



Home Office

Country Information Note

India: Medical and healthcare provision

Version 2.0

April 2023

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Assessment

Updated: 26 April 2023

Guidance on medical claims

This note provides country of origin information (COI) for decision makers handling cases where a person claims that to remove them from the UK would be a breach of Articles 3 and/or 8 of the European Convention on Human Rights (ECHR) because of an ongoing health condition.

It is not intended to be an exhaustive survey of healthcare in India.

For general guidance, see the instruction on [Human rights claims on medical grounds](#).

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Country information

Section 1 updated: 26 April 2023

1. Healthcare system

1.1 Role of the national and state governments

1.1.1 The World Health Organisation (WHO) 2022 report, Indian Health System Review, stated:

'India has a federal structure of governance with national and state jurisdiction over policies. In the health sector, this means decision-making, planning and health delivery systems are influenced by the Central national (Union) and state governments.

'Under the Indian Constitution of India, health is a state subject, and implementation of health programmes is left to state governments. The national government plays an overall stewardship role, providing vision and funds to policies and programmes. State governments play a larger role combining the role of vision, leadership, funding, regulation and delivery of health care. Health-care services are delivered by a range of public and private providers. Public sector health providers function at different levels within states and are accountable to local administrative authorities... There are a broad range of private providers, from individual practitioners to hospitals, that are subject to a variety of regulations, with various level of adherence...

'Given the constitutional division of responsibilities, the legislation, vision and financing and delivery of health-care services has largely been the preserve of the state governments, albeit with periodic interventions from the Central Government. Funding from state governments accounts for two-thirds of public health expenditure in India, the rest consisting of Central Government contributions.'¹

1.1.2 The WHO report, Indian Health System Review, also stated:

'The 2002 NHP [National Health Policy] proposed strengthening the health system in addition to specific vertical disease control programmes...

'Following the publication of NHP 2002, a major development was the launch of the National Rural Health Mission (NRHM) in 2005. The NRHM was an umbrella programme under which a whole range of policy objectives espoused in NHP 2002 were operationalized. The NRHM focused on improving maternal and child health indicators by improving institutional deliveries, encouraging universal immunization, addressing micro-nutrient deficiencies and crucially, provided an expanded budget for the training and deployment of frontline workers. Given that NRHM was designed as a Centrally sponsored scheme which required state governments to provide matching contribution (10% in case of priority (high-focus) states and 40% for others) with the remainder being funded by the Central Government it effectively led to a prioritization of health spending in government budgets.'²

¹ WHO, '[Indian Health System Review](#)' (pages 35-37), 2022

² WHO, '[Indian Health System Review](#)' (pages 40-41), 2022

1.2 Public sector

1.2.1 The WHO report, Indian Health System Review, stated:

‘Health services in India are delivered by a diverse set of public, for-profit and not-for-profit private providers...Alternative systems of medicine, commonly known as Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homeopathy (AYUSH) supplement allopathic health providers. Health services in the public system include both curative and preventive services. Public sector health services under the ambit of the ministries at the national level and departments of health at the state levels are financed from general revenues of governments. These services are provided by public sector facilities that include at the primary level, a sub-centre (SCs) established to serve a population of 3000 – 5000, primary health centre (PHCs) for a population of 20 000 – 30 000, community health centre (CHCs) for a population of 80 000 – 120 000, and district hospitals. A CHC, sub-divisional or district hospital also serves as a first referral unit (FRU) if it is equipped to provide round-the-clock services for emergency obstetric and new-born care, in addition to all emergencies that any hospital is required to provide...

‘Above the level of district hospitals, tertiary care is provided by medical colleges and/or state-level super-specialty hospitals. Maintenance and upkeep of facilities up to the district hospital level is largely the responsibility of the state government with the Central Government providing part funding through the NHM. The NHM’s core focus areas have evolved from its focus on reproductive, maternal, newborn and child health services, to additionally include adolescent health services, health system strengthening, and tackling other communicable and noncommunicable diseases.

‘Medical colleges and super-specialty hospitals at the state level receive support directly from state health departments. In recent years, several tertiary-care hospitals on the lines of All India Institute of Medical Sciences (AIIMS) (India’s main tertiary-level health facility in the public sector) have been set up in states to provide high-end tertiary care and serve as apex teaching institutions, funded directly by the Central Government.’³

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1.3 Patient access to public sector healthcare

1.3.1 The Commonwealth Fund blog article, Cash Assistance Eases Financial Burden Associated with Medical Emergencies, dated 11 May 2022, stated:

‘While each Indian state is required to provide free universal access to health services, health care is chronically underfunded, meaning that although they are entitled to free care, many go without. Because of the severe shortages of staff and supplies at government health facilities, many people seek care from private providers and pay out-of-pocket.’⁴

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1.4 Private sector

³ WHO, [‘Indian Health System Review’](#) (page 37), 2022

⁴ Commonwealth Fund, [‘Cash Assistance Eases Financial Burden...’](#), 11 May 2022

- 1.4.1 The Australian Department of Foreign Affairs and Trade (DFAT) Country Information Report – India, published in December 2020, stated:
- ‘Low public health investment has led to a heavy reliance on a weakly [sic] regulated private sector. With the majority of health care expenditure in the private sector – non-profit and private hospitals provide 70 per cent of health care in India – a large proportion of the population is vulnerable to poverty in the event of a catastrophic illness. India liberalised the health sector in 2000 to allow the private sector into the market, and health insurance is a growing market sector.’⁵
- 1.4.2 The WHO report, Indian Health System Review, stated:
- ‘Payment for accessing health-care services offered by private providers is mainly in the form of out-of-pocket (OOP) expenses and insurance financing. Privately purchased or publicly funded insurance schemes provide partial or full coverage for hospitalization at empanelled hospitals for enrollees, but most private outpatient care is paid for out of pocket. Presently, private providers are regulated through the Clinical Establishments Act and Rules among others, and professional accreditation of the facilities and clinical practice was under the ambit of the Medical Council of India (MCI) until it was replaced in 2020 by the National Medical Commission (NMC).’⁶
- 1.4.3 The WHO report, Indian Health System Review, also stated:
- ‘The private sector in India plays a major role in health-care service delivery: in the volume, share and variety of inpatient and outpatient services provided, in diagnostic services, the pharmaceutical sector and human resources for health. The organization of the private sector in India is diverse, including both for-profit and not-for-profit institutions, charitable or religious trusts. The private sector also consists of a large number of solo medical practitioners (belonging to traditional systems of medicine as well as allopathy), small nursing homes, dental practices, physiotherapists, para-medical practitioners, diagnostic and pathological laboratories, blood banks, as well as large secondary- and tertiary-care hospitals controlled by major corporate groups that have branches all over the country...In addition, many unqualified health-care providers also provide services throughout the country...’⁷
- 1.4.4 The WHO report, Indian Health System Review, further stated:
- ‘The private health-care sector in India has historically been dominated by sole proprietors running small clinics...Many of the individuals working in the private sector are government doctors engaged in dual practice. As a result, private investments (at least in outpatient care and smaller hospitals) are mostly personally financed by doctors who establish these institutions...’⁸
- 1.4.5 The WHO report, Indian Health System Review, further stated: ‘Private limited companies constitute a small part of the hospital sector and have historically been located largely in the eight largest cities (Ahmedabad,

⁵ DFAT, ‘[Country Information Report – India](#)’ (page 15), 10 December 2020

⁶ WHO, ‘[Indian Health System Review](#)’ (pages 38-39), 2022

⁷ WHO, ‘[Indian Health System Review](#)’ (page 48), 2022

⁸ WHO, ‘[Indian Health System Review](#)’ (pages 124-125), 2022

Bangalore, Chennai, Delhi, Hyderabad, Kolkata, Mumbai and Pune). Over the past decade, private hospital chains have expanded into smaller “tier-2” cities.⁹

- 1.4.6 The WHO report, Indian Health System Review, further stated: ‘The provision of personal curative health services is predominantly carried out by private providers. Nearly 70% of all outpatient visits, about 58% of all inpatient episodes, and approximately 90% of medicines dispensed, and diagnostic facilities in India are currently provided by either for-profit or not-for-profit providers in the private sector. However, the quality, cost and effectiveness of services vary considerably across providers.’¹⁰
- 1.4.7 The Apollo Hospitals website gives an indication of the range of services available at larger private hospitals, for example:
- [‘Apollo Hospitals in India’](#)
 - [‘Indraprastha Apollo Hospitals’, Delhi](#)
 - [‘Apollo Hospitals, Bangalore’](#)
 - Apollo Hospitals, Delhi: [‘Orthopaedic Surgery in Delhi’](#).
- 1.4.8 According to the June 2020 Commonwealth Fund IHCSF profile on India, most private insurance plans did not provide comprehensive coverage for mental health care¹¹.
- 1.4.9 See also [Mental health](#).

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1.5 Rural/urban facilities

- 1.5.1 A blog published on Docus (online platform that allows Indian doctors to collaborate with medical experts from the USA and Europe), Rural-Urban Divide in Indian Healthcare System, dated 24 October 2022, stated:

‘...there is a significant difference in the quality of healthcare services between rural and urban areas. To begin with, the healthcare infrastructure is mainly concentrated in urban areas, while most of the population in India lives in rural areas. Rural health services in India face a severe crisis, which causes a serious rural-urban divide in healthcare.

