine may be utilized to export medical services in the future. Cellphones and artificial data technologies for monitoring general health and delivering virtual treatment through cellphones have the potential to reduce comorbidities drastically. After negotiating a PPP contract with a State Government, a current NATHEALTH provider would cover 172 primary health institutions in metropolitan regions[16].

.5. Health care industry challenges

Policymakers may face obstacles because of India's diverse demographics, political structures, social systems, and recent economic achievements. This section examines India's healthcare delivery challenges and the underlying cultural, economic, and political circumstances necessary for transforming the Indian healthcare business. Private healthcare is increasing at an unsustainable rate in India due to socioeconomic and political turmoil and a lack of government oversight.

5.1. Inequality issues: Health inequalities are inextricably related to economic and social inequality, and it's eye-opening to recognize this relationship. Economic and social inequalities have a detrimental effect on people's health. Racial and ethnic disparities have a direct impact on mortality, morbidity, and life expectancy. Additionally, the distribution of wealth is more critical than a shortage of money itself. Only in the United States is such a vast inequality in health care access present. Only five nations spend less on public health than the rest of the world (Burundi, Myanmar, Pakistan, Sudan, and Cambodia).

5.2. Socioeconomic Challenges: Economic development is a critical indicator of a country's well-being. The financial viability of the healthcare system is inextricably linked to its quality. Healthcare prices have risen dramatically in India due to recent monetary policy developments. In 1991, a fiscal policy reform programme was launched to stabilize the economy and boost growth rates. Countries like India, with a vast yet rapidly growing population, see a strong correlation between population growth and health results. Numerous Indian states have among the country's worst health and economic conditions, owing to a lack of focus on population growth. Health care difficulties have been compounded by urbanization. Illiteracy is a persistent danger to the social fabric, as is a lack of understanding, affecting health results. The continuance of poverty in society exacerbates the health issue. As a result, health inequalities occur, with poor individuals suffering a more significant toll on their well-being than better socioeconomic situations [26].

5.3. Political Determination: Elected officials no longer need to communicate with citizens before making major policy choices. Without elections for five years, citizens cannot voice their thoughts on the government's policies. When it comes to the Indian government, it is common for them to deliberately or accidentally create gaps in the development process. There must be a solid political will to improve health policy, as with every change. True structural transformation requires long-term political commitment.

5.4. Emergence of private healthcare: India has seen a surge in personal health services in recent years. It is becoming more critical for the private sector to contribute to creating and reducing healthcare expenses in the face of government budget restrictions. Private medical insurance and growth insurers have increased in popularity. Concerns have been made over the private sector's fast growth in the United States. Health care institutions are under growing pressure to demonstrate the effectiveness and suitability of their services. Clinics often charge patients excessively for diagnostic tests and prolonged hospital stays. Organizational pressure to lower the 'cost per illness event' exacerbates the absence of regulation.

5.5. Additional Challenges: A critical source of worry is the absence of a trustworthy healthcare delivery system. Around the nation, medical instructors are in short supply. To ensure the continued growth of India's healthcare business, competent people, lower-cost technology, and improved infrastructure must all be readily accessible. Another issue would be recruiting capable people in India to offer auxiliary healthcare services, particularly those delivered by voice. Despite these achievements, a sizable number of the population continues to suffer and die due to readily avoidable illnesses, a lack of inexpensive and high-quality treatment, and starvation. The most susceptible are women and children from low-income families.

Problem areas include:

Maternal and child health: Child and maternal-child mortality are steadily dropping. Only about half of pregnant women get adequate prenatal care, including three prenatal visits. This percentage has remained constant and modest throughout time. While the per cent of kids aged 12 to 23 months who already have received all immunizations has increased from 46% in 2004 to 54% in 2008, these levels remain intolerably low. India will be unable to meet the Millennium Development target for health at the current pace of advancement.