‘The residents of the poorest states have difficulties accessing adequate medical treatment...

‘However, the situation is completely the opposite in urban areas. Most of the private hospitals are here...

‘Living conditions and a low level of education are crucial barriers for rural population. Consequently, they are unaware of their rights and health-related information...

‘Many government programs focus on improving the rural healthcare infrastructure. However, the number of qualified medical practitioners in rural hospitals is still insufficient. So, it creates hardships for accessing

⁹ WHO, [‘Indian Health System Review’](#) (pages 124-125), 2022

¹⁰ WHO, [‘Indian Health System Review’](#) (page 2), 2022

¹¹ Commonwealth Fund, [‘International Health Care System Profiles - India’](#), 5 June 2020

quality rural health services in India...

'Rural health services in India are extremely costly for the rural population. Many rural hospitals are ill-equipped to treat patients with severe diseases. For this reason, patients are frequently referred to private hospitals... [which] are extremely expensive for rural population in India...

'Long-distance travel and accommodation costs are a barrier to better diagnoses and treatment in rural India. It is very common for the rural population to cancel medical treatment due to lack of financial means...

'Another factor contributing to the rural-urban divide in India is the low penetration of insurance.'¹²

1.5.2 The WHO report, Indian Health System Review, stated:

'Across India, there are more government hospitals in rural areas than in urban areas... These government hospitals include those of Central, state, local government bodies, including PHCs. But the distribution of beds is more favourable in urban areas, as urban government hospitals are larger in size than their rural counterparts... Despite gains in both rural and urban areas from 2004 to 2017, substantial shortfalls exist in the number of subcentres, PHCs and CHCs across states, relative to the norms established by the Central Government.'¹³

1.5.3 The WHO report, Indian Health System Review, also stated: 'Limited funding, policies promoting the private sector and rising incomes fuelled rapid growth of the private health sector from the 1980s... Rural-urban disparities worsened as better trained providers, both public and private, tended to concentrate in urban areas. In part, as a response to this, the National Health Policy (NHP), 2002 focused on rural-urban health disparities.'¹⁴

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1.6 Traditional and complementary medicine

1.6.1 The Times of India report, India's alternative medicine industry grows, boosted by the Covid-19 pandemic, dated 18 November 2022, stated:

'Ayurveda is trusted by millions of people all over the country since it is deeply integrated with our food and daily routines. People have used Ayurveda through food and medicine and this has stood the test of time. A large population still has less faith in modern medicine...

'Indian society has relied on locally practiced traditional medical methods since ancient times... Traditional medicine's expansion is also hampered by a lack of research infrastructure and ease of use. Higher funding and resources for research and development and in marketing have fostered the growth of allopathic medicine. Still nearly 70% of India's rural population still relies on traditional medicine for their basic care...

'Ayurveda, yoga, naturopathy, Unani, Siddha, and homoeopathy make up India's system of alternative medicine (AYUSH). India is regarded as the

¹² Docus, '[Rural-Urban Divide in Indian Healthcare System](#)', 24 October 2022

¹³ WHO, '[Indian Health System Review](#)' (page 130), 2022

¹⁴ WHO, '[Indian Health System Review](#)' (page 40), 2022

centre of alternative medicine, including Unani, Ayurveda, Siddha, and homoeopathy, due to the wealth of old scientific knowledge here. The market in India is now seeing a surge in demand for AYUSH and alternative medicines as a result of growing public awareness of the usefulness and effectiveness of traditional medical systems, as well as increased government backing for these systems and expanding R&D.¹⁵

1.6.2 The WHO report, Indian Health System Review, stated:

‘Ayurveda doctors comprise about 55% of AYUSH practitioners, followed by Homeopathy (37%) and Unani (6%) practitioners while Siddha and Naturopathy practitioners account for the remaining 2%...Unfortunately, reliable information on the number of AYUSH personnel in the private setting is not available. Most work in the nongovernment sector, with a higher density in urban (3.64 per 10 000 persons) compared to rural areas (1.04 per 10 000 persons)...According to estimates from the AYUSH council, in 2018, the number of AYUSH doctors (registered practitioners) was estimated at 800 000, translating into 6.1 AYUSH providers per 10 000 population.’¹⁶

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1.7 Healthcare services provided by NGOs

1.7.1 A number of NGOs provide a wide range of healthcare for poor, vulnerable people and marginalised communities in India, such as the Rural Health Care Foundation, Foundation for Mother and Child Health, Swasthya Swaraj, Charutar Arogya Mandal, Help Age India, LEpra Society, Doctors for Seva Arogya Foundation, Swasth Foundation, Udaan Welfare Foundation, and Deepalaya¹⁷.

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1.8 Infrastructure and staffing

1.8.1 The WHO report, Indian Health System Review, stated:

‘In 2019, the number of functioning government health facilities comprised 152 794 subcentres, 20 069 PHCs, 5685 CHCs, 1234 subdivisional hospitals (SDHs), 756 district hospitals, and 1415 MMUs...Out of 593 medical colleges in India, 244 are government-owned...The Indian railways, one of the largest public sector employers, provides health facilities to its employees and their dependents, besides health services to accident victims. During 2019, it operated a total of 580 dispensaries, in addition to 122 hospitals with a combined bed capacity of 13 355.’¹⁸

1.8.2 The WHO report, Indian Health System Review, also stated:

‘The formal private hospital sector appears to be smaller in numbers than informal health providers but plays an increasingly important role in (inpatient) health-care provision, especially in urban areas...In 2012, a census of public and private hospitals in 62 cities spanning 20 states

¹⁵ Times of India, [‘India’s alternative medicine industry grows, boosted...’](#), 18 November 2022

¹⁶ WHO, [‘Indian Health System Review’](#) (page 148), 2022

¹⁷ NGO Box, [‘Top 10 NGOs in India Working in The Healthcare Sector’](#), 31 October 2022

¹⁸ WHO, [‘Indian Health System Review’](#) (page 48), 2022

found that there were 13 413 private hospitals, ranging from small nursing homes to big corporate hospitals...The data from this hospital census showed that among private hospitals, about 71% were for-profit hospitals, followed by nursing homes (24%), trusts and charitable hospitals (3%), and corporate hospitals (1%). The average bed strength ranged from 14 beds per nursing home to 177 beds per private hospital.¹⁹

1.8.3 The WHO report, Indian Health System Review, further stated:

‘There is no single source of reliable data on the health workforce in India. Government departments tend to limit themselves to maintaining records of their health workers, while various professional councils (such as the medical, dental and nursing councils) each maintain separate records of health worker registrations. However, WHO has been estimating the health workforce in India...

‘An estimate of the size of the health workforce, based on the NHA for the year 2018, was 5.76 million. This would suggest that the density of health professionals (doctors, nurses and midwives) per 10 000 population is roughly 26.5. However, active health workforce size is estimated to be significantly lower at 3.12 million...

‘Inadequate health workforce is a major source of inefficiency in delivering government health-care services in India. Assessment of trends in health worker density from 1991 to 2019 suggests that there is a chronic shortage of physicians, with a density rate of 9.28 per 10 000 persons in 2019. The population density of nurses has improved considerably over time standing at 23.89 per 10 000 persons, and can be regarded as one of the major achievements in the past two decades. Similarly, the density of dentists and pharmacists have also increased over time...²⁰

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1.9 Pharmaceutical sector

1.9.1 The WHO report, Indian Health System Review, stated:

‘Regulation of pharmaceuticals in India is complex, involving several key regulators spread across different ministries, aimed at controlling cost and quality, the latter being mostly about safety and efficacy, while at the same time seeking to improve access to medicines. At the highest level, pharmaceutical policies in India are designed and regulated by several ministries including the Ministry of Chemicals and Fertilizers (MoCF) and the MoHFW. The Department of Pharmaceuticals (DoP) under the MoCF coordinates research and infrastructure in the pharmaceutical sector. The National Pharmaceutical Pricing Authority (NPPA) under the DoP monitors prices and availability of medicines and takes steps to remedy shortages, if any (Department of pharmaceuticals, 2011).

‘To address issues regarding quality, the Central Drugs Standard Control Organization (CDSCO), India’s counterpart to the United States Food and Drug Administration (US-FDA), is headed by the Drugs Controller General of India (DCGI) under the MoHFW. It provides market authorization for

¹⁹ WHO, ‘[Indian Health System Review](#)’ (page 132), 2022

²⁰ WHO, ‘[Indian Health System Review](#)’ (page 137), 2022

medicines based on safety and efficacy considerations. The CDSCO regulates the imports of medicines, clinical trials and coordinates activities with state drugs controllers on its activities and provides expert advice. The state drugs controllers function under and report directly to state departments of health and family welfare...State authorities work closely with the State Drug Control Administrations to ensure uniform enforcement of the Drugs and Cosmetics Act, 1940 (DCA) and other relevant legislation. The Act, regulates the import, manufacture and distribution of drugs to ensure that the medicines and cosmetics used in the country are safe, effective and conform to quality standards. The Act provides for the Central Government to intervene in, regulate import of, or provide market authorization to sell a new drug.²¹

1.9.2 The WHO report, Indian Health System Review, also stated:

‘An estimated 850 000 pharmacies and medicine-sellers exist in India. An estimated 1500–2500 pharmacies are grouped in retail chains and such retail chains are growing rapidly...The Pharmacy Act, of 1948 requires the states to create pharmacy councils for registering pharmacists. Only qualified and registered pharmacists, with previous engagement in a hospital or dispensary for a specified period of time, can own pharmacies...In practice, however, non-pharmacists can operate pharmacies attended by unqualified but “experienced” workers, while nominally being managed by qualified pharmacists...’²²

1.9.3 The India Brand Equity Foundation (IBEF) noted in April 2023:

‘India is the largest provider of generic drugs globally and is known for its affordable vaccines and generic medications. The Indian Pharmaceutical industry is currently ranked third in pharmaceutical production by volume ...Generic drugs, over-the-counter medications, bulk drugs, vaccines, contract research & manufacturing, biosimilars, and biologics are some of the major segments of the Indian pharma industry...’²³

1.9.4 Medicines are available either free of charge or at subsidised prices at public hospitals; the degree of subsidisation varies from state to state²⁴. In the State of Punjab, for example, medications for outpatients are provided at a subsidized rate. Inpatient medications are free if they are available in the pharmacy attached to the public hospital or participating private hospital²⁵. In private facilities, medication must be paid for by the patient²⁶.

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1.10 Availability of drugs and medication

1.10.1 The WHO report, Indian Health System Review, stated:

‘Approximately 10% of all medicines are prescribed and dispensed in government settings, with the rest prescribed and dispensed in the private

²¹ WHO, ‘[Indian Health System Review](#)’ (page 68), 2022

²² WHO, ‘[Indian Health System Review](#)’ (page 70), 2022

²³ India Brand Equity Foundation, ‘[Indian Pharmaceutical Industry](#)’, April 2023

²⁴ European Union Agency for Asylum, MedCOI, 14 April 2020

²⁵ MedCOI, 14 April 2020

²⁶ MedCOI, 14 April 2020

sector. In the government set-up, drugs are prescribed by medical doctors and specialists, and the dispensing function is undertaken by a dedicated dispensing unit in each health facility. Although patients are expected to receive medicines free in public health facilities, due to lack of funds and poor governance in procurement and distribution of medicines, patients often end up paying chemists outside the public health facilities for their medicines. Survey data suggest that nearly 65% of all health spending in the country is in the form of OOP [out-of-pocket] spending by households, two thirds of it on drugs. Some states such as Tamil Nadu, Rajasthan, Kerala and Delhi are able to provide free medicines through the public system, but this is not the case with most other states... This is reflected in the considerable cross-state variation that exists in the proportion of the population obtaining subsidized medicines in public facilities...

'Drug dispensing units within private hospitals also dispense drugs. In the case of private physicians practising outside hospitals, the patient gets a prescription from the doctor and the medicines are dispensed by private retail outlets. India currently has over 850 000 retail outlets that dispense medicines, with the number of retailers varying significantly across states: the density of medicine retailers in some states are: Maharashtra (0.62 per 1000 population), Tamil Nadu (0.50 per 1000 population), Gujarat (0.39 per thousand), and Punjab (0.84 per thousand), Delhi (1.33 per 1000 population).'²⁷

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1.11 Accessibility of drugs and medication

1.11.1 The Commonwealth Fund International Health Care System Profile (IH CSP) on India stated:

'Cost-sharing and out-of-pocket spending: Citizens can get free care in public health facilities with no deductibles, co-payments, or coinsurance.

'However, because government funding for health care is limited and there are accessibility issues at the existing facilities, a significant portion of outpatient and inpatient care is delivered at private, high-priced facilities, with costs typically paid out-of-pocket...

'A significant proportion of the population faces impoverishment due to lack of insurance and high out-of-pocket expenditures. An estimated 8 percent of the population is being pushed below the poverty line as a result of high out-of-pocket payments.'²⁸

1.11.2 The Times of India report, Gaps in medicine accessibility in rural India, dated 16 October 2022, stated:

'Almost 65 percent of India's population that resides in rural India has 30 percent of the total available health infrastructure. In India, while affordability has received policy focus, in the form of price controls; the availability of medicines, especially in rural areas, has remained a matter of grave concern. "Physical reach" is a parameter used to evaluate access and is defined as "the presence of a pharmacy within 5 km from the place of

²⁷ WHO, '[Indian Health System Review](#)' (page 178), 2022

²⁸ Commonwealth Fund, '[International Health Care System Profiles - India](#)', 5 June 2020

residence or work”...

‘Medicine inaccessibility in rural India is a multi-faceted problem. Organized Pharmacy companies are reluctant to open outlets in rural areas as their growth is largely propelled by urban demand. The Top 2 Pharmacies in India cover less than 10% of the population of India. To top it, low margins, problems operating pharmacies and security concerns have ensured only limited penetration of pharmacy companies in villages.’²⁹

1.11.3 The WHO report, Indian Health System Review, stated:

‘Physical access to and affordability of medicines, vaccines and diagnostic facilities are a primary concern. Government underfunding accompanied by weak procurement and logistics systems has meant that access to medicines and medical equipment in government health facilities remains poor. Exceptionally, a few Indian states have adequately funded and set up mechanisms for an efficient procurement and supply of medicines and diagnostics. In the private sector, physical access to medicines is easier, but the “ability-to-pay” may inhibit access. Prices remain high for many essential medicines, leaving them out of reach for many households... Moreover, poor regulatory oversight has limited policy-makers’ ability to control inappropriate prescription and use of medicine...

In the private sector, physical access to medicines is easier, but the “ability-to-pay” may inhibit access. Prices remain high for many essential medicines, leaving them out of reach for many households. Despite being the “pharmacy of the global south”, India’s branded generics market continues to be elusive or unaffordable to a majority in the population.’³⁰

1.11.4 See also the Ministry of Health and Family Welfare (2022) [National List of Essential Medicines](#)³¹.

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1.12 National and state publicly-financed health insurance schemes

1.12.1 The Australian Department of Foreign Affairs and Trade (DFAT) Country Information Report – India, published in December 2020, stated:

‘In April 2018, the government announced the Ayushman Bharat health insurance scheme to provide cashless and paperless treatment in participating public and private hospitals to India’s poorest households. The scheme covers three days of hospitalisation and 15 days post-hospitalisation, including diagnostic care and medication expenses. An estimated 500 million persons, or 40 per cent of the country’s population, are eligible beneficiaries. While welcoming its intent, some commentators have expressed concern the scheme does not go far enough; it does not cover indirect costs associated with hospitalisation, such as transport costs and lost wages. Other concerns include the benefit ceiling (500,000 rupees; approx. AUD9,250 [£4,888.37])³² leaving patients with a large gap for some procedures; the scope for corruption;

²⁹ Times of India, ‘[Gaps in medicine accessibility in rural India](#)’, 16 October 2022

³⁰ WHO, ‘[Indian Health System Review](#)’ (page 2), 2022

³¹ Ministry of Health and Family Welfare, ‘[National List of Essential Medicines](#)’, 2022

³² XE Currency Converter, ‘[Indian rupees to British pounds](#)’, 19 April 2023

and insufficient budget allocation.³³

1.12.2 The Indian Ministry of Health and Family Welfare published information about the Rashtriya Arogya Nidhi in July 2022:

'The Ministry of Health and Family Welfare provides financial assistance for treatment of poor patients suffering from identified life threatening diseases and taking treatment in Government hospitals, under the Umbrella Scheme of Rashtriya Arogya Nidhi (RAN) and Health Minister's Discretionary Grant.

'Rashtriya Arogya Nidhi (RAN): Under the Umbrella Scheme of Rashtriya Arogya Nidhi, one-time financial assistance up to Rs.15 lakh is provided to patients belonging to poor families living below threshold poverty lines and suffering from major identified life-threatening diseases for medical treatment at Government hospitals.

'RAN has three components, namely (i) Rashtriya Arogya Nidhi (RAN) – to provide financial assistance to patients suffering from life threatening diseases other than Cancer, (ii) Health Minister's Cancer Patients Fund (HMCPF) - to provide financial assistance to patients suffering from Cancer; and (iii) Scheme for financial assistance up to Rs. 20 Lakh for patients suffering from specified rare diseases...

'Health Minister's Discretionary Grant (HMDG): Under Health Minister's Discretionary Grant (HMDG), financial assistance up to a maximum of Rs. 1.25 lakhs is provided to the poor indigent patients to defray a part of the expenditure on hospitalization/treatment in Government Hospitals for life threatening diseases covered under Rashtriya Arogya Nidhi (RAN) in cases where free medical facilities are not available. Only those having annual family income up to Rs.1.25 lakhs and below are eligible for financial assistance under the scheme...