Nutrition in childhood: Despite the world's most innovative infant feeding programs, child malnutrition statistics have remained stable for almost two decades: 48% of children under the age of 5 are stunted, 43percent of the total are underweight, and 20percent of total are rejected. Simultaneously, new health issues emerge. The rise in chronic adult illnesses and injuries strains the system's response capability. Non communicable diseases and injuries represent approximately 60% of India's burden of disease, led by cardiovascular disease, mental disorder, trauma, cancer, and diabetes. While HIV prevalence has lately been reduced to an approximated 0.41 per cent of the population of around 2.5 million individuals, it remains a severe burden that demands continued efforts to avoid a catastrophic, broader widespread pandemic. Numerous nations face extreme dangers from tuberculosis, malaria, polio, and dengue [27].

Financial constraint: In India, out-of-pocket expenses account for more than 70% of total health expenditure, putting them the most common method of funding health care. This puts families in severe financial difficulty. According to the 60th wave of the National Sample Survey, 63 million people or 12 million families fell into poverty in 2004 due to health care costs. Most of these families (79%) fell into poverty due to outpatient treatment, which included medicines, while the remaining (21%) fell into poverty as a result of inpatient care. There is a significant demand for tertiary care centres that prioritise the treatment of lifestyle problems, concentrating on neurology, cardiology, cancer, and orthopaedics. Tertiary hospitals are predicted to grow ahead of the rest of the health sector in the following years, owing to the rising frequency of lifestyle disorders and the accelerated growth of medical tourism.

Shortage of medical personnel: India is suffering from a severe lack of trained medical personnel, particularly physicians, nurses, and especially paramedics, who are more eager to work in rural areas with limited access to care than doctors. Medical training and education are in high demand, creating further opportunities for private operators or public-private partnerships (PPP).

Systemic Constraints: Regardless of the Central Government's emphasis on health, maintaining enthusiasm in the states will be a significant challenge. Increased funding for health services must improve access and delivery of health services. To attain the MDGs for health, the following structural constraints must be addressed:

Spending on public health is ineffective for the reasons listed: (i) a total absence of public accountability and incentive system; (ii) unproductive focusing and an inadequate focus on core public health activities; (iii) a fragile data atmosphere, coupled with insufficient monitoring and closer examination of impact studies; (iv) a lack of engagement with the non-government industry and a lack of an "entire system" point of view; and (v) insufficient human resources in both numbers.

Provision of Private Health Care That Is Not Regulated: When confronted with disease, 80 per cent of Indians opt for private care. However, approximately half of these visits are to competent and licenced physicians practising contemporary medicine. Numerous privately-owned facilities continue to be unregulated or get periodic inspections. Private care is unorganized and not concerned with efficacy, quality, cost, or improved patient care. Accreditation is a relatively new concept. While the government acknowledges the need for early access to critical services, many continuing initiatives appear to be ad hoc in character. Novel collaborations with non-governmental organizations

Additionally, professional providers must be evaluated and monitored to ensure the appropriate delivery of critical health services.

Health Insurance Coverage Is Inadequate: Around 20% of Indians have some health insurance, the bulk of which is inadequate. Almost each private medical practitioner requires families to pay the total cost of therapy upfront. As a result, individuals, particularly the impoverished, are particularly susceptible. There is still a considerable distance to go before a sizable portion of India's population is financially protected against health-related disasters.

There is inadequate emphasis on communication to improve health and increase access to care: India's medical system is poorly unprepared to cope with non-communicable illnesses. To address these challenges, efforts in preventive and preventive care are essential. It is critical to concentrate on critical newborn and early child feeding habits to combat malnutrition.