'In order to simplify/streamline the functioning of RAN to expedite the approvals, Government has launched these schemes on the National Health Authority IT platform. It enables release of financial assistance to the eligible applicants identified online through the Government's existing database.'³⁴

1.12.3 Many of the state and union territory governments have also established health insurance schemes. For example, MedCOI noted in April 2020:

'In [the State of] Punjab there is a scheme called Ayushman Bharat - Sarbat Sehat Bima Yojana (AB-SSBY), a state specific health insurance scheme for the beneficiaries of the State of Punjab. AB-SSBY provides financial protection to 75 % of the population of Punjab State. It is an entitlement based cashless health insurance cover of INR 500,000 per family per year. Under this scheme, cashless and paperless treatment is available at certain government and private hospitals.'³⁵

1.12.4 The WHO report, Indian Health System Review, stated:

'A large number of government funded health insurance schemes have emerged in India, at the national and state levels. The erstwhile RSBY,

³³ DFAT, '[Country Information Report – India](#)' (page 15), 10 December 2020

³⁴ Ministry of Health and Family Welfare, '[Details of Financial Assistance for...](#)', 22 July 2022

³⁵ MedCOI, 4 April 2020

now the PM-JAY, is a tax-funded health insurance scheme at pan-India level to cover hospitalization care. The PM-JAY is intended to cover about 500 million people, or nearly 40% of India's population, comprising poor and vulnerable groups who are identified based on the Socio-Economic Caste Census... Although designed for implementation in all states, with the Centre and the states contributing to the premiums in a 60:40 ratio, some states have backed out from the scheme, as they are intended to continue with their own schemes. The benefits under PM-JAY cover about 1500 medical procedures and interventions that require hospitalization..., with an annual cover of INR 500 000 for a poor family... Some state government schemes cover more than 40% of their population, over and above the PM-JAY beneficiaries...

'Despite the optimism generated by the GFHI schemes, household-level analyses show that in spite of the free and cashless services provided, patients continue to incur OOP payments for additional benefits that are not covered by the scheme and for outpatient visits (outpatient services are not covered). Moreover, when the costs of treatment exceed the maximum annual benefit of the GFHI, hospitals levy extra charges on patients.'³⁶

1.12.5 The Commonwealth Fund IHCSF on India, published in 2020, stated:

'One important scheme aimed at reducing financial catastrophe and vulnerability for lower-income populations is the National Health Insurance Program (Rashtriya Swasthya Bima Yojana, or RSBY), launched in 2008...

'With ineffective public insurance schemes and the low uptake of commercial insurance, only around 37 percent of the population were covered by any form of health coverage in 2017–2018. Further systemic barriers to access include long wait times in hospitals, the perceived low quality of public health services, and substantial workforce and infrastructure shortfalls.

'In March 2018, the central government approved the implementation of PM-JAY. This flagship public health initiative has been internationally recognized as a significant step toward achieving universal coverage in India. The initiative offers hospital coverage for the 40 percent of the country's population that is poor or low-income. The other important initiative is to bolster preventive and promotive health care services by revamping existing primary health facilities into Health and Wellness Centres...

'There are various public insurance schemes, including RSBY, which provides hospital coverage for most diseases and pre-existing health conditions for individuals living below the poverty line (with a family cap of five members). Outpatient care, primary care, and high-level tertiary care are not included.

'The new National Health Protection Scheme is for individuals in the bottom two income quintiles. This scheme provides INR 500,000 (USD 7,007) per family per year to cover secondary and tertiary health services, from inpatient to post-hospitalization care. Eligibility is based on a

³⁶ WHO, '[Indian Health System Review](#)' (page 94), 2022

household's level of deprivation as defined by the Socio-Economic Caste Census. The scheme extends coverage to approximately 100 million poor and vulnerable families. Beneficiaries are auto-enrolled in the system and, therefore, are able to obtain benefits as cashless transactions.

'Funding for the public insurance schemes is divided between the central and state governments. For instance, most states are contributing a 40 percent share to the cost of the National Health Protection Scheme, with the central government providing the remaining 60 percent...

'The states also run their own health schemes, mostly along the lines of RSBY. In addition, public sector undertakings (state-owned enterprises) and autonomous government bodies like central and state universities offer health coverage to their employees.'³⁷

1.12.6 The Commonwealth Fund IHCSF on India, also stated:

'Another important health coverage scheme is the Central Government Health Scheme, organized and run by the Ministry of Health and Family Welfare for current and retired central government employees and their dependents. There are no income or wage requirements to be eligible. Coverage includes health care services for allopathic, homeopathic, and alternative medicine treatments. Approximately 3.6 million beneficiaries were registered under this scheme as of late 2019. Similar schemes exist for railway and defense employees.'³⁸

1.12.7 The Commonwealth Fund IHCSF on India, further stated:

'An important social health insurance scheme is the Employees' State Insurance Scheme, which is organized by the Ministry of Labour and Employment for the workforces of companies with 10 or more employees. Previously, only workers employed by factories were eligible, but the scheme has been extended to companies in other industries, such as hotels, restaurants, transportation companies, newspaper establishments, and cinemas. This is India's only true health insurance scheme to which both employees and employers contribute...Coverage for workers and their families includes maternity care, as well as disability and death benefits for employment-related injuries. State governments contribute one-eighth of the medical benefit expenditures, up to an annual per-capita ceiling of INR 1,500 (USD 21). The scheme has approximately 133 million beneficiaries.'³⁹

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1.13 Private medical insurance schemes

1.13.1 The WHO report, Indian Health System Review, stated:

'The vast majority of health insurance products in India cover only hospitalization expenses, but not outpatient care. A few insurance companies have begun offering cashless facility for OPD coverage. The expenses covered under this category includes those expenditures from authorized diagnostic centres, retail pharmacies, dental care units

³⁷ Commonwealth Fund, '[International Health Care System Profile on India](#)', 5 June 2020

³⁸ Commonwealth Fund, '[International Health Care System Profile on India](#)', 5 June 2020

³⁹ Commonwealth Fund, '[International Health Care System Profile on India](#)', 5 June 2020

and optical care centres. Individual payments for health insurance premiums (up to INR 25 000 for purchase of health policy for self, spouse, children) are deductible from income for taxation purposes, while an additional INR 25 000 deduction is allowed if premium is paid for a parent who is a senior citizen (age 60+)...With regard to group health insurance, only employers are allowed to claim tax deduction on premiums paid for employees, while the latter are entitled only for medical benefits, not tax deduction...

'Most health insurance products in India are characterized by upper limits on claims, which vary by premiums paid. Related to this, premiums are correlated with the age of person insured. The average premium for an adult in the age group of 25–40 years is INR 5000 for an insured amount of INR 500 000. In a family floater scheme for two adults and two children with an insured sum of INR 500 000 annually, the average annual premium charged by different insurers falls in the range of INR 25 000 to INR 30 000. In contrast, for roughly about the same insured amount and similar family sizes the premiums charged under PM-JAY are in the range of INR 450–1500, reflecting the large gains from bigger groups of pooled populations.'⁴⁰

1.13.2 The Commonwealth Fund IHCSF on India stated:

'Role of private health insurance: Thirty-six percent of insured individuals in India have private coverage, which covers only hospitalizations.

'The Insurance Regulatory and Development Authority Act of 1999 allowed for private companies to enter the health insurance market. The 1999 act also allowed for individuals who are not eligible for sponsored insurance schemes to purchase a private policy. Private insurance now accounts for nearly 4.4 percent of total current health expenditures.'⁴¹

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1.14 Emergency healthcare

1.14.1 The Times of India report, Robust emergency medical services: The need of the 'golden' hour, dated 26 August 2022, stated:

'On-paper data and studies by WHO and healthcare institutions show the adequacy of ambulances and healthcare vehicles in India, but we're standing far away from comprehensive emergency medical services. The lack of an effective emergency care network unequipped and uncertified ambulances, unskilled ambulance personnel and drivers, untrained masses, traditional practices, and technology are responsible for the inadequate emergency medical response services that result in high casualty rate during the emergency medical crises.'⁴²

1.14.2 Ziqitza Healthcare Limited provides emergency care services, as explained in a Print article dated 2 December 2022:

'Ziqitza Health Care Ltd. (ZHL), a company that's part of Public-Private Partnership with the Indian Government, provides ambulances with state-of-the-art technology across multiple states in India...[they have]:

⁴⁰ WHO, '[Indian Health System Review](#)' (page 112), 2022

⁴¹ Commonwealth Fund, '[International Health Care System Profile on India](#)', 5 June 2020

⁴² Times of India, '[Robust emergency medical services:...](#)', 26 August 2022

‘Standardized Protocols: [to]...provide consistent service and skill across all of the ambulance in each state...

‘Available free of charge:...with the necessary equipment and trained staff to provide a wide range of emergency ...

‘Trained Staff: Paramedics...provide basic and advanced care during trauma, respiratory, cardiac, diabetic, allergic, and/or accident-related emergencies...

‘World-class Equipment: All of our 108 ambulances are equipped with ALS [advanced life support], providing a wide variety of superior medical devices. From oxygen cylinders to the BLS [basic life support] apparatus that enables pain relief, we can provide all necessary tools for paramedics.

‘Swift Response: Ziqitza Healthcare team are always able to identify the nearest ambulance to a person in need of urgent care for timely and consistent care.’⁴³

1.14.3 The WHO report, Indian Health System Review, stated:

‘Emergency care services are provided in both public and private hospitals. There are several important pieces of legislation relating to the provision of emergency care in India. Under the Clinical Establishments Act, all clinical establishments are required to “provide medical care and treatment necessary to stabilize any individual who comes or is brought to the clinical establishment in an emergency medical condition”. The Supreme Court has ruled that any denial of emergency care based on a patient’s ability to pay or medicolegal case is considered a violation of the patient’s “Right to Life”, as per Article 21 of the Constitution of India. The court in 2014 also passed a ruling to facilitate emergency transportation and care of road traffic accident victims by ensuring that any person can take an injured person from a road traffic accident to the nearest hospital without being incriminated themselves.

‘Emergency medical services (EMS) respond to health emergencies and provide patient transportation to health facilities. EMS systems in India are fragmented and there is no uniform system available across the country. An emergency referral transport system was introduced under the NRHM, and is available in 31 states and union territories. They can be accessed through “108” and “102” toll-free numbers. The 108 number operates on a public–private partnership model between state governments and private EMS providers. The 102 number is part of the JSSY programme and is aimed at providing transport for pregnant women and children.

‘Under the 108/102 schemes, there are over 19 290 operating ambulances (NHM, 2021). Outside of the NHM system (108/102), state governments and private institutions also operate their own ambulance services. It is important to note that the majority of ambulances in service do not provide advanced life support.’⁴⁴

1.14.4 See also the Foreign, Commonwealth, and Development Office (FCDO) [List](#)

⁴³ The Print, ‘[108 is one of the largest emergency services in India...](#)’, 2 December 2022

⁴⁴ WHO, ‘[Indian Health System Review](#)’ (pages 176-177), 2022

[of doctors and medical facilities in India](#) (updated on 23 December 2021)⁴⁵.

- 1.14.5 See also US Embassy and Consulates in India – [Doctors List](#) (5 March 2019)⁴⁶.

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Section 2 updated: 26 April 2023

2. Covid-19

- 2.1.1 According to data from the [Worldometer](#) website, as of 26 April 2023, a total of 44,905,827 people in India have been infected with the Covid-19 virus, and 531,369 people have died as a result. A total of 44,311,078 people who had been infected with Covid-19 have recovered⁴⁷.

- 2.1.2 For the most recent government updates on Covid-19, see the [Ministry of Health and Family Welfare](#) website.

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Section 3 updated: 26 April 2023

3. Cancer (oncology)

3.1 Prevalence and types

- 3.1.1 The Livemint article, ICMR data shows unequal toll of cancer on women, dated 7 December 2022, stated:

‘New Delhi: More women than men in India are being diagnosed with cancer, a disease that is likely to strike 1.57 million in 2025 from 1.46 million this year [2022], the Indian Council of Medical Research (ICMR) has revealed in its bi-annual report, alarming the Indian health establishment...

‘These disturbing figures do not include data from two of India’s most populous states—Uttar Pradesh and Bihar. The national average of cancer cases for 2022 is 100.4 per 100,000, with a large number of women (105.4 per 100,000) being diagnosed with breast cancer, a preventable [sic] disease. By comparison, 95.6 men per 100,000 have been diagnosed with lung cancer.

‘The study was carried out at the ICMR’s National Centre for Disease Informatics and Research, Bengaluru. The scientist analyzed National Cancer Registry Programme (NCRP) data for 2020-2022 to evaluate the burden of cancer in India in 2025...

‘The top cancers in women were breast cancer, which had the highest incidence, followed by cervix, ovary and corpus uteri. Among men, cancers of the lung, mouth and tongue were common—all associated with smoking and other tobacco use.

‘The report did not give figures for the incidence of breast, cervix, ovary and uterine cancers in India but Dr Abhishek Shankar, associate professor, Department of Radiation Oncology, All India Institute of Medical Sciences Patna said, “As per modelling data, the projection is that breast cancer cases

⁴⁵ FCDO, ‘[India: doctors and medical facilities](#)’, 23 December 2021

⁴⁶ US Embassy and Consulates in India – ‘[Doctors List](#)’, 5 March 2019

⁴⁷ Worldometer, ‘[Coronavirus – India](#)’, 26 April 2023

will reach 250,000 by 2030. Currently, there are approximately 182,000 cases of breast cancer in India."⁴⁸

- 3.1.2 The India Today article, Five cancers most common in India - and how to detect them early, dated 24 January 2023, stated that the most common types of cancer Indians suffer from were lung cancer, oral cancer, breast cancer, cervical cancer, and stomach cancer⁴⁹.

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3.2 Available treatment

- 3.2.1 The Hindu (Indian news media outlet) report, Several anti-cancer drugs, antibiotics to become more affordable in India, dated 13 September 2022, stated:

‘Four major anti-cancer drugs - Bendamustine Hydrochloride, Irinotecan HCl Trihydrate, Lenalidomide and Leuprolide acetate which are effective in various types of cancers have been added to the list [National List of Essential Medicines].

‘Several anti-cancer drugs, antibiotics and vaccines will now become more affordable as they are among 34 new additions to the National List of Essential Medicines, with the government saying this will reduce "patients' out-of-pocket expenditure.”

‘Anti-infectives like Ivermectin, Mupirocin and Meropenem have also been added to the list, taking the total drugs under it to 384.’⁵⁰

- 3.2.2 The Medifee website (accessed on 11 April 2023) provided information about cancer treatment in various private-sector hospitals:

‘Apollo Cancer Institute, Chennai

‘The hospital boasts of a newly constructed Chemotherapy Ward and also facilitates potential donor search to offer transplant. It also has specialized clinics for Thyroid, Tumor and Breast cancer. It also offers Radiotherapy, Stereotactic Radiosurgery, Bone Marrow Transplant, Medical and Surgical Oncology, Digital Mammography and Histopathology...

‘American Oncology Institute, Hyderabad

- All specialties of cancer present under one roof providing a wide range of treatment options for each type of cancer
- Tertiary care facilities like reconstruction surgery, physiotherapy, speech therapy, diet counseling etc...
- Highly advanced medical technology used for diagnosis and treatment of cancer
- Separate division dedicated to administering chemotherapy and post-procedure care for the same
- Utilization of safety precautions of the highest level while

⁴⁸ Livemint, [‘ICMR data shows unequal toll of cancer on women’](#), 7 December 2022

⁴⁹ India Today, [‘Five cancers most common in India - and how to detect them early’](#), 24 January 2023

⁵⁰ The Hindu, [‘Several anti-cancer drugs, antibiotics to become more...’](#), 13 September 2022

administering radiation therapy

- Fully functional operation theater for patients requiring surgical treatment of cancer
- Bone marrow transplant unit present exclusively for treatment of blood cancers in adults as well as children
- Recovery rooms with all essential facilities for convalescent patients post-treatment...

‘Apollo Cancer Institute, Hyderabad...

- Highly advanced technology like PET scan and Novalis TX Radiotherapy used for treatment of cancer
- Separate clinics for diagnosis, treatment and post-treatment care of breast cancer, cancer of head and neck and oral cancer...
- Apollo Cancer Check is a unique facility providing gender specific cancer care and preventive measures against cancer
- Tumor board is a unique Apollo feature wherein every cancer case is discussed at length and best possible treatment plan is chosen
- Rehabilitation facilities like occupational therapy, psychological counseling offered to all patients as needed...
- Separate proton treatment center providing advanced level of radiation therapy...

‘Fortis Memorial Research Institute, Gurgaon...

- Advanced medical technology like cryotherapy, hormone therapy, BRCA gene study, CA-125 test available for early diagnosis and treatment
- Separate department for dealing with cancers in pediatric patients
- Palliative medicine division dedicated to provide best quality medical care to patients with terminal cancer
- Well equipped pathology lab to perform biopsy and other studies for detection of cancer
- Latest investigative techniques and highly calibrated instruments providing high quality treatment to patients
- Bone Marrow transplant services available for children and adults suffering from blood cancer...

‘Apollo Cancer Institute, Delhi...

- Has qualified surgical oncologists specializing in management of lung cancer, brain and spine tumors, head and neck tumors, bone cancer, liver cancer etc.
- Oncology department uses sophisticated technology such as Novalis TX with exact TC, 6D robotic couch, da Vinci Surgical System etc.
- Oncologists aided by a six bedded HEPA filtered laminar airflow unit

and a highly advanced stem cell processing unit...

- Frameless Stereotactic Radiosurgery, Image guided Radiotherapy (IGRT), 3D Conformal Radiotherapy are few of the cancer treatment modes available at Indraprastha Apollo
- Psycho-social therapy and counseling facilities for cancer patients
- Cancer screening programs planned by hospital for cancer awareness among public...

'BGS Global Hospital, Bangalore...

- Fully functional 14 operation theaters for patients who need surgical treatment for cancer
- Highly calibrated and accurate instruments used for error free diagnosis of cancer...
- Breast cancer survivor programmes to spread health awareness and as a platform for cancer survivors to share their experiences
- Department of hemato-oncology providing highest quality of care for adult and pediatric patients suffering from blood cancer...