6.1. Several notable government initiatives:

Numerous policy documents, including from 2002 and the Rural Health Mission's 2005–2012 report, urge higher health spending. In September 2021, the Indian government launched the Ayushman Bharat digitization programme. According to the mission statement, the organization's objective is to link hospitals via digital health technologies throughout the country. In June 2021, the Department of AYUSH and the Indian networking sites site Bolo India joined to raise knowledge of traditional Indian medical systems, particularly Siddha, Yoga, Unani, and Ayurveda, among the Indian populace. According to an Indian govt official, the Indian government intends to develop the country's health systems by using credit facilities of Rs 500 billion (\$6.8 billion). This deal will cover more than 10 million people over the next year. Mr Rajnath Singh, India's Defense Minister, launched it in May 2021 to offer telemedicine to military personnel and veterans. In May 2021, the NDHM platform registered 3,156 doctors and 1,490 facilities, yielding 11,95,000 Health IDs. In May 2021, Amphotericin-B, an antifungal medicine used to treat "Black Fungus," will see a considerable increase in supply and availability. The National Commission for Allied and Health-care Professions Bill 2021 was enacted in March 2021, establishing a body to regulate and maintain healthcare practitioners' educational and professional standards. Union Budget 2021 included Rs. 2,32,846 crores for the fiscal year 2022 healthcare system budget, a 2.37-fold or 137-per cent increase over the previous year. Over the next six years, a total of Rs. 64,180 crore (US\$ 8.80 billion) would be spent in the healthcare sector to boost primary, secondary, and tertiary care, as well as medical systems and institutions for the early diagnosis and treatment of new or developing illnesses (Nutrition Mission). The Union Budget for 2021-22 provides the "National Health Mission" of Rs. 37,130 crore (US\$ 5.10 billion) (NHM). The Union Budget for 2021 includes an additional Rs. 2,122 crore (US\$ 291.39 million) for the Ministry of AYUSH, raising the total to Rs. 2,970 crore (US\$ 407.84 million).

Road map for the future: Medical equipment manufacturers have various opportunities in India. In India, many people have become aware that they require medical care. • The versatility of the Indian healthcare market benefits all business sectors, including providers, payers, and digital healthcare enterprises. By the end of the fiscal year, it is predicted that Indian hospitals would generate an additional Rs 8.6 trillion (\$132.84 billion) (FY22). The Indian government wants to dedicate 2.5 per cent of GDP to health care by 2025. To summarise, industry forecasts predict that health care spending will more than triple to Rs 8.6 trillion (US\$ 133.44 billion) by 2022. Medical expenditures accounted for 1.2 per cent of GDP in India's 2021 budget. As the middle class expands and new illnesses emerge, health insurance grows in popularity. The need for an economical, quality medical sector is expected to increase in the coming years. Since FY19, total direct premium revenue from health insurers has climbed by 13.3 per cent annually to Rs. 58,572.46 crore. Healthcare currently accounts for 29.5 per cent of the entire gross domestic product in the United States. According to industry estimates, health tourism would attain revenue of Us\$13.42 bn by 2026. According to Indian Tourist Information at a View 2020 report, 697,300 people travelled to India in FY19 for medical treatment. By the end of fiscal year 22, India's healthcare facilities are expected to reach \$349.1 billion (FY22). By 2025, growth is expected to reach \$10,6 billion. Furthermore, the Department for the Promotion of Business and External Trade reports that FDI inflows into pharmaceutical enterprises totalled 18.12 billion dollars between April 2000 and June 2021.

Conclusion

India's health situation is now contrasted. While health tourism and private treatment are pushed, a sizable portion of the Indian population continues to live in fear of treatable ailments that get little attention from politicians. India's National Rural Health Mission is a specific example of an initiative that prioritizes public health care. Whereas the government has increased healthcare spending via programs such as NRHM, further effort is needed. Priority will be given to developing effective and sustainable health systems capable of meeting the simultaneous pressures of the rise in non-communicable disease and the increasing demand for higher-quality and more comprehensive health care.