'Artemis Hospital, Delhi NCR

- 380 bedded tertiary care center having all medical specialties under one roof
- Best quality primary treatment, convalescent care and rehabilitation services provided to all cancer patients
- Most advanced technology used to provide treatment to cancer patients in the form of chemotherapy, radiation therapy and surgery
- Safety precautions of maximum level undertaken while administering radiation therapy
- Fully operational outpatient department catering to all cancer presents presenting for follow ups and consultation
- Day care facility for patients requiring chemotherapy
- Pain clinic facility
- Separate division providing medical care for elderly cancer patients...

'Nanavati Hospital, Mumbai...

'It is a 350 bedded hospital, housing 55 medical and surgical specialties. Its oncology department is very well renowned and is sought after by patients from all over the country.

'Dr. Balabhai Nanavati Hospital, Mumbai...

- Team of highly expert oncologists and oncosurgeons providing round the clock treatment of each patient
- Provision of day care facility for patients requiring chemotherapy
- Safety precautions of the highest level followed while administering

radiation therapy

- Hemato-oncology unit providing bone marrow transplant facility
- Highly calibrated instruments used for providing accurate diagnosis
- Rehabilitation facilities like physiotherapy, occupational therapy, psychological counseling available for patients recovering from cancer...

‘Manipal Hospital, Bangalore...

- Latest medical devices like PET-CT scan, gamma camera, used for apt diagnosis of cancer and its metastasis
- Fully operational Nuclear Medicine department equipped with latest medical technology to provide radiation therapy
- Facility for monitoring patients who require rest and medical care after chemotherapy sessions
- Highly sophisticated operation theater for performing cancer surgeries
- Best quality palliative therapy provided to patients having terminal cancer
- Facility for plastic surgery to reconstruct particular body tissue after cancer surgery has been performed
- Separate division for management of pediatric cancers...

‘Continental Cancer Institute & Radiation Center, Hyderabad

‘Continental Hospital is a venture of Parkway Pantai Ltd., which is a leading healthcare brand across the globe. It is a 750 bedded tertiary care center, equipped with fully functional operation theaters and ICU...

‘Continental Hospital, Gachibowli...

- Team of highly experienced oncologists and oncosurgeons providing round the clock treatment to each patient
- Comprehensive treatment plan customized to suit every patient's requirements
- Patient counseling to make them aware about their treatment plan
- Best quality chemotherapy and post-procedure care provided to all patients
- ICU facility for cancer patients requiring critical care
- Palliation therapy provided to all patients with terminal stage of cancer
- Highly sophisticated facilities like PET-CT scan, immunotherapy, biological therapy, excision biopsy for diagnosis and treatment of cancer
- Fully equipped Bone Marrow Transplant Unit exclusively for blood cancer management...

‘Yashoda Cancer Institute, Hyderabad...

- Advanced medical technology like 1.5 Tesla MRI, Dual Source CT Scanners, Digital X-Rays utilized for diagnosis of cancer
- Fully equipped onco-pathology laboratory where highly sophisticated techniques like frozen section biopsy, flow cytometry...are available
- Team of highly experienced doctors, surgeons and technicians striving to achieve their goal of best quality cancer care to each cancer patient
- Latest technology known as Varian RapidArc Linear Accelerator utilized to provide radiation therapy
- Highest level of safety maintained while performing chemotherapy and radiation therapy
- Psychological counseling facility for patients who suffer from or are recovering from cancer
- Facility for plastic surgery to reconstruct body tissues...⁵¹

3.2.3 The Medifee website (accessed on 11 April 2023) provided information about cancer treatment in various government/missionary hospitals:

‘Tata Memorial Hospital, Mumbai...

- More than 40,000 patients from across India and abroad visit this hospital for treatment
- OPD patients amount to nearly 1000 daily
- Radiotherapy and chemotherapy is rendered to around 6000 patients annually...
- Nearly 70 percent patients treated free of cost...
- Online opinion provided

‘All India Institute of Medical Sciences, New Delhi...

- First to have a vacuum assisted unit for advanced Mammography
- Above 250 hematopoietic stem cell bone marrow conducted
- Polymerase chain and FISH reaction used for prognosticating cancer patients
- 200 beds available...

‘Cancer Institute, Adyar, Chennai...

- 40% paying beds, while rest are general category where patients are treated free
- More than 15,000 patients seen annually for treatment
- More than 1,40,000 follow up cases annually...

‘Gujarat Cancer and Research Institute, Ahmedabad...

⁵¹ Medifee, [‘Top 11 Cancer Hospitals in India’](#), no date

- 650 beds available for cancer patients
- High quality nursing and health services provided for all oncology branches
- Latest technology for cancer management and diagnosis
- Around 1000 permanent employees for all classes and more than 100 resident doctors to serve patients...

'Kidwai Memorial Institute of Oncology (KMIO), Bangalore...

- Low mortality rate for curable cancers...
- Finest infrastructure facilities for research and treatment of cancer...

'Regional Cancer Centre, Thiruvananthapuram...

- Above 11,000 cancer cases annually treated
- Above 50,000 follow up cases...
- [A]most 70% patients rendered with free care
- Modern equipments and machineries used for diagnosis and treatment...

'Post Graduate Institute of Medical Education and Research, Chandigarh...

- Special 4 bedded provision for Bone Marrow Transplant
- Best regional health care center for Pulmonary Medicine that includes Lung cancer clinic
- High tech machinery for Radiotherapy.⁵²

3.2.4 As an example of cancer treatment facilities at large private hospitals, see [Apollo Hospitals](#).

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3.3 Access to treatment

3.3.1 The Think Global Health article, India Needs Cancer Care Outside its Big Cities, dated 23 October 2022, stated:

'Improvements in treatment facilities to meet growing needs have been limited to urban areas. Almost 70 percent of the Indian population live in rural areas, but most of the country's cancer facilities are in a few major cities.

"Access to cancer care goes down as soon as you go out of tier 1 cities [larger cities, including Chennai, Mumbai, and Kolkata]. In rural India, it is much lower than what it is in urban India," says C.S. Pramesh, director of Tata Memorial Hospital in Mumbai, one of India's...largest cancer centers. 'The result is that tertiary cancer care centers in cities are overwhelmed.

"We see about 45,000 new patients registered with us every year. Only around 15 percent are from the city, 25 percent come from other parts of the state, and nearly 60 percent of the patients come from other parts of

⁵² Medifee, '[Top 11 Cancer Hospitals in India](#)', no date

India—a vast majority of whom travel far distances from northern, eastern, and northeast India for their treatments,"....

'It's the poorest patients who travel to large, publicly funded hospitals because of the subsidized care offered in these [tertiary care] centers.

'...patients and families have to figure out the logistics of their stay [in big city hospitals], overcome language and cultural barriers, forgo regular incomes, leave children and other family members back home, and endure stigma associated with the disease. These hurdles lead to many patients choosing to discontinue their treatments. Hospitals and charitable organizations reserve some beds for patients and caregivers, but there still remains a large unmet need...'⁵³

3.3.2 The same source noted:

'St. Jude India is one organization that provides shelter for children undergoing cancer treatment and their families who travel from rural India and small towns to urban cancer centers.

'Access to cancer care facilities—including basic diagnostic tools like lab tests, blood work, and scans—is still sparse in many parts of India. ...

'Oncologists—doctors who specialize in cancer care—are limited in number, and it is difficult to access them outside big cities.

"At last count, 50 percent of all oncologists in India were in just ten or twelve major cities. All the other places account for the other 50 percent," points out Pramesh...

'...People first exhaust local options, visiting non-medical practitioners for treatment—village elders and shamans who use traditional remedies... It is only when the disease has advanced that many patients go to tertiary centers...

'In an effort to bridge the urban and rural cancer care disparity, the Tata Memorial Hospital has helped set up eight additional cancer centers in smaller cities. Two cancer centers were opened in Varanasi, in northern India...[and] register almost 18,000 patients a year...

'Another effort is the National Cancer Grid (NCG), a network of more 270 private and public cancer centers that standardize cancer care protocols so people can get quality care beyond a few centers.'⁵⁴

3.3.3 The Indian Express (news media outlet) report, These cutting-edge technologies have revolutionised cancer care in India, dated 4 February 2023, stated:

'Some of the cutting-edge technologies that have helped change the cancer scenario in India:

'Precision Medicine/Oncology...uses genomic information to personalize treatment for cancer patients...

'Robotic Surgery...It is used in cancer surgery to remove tumours with

⁵³ Think Global Health, '[India Needs Cancer Care Outside its Big Cities](#)', 23 October 2022

⁵⁴ Think Global Health, '[India Needs Cancer Care Outside its Big Cities](#)', 23 October 2022

greater precision, minimizing the risk of damage to surrounding tissue...

'Image-guided Radiation Therapy (IGRT)...

'Proton Therapy...is another type of radiation therapy that uses high-energy proton beams to destroy cancerous cells...

'Liquid biopsy is a non-invasive diagnostic test that analyses a patient's blood or other bodily fluids for cancer cells or markers...

'Artificial Intelligence (AI)...is being used in cancer care to improve diagnosis, treatment planning and prognosis...

'Radiomics focuses on AI-powered healthcare...has been applied within oncology to improve diagnosis, prognostication, and clinical decision support, with the goal of delivering precision medicine.

'Theranostics...is a treatment strategy that combines therapeutics with diagnostics and helps in targeted drug delivery.'⁵⁵

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3.4 Cost of cancer treatment

3.4.1 The Care Insurance website provided the following information regarding the cost of cancer treatment in India⁵⁶

Cancer treatment	Cost of treatment in India (There may be a 5%-10% variation in estimated costs depending on the severity of the cancer and the location of the cancer treatment facility)
Surgery	Organ-specific cancer treatment usually costs from 280,000 rupees (£2,738.50) to 1,050,000 rupees (£10,268.17) ⁵⁷ . Price will vary depending on the site and stage of cancer
Robotic surgery	Around 525,000 rupees (£5,134.73) ⁵⁸ on average
Chemotherapy	18,000 rupees (£176) ⁵⁹ per session, depending on the cancer's severity
Radiation therapy	There is no fixed therapy cost in India, as it depends on the patient's need for internal or external therapy Internal radiation - from 61,960 rupees (£605.96) to 516,337 rupees (£5,049.72) ⁶⁰ External radiation – from 30,000 rupees (£293.35) to 2,000,000 rupees (£19,551.74) ⁶¹

⁵⁵ Indian Express, '[These cutting-edge technologies have revolutionised cancer...](#)', 4 February 2023

⁵⁶ Care Insurance, '[Cancer Treatment Cost in India: Important Things...](#)', updated on 2 February 2023

⁵⁷ XE Currency Converter, '[Indian rupees to British pounds](#)', 19 April 2023

⁵⁸ XE Currency Converter, '[Indian rupees to British pounds](#)', 19 April 2023

⁵⁹ XE Currency Converter, '[Indian rupees to British pounds](#)', 19 April 2023

⁶⁰ XE Currency Converter, '[Indian rupees to British pounds](#)', 19 April 2023

⁶¹ XE Currency Converter, '[Indian rupees to British pounds](#)', 19 April 2023

Immunotherapy	Cost ranges from 441,000 rupees (£4,310.96) to 455,000 rupees (£4,447.81) ⁶² The cost is estimated for monthly treatment over a period of at least two years
Bone marrow transplant	Cost ranges from 1,500,000 rupees (£14,661.37) to 4,800,000 rupees (£46,916.38) ⁶³
Targeted therapy	Cost ranges from around 200,000 rupees (£1,955.15) to 250,000 rupees (£2,443.94) ⁶⁴
Hormone therapy	Cost will depend on the severity of the cancer but usually costs from 322,845 rupees (£3,156.19) ⁶⁵ onwards

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3.5 State and NGO support in accessing treatment

3.5.1 The ZenOnco.io (Indian integrative cancer care healthtech platform), article, Financial Support for Cancer Treatment By Indian Government, dated 20 April 2022, provided information about government schemes for providing financial support to cancer patients. The schemes mentioned were:

‘1. Health Minister’s Cancer Patient Fund (HMCPF):..The fund usually provides financial support to those cancer patients dwelling in regions below the poverty line...

‘List of 27 Regional Cancer Centres under the scheme of HMCPF:

- Kamala Nehru Memorial Hospital, Allahabad, Uttar Pradesh
- Chittaranjan National Cancer Institute, Kolkata, West Bengal
- Kidwai Memorial Institute of Oncology, Bangalore, Karnataka
- Regional Cancer Institute (WIA), Adyar, Chennai, Tamil Nadu
- Acharya Harihar Regional Cancer, Centre for Cancer Research & Treatment, Cuttack, Orissa
- Regional Cancer Control Society, Shimla, Himachal Pradesh
- Cancer Hospital & Research Centre, Gwalior, Madhya Pradesh
- Indian Rotary Cancer Institute (AIIMS), New Delhi
- R.S.T. Hospital & Research Centre, Nagpur, Maharashtra
- Pt. J.N.M. Medical College, Raipur, Chhatisgarh
- Post Graduate Institute of Medical Education & Research..., Chandigarh

⁶² XE Currency Converter, [‘Indian rupees to British pounds’](#), 19 April 2023

⁶³ XE Currency Converter, [‘Indian rupees to British pounds’](#), 19 April 2023

⁶⁴ XE Currency Converter, [‘Indian rupees to British pounds’](#), 19 April 2023

⁶⁵ XE Currency Converter, [‘Indian rupees to British pounds’](#), 19 April 2023

- Sher-I- Kashmir Institute of Medical Sciences, Soura, Srinagar
- Regional Institute of Medical Sciences, Manipur, Imphal
- Govt. Medical College & Associated Hospital, Bakshi Nagar, Jammu
- Regional Cancer Centre, Thiruvananthapuram, Kerala
- Gujarat Cancer Research Institute, Ahmadabad, Gujarat
- M.N.J. Institute of Oncology, Hyderabad, Andhra Pradesh
- Pondicherry Regional Cancer Society, JIPMER, Pondicherry
- Dr. B.B. Cancer Institute, Guwahati, Assam
- Tata Memorial Hospital, Mumbai, Maharashtra
- Indira Gandhi Institute of Medical Sciences, Patna, Bihar
- Acharya Tulsi Regional Cancer Trust & Research Institute..., Bikaner, Rajashtan
- Regional Cancer Centre, Pt. B.D.Sharma Post Graduate Institute of Medical Sciences, Rohtak, Haryana
- Civil Hospital, Aizawl, Mizoram
- Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow
- Government Arignar Anna Memorial Cancer Hospital, Kancheepuram, Tamil Nadu
- Cancer Hospital, Tripura, Agartala

'2. The Health Minister's Discretionary Grants (HMDG): It is the type of scheme that provides financial support up to Rs fifty thousand to the poor cancer patients in the conditions where these patients are not able to avail accessible medical facilities at the government hospitals...

'3. The Central Government Health Scheme (CGHS) is applicable for retired Central Government employees and their dependents. In order to provide better cancer treatment facilities to CGHS beneficiaries, one private hospital in Hyderabad and 10 Private hospitals in Delhi were registered in June 2011 under CGHS, mainly for availing Cancer treatment as per the rates of Tata Memorial Hospital for Cancer Surgery...

'4. Prime Minister's National Relief Fund (PMNRF): It mainly aims for providing financial support to the poor patients for the disease treatment at Government/PMNRF designated hospitals to the partial settlement of the expenses...It is applicable for the victims of natural disasters and also provides partial coverage for heart surgeries, kidney transplantation, cancer treatment, and more such treatments...

'5. Pradhan Mantri Jan Arogya Yojana (PMJAY) scheme or Ayushman Bharat Yojana (AB-PMJAY scheme):..Ayushman Bharat Yojana (AB-PMJAY) will help underprivileged families avail the best healthcare services with insurance coverage up to INR 5 lakh for each family per year for tertiary and secondary hospitalization expenses involving diagnostic cost, medical treatment, hospitalization, pre-existing illnesses and several critical

ailments. It facilitates cashless healthcare services to its beneficiaries in public sector hospitals and private network hospitals...

'6. State Illness Assistance Fund (SIAF): It is mainly integrated for the specific states and union territories for setting up the Illness Assistance Fund offering coverage of up to Rs. 1 Lakh for cancer treatment at government hospitals within the state. Many states do not constitute this scheme, while the other states support the plan.'⁶⁶

3.5.2 The Give NGO article, 10 cancer care NGOs in India helping the poor, dated 4 February 2022, stated:

'On World Cancer Day, we look at 10 cancer care NGOs that are helping patients in various ways. They are also spreading awareness about the disease and its prevention.

'1. Cuddles Foundation...

'Its FoodHeals Programme is about providing proper nutrition customised to a child's medical condition. Cuddles Foundation's trained nutritionists work with government and charity cancer hospitals and share food and supplements with patients and families...

'2. St. Jude India Childcare Centres

'The organisation's centres are a home away from home for underprivileged families during their child's treatment for cancer. St. Jude's mission is to provide a clean, safe and cost-free environment and holistic care to children with cancer...

'St. Jude India Childcare Centres - Cancer Care NGO

'This cancer care NGO provides every child suffering from the illness, irrespective of economic status, a chance of surviving the disease. In its 33 centres across India, St. Jude provides families in need with free housing, nutrition and free transportation...

'3. Charutar Arogya Mandal

'Charutar Arogya Mandal

'Charutar Arogya Mandal provides state-of-the-art multidisciplinary cancer care for patients from weaker economic groups at affordable or no cost. Shri Krishna Hospital, which the Mandal runs, does over 500 cancer surgeries. It also provides 2,000 patients with radiotherapy and 2,500 patients with chemotherapy every year.

'4. Indian Cancer Society

'Founded in 1951, Indian Cancer Society is considered to be the first cancer care NGO that started to provide help to patients in India. And it has been helping with the early detection of cancer through centres and mobile camps across India...

'It also supports the underprivileged with accommodation, rehabilitation, and survivor support groups...

⁶⁶ ZenOnco.io, '[Financial Support for Cancer Treatment By Indian Government](#)', 20 April 2022

‘5. Udhavum Ullangal Public Charitable Trust...