REFERENCES:

1. Fleetwood, J., *Social justice, food loss, and the sustainable development goals in the era of COVID-19*. Sustainability, 2020. **12**(12): p. 5027.
2. Nutbeam, D. and I. Kickbusch, *Health promotion glossary*. Health promotion international, 1998. **13**(4): p. 349-364.
3. Bone, K., M. Simon Mills, and M. Fnimh, *Principles and practice of phytotherapy: modern herbal medicine*. 2012: Elsevier Health Sciences.
4. Alawode, G.O. and D.A. Adewole, *Assessment of the design and implementation challenges of the National Health Insurance Scheme in Nigeria: a qualitative study among sub-national level actors, healthcare and insurance providers*. BMC Public Health, 2021. **21**(1): p. 1-12.
5. Sen, S. and R. Chakraborty, *Revival, modernization and integration of Indian traditional herbal medicine in clinical practice: Importance, challenges and future*. Journal of traditional and complementary medicine, 2017. **7**(2): p. 234-244.
6. Newcombe, S., *The revival of yoga in contemporary India*. Oxford Research Encyclopaedia: Religion, 2017.
7. Singh, I.P., et al., *Natural products: drug discovery and development*, in *Drug Discovery and Development*. 2021, Springer. p. 11-65.
8. Rahman, A. and M. Aslam, *The Unani Concept of Mizaj (temperament) and its Correlation with Biodiversity in Present Epoch-A*. interaction. **25**: p. 26.
9. Karan, A., et al., *Size, composition and distribution of human resource for health in India: new estimates using National Sample Survey and Registry data*. BMJ open, 2019. **9**(4): p. e025979.
10. Khandelwal, S.K., et al., *India mental health country profile*. International review of psychiatry, 2004. **16**(1-2): p. 126-141.

11. Qadeer, I., *Draft National Health Policy 2001-I: Debt Payment and Devaluing Elements of Public Health*. Economic and Political Weekly, 2002: p. 12-16.
12. Breslow, L., *A quantitative approach to the World Health Organization definition of health: physical, mental and social well-being*. International journal of Epidemiology, 1972. **1**(4): p. 347-355.
13. Porter, M.E. and M.R. Kramer, *Creating shared value*, in *Managing sustainable business*. 2019, Springer. p. 323-346.
14. Aayog, N., *Annual Report 2020-21 of Niti Aayog*. 2021, Government of India.
15. Kozak, M. and S. Baloglu, *Managing and marketing tourist destinations: Strategies to gain a competitive edge*. 2010: Routledge.
16. Sarwal, R., et al., *Investment Opportunities in India's Healthcare Sector*. 2021.
17. Hooda, S., *Decoding Ayushman Bharat*. Econ Political Wkly, 2020. **55**: p. 107-115.
18. Nayak, B., S.S. Bhattacharyya, and B. Krishnamoorthy, *Application of digital technologies in health insurance for social good of bottom of pyramid customers in India*. International Journal of Sociology and Social Policy, 2019.
19. Rajagopalan, S. and A. Choutagunta, *Assessing healthcare capacity in India*. 2020.
20. Mulcahy, P., et al., *Is there an association between public spending on health and choice of healthcare providers across socioeconomic groups in India?—Evidence from a national sample*. Social Science & Medicine, 2021. **285**: p. 114149.
21. Vijai, C. and W. Wisetsri, *Rise of Artificial Intelligence in Healthcare Startups in India*. Advances In Management, 2021. **14**(1): p. 48-52.
22. Jha, V., et al., *Science Diplomacy*. 2021.
23. Singh, S. and H. Popli, *Indian Active Pharmaceutical Ingredient (API) Industry—An overview on Challenges, Opportunities & Regulatory prerequisites*. International Journal Of Drug Regulatory Affairs, 2021. **9**(2): p. 66-76.
24. Begum, A. and A. Imran, *Performance of Digital Economy in India*.
25. Bjork, S., et al., *Global policy: aspects of diabetes in India*. Health policy, 2003. **66**(1): p. 61-72.
26. Li, X., et al., *Urbanization and health in China, thinking at the national, local and individual levels*. Environmental Health, 2016. **15**(1): p. 113-123.
27. Palmateer, N.E., et al., *Rapid decline in HCV incidence among people who inject drugs associated with national scale-up in coverage of a combination of harm reduction interventions*. PloS one, 2014. **9**(8): p. e104515.