‘This cancer care NGO conducts medical education programmes each year, in association with the Department of Public Health, Government of Tamil Nadu. They also conduct cancer awareness and screening camps associated with Chennai’s Cancer Institute...

‘6. CanKids KidsCan

‘As the organisation’s name suggests, CanKids KidsCan works with children who have cancer through its signature programme YANA – You are Not Alone. They provide holistic support to a child with cancer and the family, from detection, through diagnosis treatment, and thereafter to improve the survival chances.

‘The organisation runs six ‘Home Away From Homes’ – a low-cost model where children with cancer and their families can stay while they are undergoing treatment...Its Paediatric Palliative Care Centre (PPCC) Subhita provides comprehensive palliative and supportive care for children with cancer.

‘7. Yuvraj Singh Foundation...

‘The Foundation works extensively in the healthcare sector, focusing on cancer issues. The organisation educates people about cancer prevention techniques, the importance of getting screened regularly and the signs and symptoms of cancer...

‘Yuvraj Singh Foundation - Cancer Care NGO

‘Yuvraj Singh Foundation’s vision is to eradicate the stigma associated with cancer in India. It also aims to change the negative public perception of the disease – that is preventable and curable...

‘8. Sanjeevani Life Beyond Cancer...

‘It runs various programmes for cancer patients. One of them is called CanSahyogi. Under this, it provides emotional, psychological and logistical support to patients and their relatives besides hand-holding patients through the course of their treatment...

‘9. Women’s Cancer Initiative – Tata Memorial Hospital

‘The initiative’s core activity comprises the support of socially and economically disadvantaged women who are diagnosed with breast and gynaecological cancers...

‘10. Cancer Patients Aid Association

‘When it was founded over 52 years ago, the mission of the Cancer Patients Aid Association (CPAA) was to become an all-encompassing cancer help agency that works towards patient care, aid and assistance, awareness, early detection, rehabilitation and advocacy.’⁶⁷

3.5.3 The Ministry of Health and Family Welfare (MOHFW) website provided a list of [regional cancer centres](#)⁶⁸.

⁶⁷ Give, ‘[10 cancer care NGOs in India helping the poor](#)’, 4 February 2022

⁶⁸ MOHFW, ‘[Addresses of Regional Cancer Centres](#)’, no date

3.5.4 See also [Rural/urban facilities](#).

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Section 4 updated: 26 April 2023

4. Cardiology (heart conditions)

4.1 Hypertension (high blood pressure)

4.1.1 The WHO report, UN award for high-impact India Hypertension Control Initiative, dated 25 September 2022, stated:

‘India Hypertension Control Initiative (IHCI), a nationwide primary health care intervention under the National Health Mission, was awarded the 2022 UN Interagency Task Force and the WHO Special Programme on Primary Health Care Award at a UN General Assembly side-event held on 21 September 2022 in New York...

“IHCI is being implemented in 138 districts of 23 states. More than 34 lakh people with hypertension are taking treatment in government health facilities... We are committed to building a healthy and fit India,” tweeted Dr Mansukh Mandaviya, Union Minister of Health and Family Welfare, Government of India...

‘Of the estimated 220 million people living with hypertension in India, only 12% have their blood pressure under control. India has set a target of 25% relative reduction in the prevalence of hypertension (raised blood pressure) by 2025.

‘IHCI’s easily scalable strategies include a simple drug-dose-specific standard treatment protocol, ensuring adequate quantity of protocol medications, decentralization of care with follow-up and refills of medicines at Ayushman Bharat Health & Wellness Centres (AB-HWCs), task sharing involving all health staff, and a near real-time information system to track every patient for follow-up and blood pressure control. Around half of those who were treated under IHCI have blood pressure under control.’⁶⁹

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4.2 Heart disease and failure

4.2.1 The Kauvery Hospital in Chennai can provide medical care for people with heart disease, as explained in its website:

‘The Kauvery heart failure and transplantation centre provides comprehensive multidisciplinary care for heart failure patients to promote and restore their quality of life. The highly qualified team of doctors and supportive staff including the specialised heart failure nurses will strategise a personalised care plan taking into account the co-morbidities. The treatment offered takes a comprehensive approach to heal the heart starting from diet, exercise, psychosocial help to medications, device implants and heart transplants.’⁷⁰

4.2.2 As an example of cardiology facilities at large private hospitals in the main

⁶⁹ WHO, ‘[UN award for high-impact India Hypertension Control Initiative](#)’, 25 September 2022

⁷⁰ Kauvery Hospital, Chennai, ‘[Kauvery Heart Failure and Transplantation Centre](#)’, no date

cities, see [Apollo Hospitals](#)⁷¹.

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Section 5 updated: 26 April 2023

5. Dental diseases and conditions

5.1.1 The WHO report, Indian Health System Review, stated:

‘While dental care has traditionally been considered as part of primary health-care, dental health services at the PHC level are unavailable in most states in India. Dental facilities in public sector facilities are available mostly at the CHC level or higher. Most practising dentists in India are concentrated in the private sector (over 90%) and in urban areas... These factors have led to a pronounced inequity in the distribution of dental health care between rural and urban areas. There are no regulations on prices, and there is limited oversight on the quality of dental services. In 2014, the DCI released several guidelines, which include information on dental ethics, duties and obligations of dentists, maintenance of clinical practices, dental records, display of registration numbers, rational prescription of generic drugs, quality of services and payment for professional services (Dental Council of India, 2014). Unfortunately, these guidelines are neither enforced nor implemented in any registration or accreditation process.’⁷²

5.1.2 The Policy Circle (independent media platform dedicated to coverage of the Indian economy, policy, governance, and sustainable development) website noted in an article in June 2022:

‘Out-of-pocket payment for dental healthcare is still the most common payment method in developing nations like India. Very few people can afford this on a regular basis. A majority of individuals will visit a dentist only on rare occasions and for curative treatment. Because of the high expense of preventive measures, the percentage of the population who receives dental treatment has remained low. There is also a lack of awareness among Indian population regarding oral health...

‘Dental surgeries are not covered by most Indian health insurance companies because of the misconception that they come under cosmetic treatment...

‘There are very few private insurance companies in India that cover dental operations and none of the big insurance companies offer dental insurance separately.

‘Though India is producing a large number of dental graduates, most rural areas in the country do not have service providers for common oral diseases and hence about 72.6% of the rural population remains uncovered. There is also the issue of accessibility and cost if people need to travel to get oral health treatment. Most dental procedures are covered in the case of an accident, although they are usually restricted to fixing the damage caused by the accident.’⁷³

⁷¹ Apollo Hospitals, ‘[Cardiology](#)’, no date

⁷² WHO, ‘[Indian Health System Review](#)’ (page 188), 2022

⁷³ Policy Circle, ‘[India must push for targeted dental insurance schemes](#)’, 3 June 2022

- 5.1.3 The Bhalla Dental Clinic and Implant Centre in Ahmedabad can provide the following dental-care services:
- Root canal treatment
 - Cosmetic dentistry
 - Dental crown and bridge treatment
 - Tooth whitening treatment
 - Dental implants surgery
 - Dental bridge treatment
 - Tooth reshaping and contouring
 - Cosmetic gum surgery⁷⁴.
- 5.1.4 The SmileCentre dental care centre in Kochi can carry out a wide range of dental and facio-maxillary treatments, such as dental implants, orthodontic treatment, smile-designing laser dentistry, dento-facial trauma and deformities surgery, including cosmetic jaw surgery, and dental emergencies⁷⁵.
- 5.1.5 The Dr Aher dental surgery in Rameshwar Nagar can carry out root canal treatment, smile-designing, dental implants, dental veneers, dental bonding, cosmetic caps, brace fittings, teeth whitening, and paediatric dental care⁷⁶.
- 5.1.6 See also WHO 2022 [Oral Health Country Profile on India](#).

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Section 6 updated: 26 April 2023

6. Diabetes

- 6.1.1 MedCOI confirmed in March 2020 that the following services were available at or via public hospitals including AIIMS:
- outpatient or inpatient treatment by an internal specialist (internist)
 - laboratory research of blood glucose (incl: HbA1C/glyc.Hb)
 - laboratory research: urine test for glucose/glucosuria⁷⁷.
- 6.1.2 MedCOI also confirmed in March 2020 that the following drugs used to treat diabetes were available from the All India Medicos (private facility) in Delhi - metformin, gliclazide, and tolbutamide⁷⁸.
- 6.1.3 The Biospectrum India article, Pharma Hits Sweet Spot with Innovative Diabetes Drugs, dated 1 November 2022, stated:
- ‘Looking at the growth potential of the diabetes market, Mumbai-based Glenmark Pharmaceuticals launched Thiazolidinedione Loxeoglitazone (Loxeoglitazone) in India for the treatment of type 2 diabetes in adults on

⁷⁴ Bhalla Dental Clinic and Implant Centre, Ahmedabad, [‘Dental Treatment and Surgery...’](#), no date

⁷⁵ SmileCentre, Kochi, [‘About Us’](#), no date

⁷⁶ Dr Aher dental surgery, Rameshwar Nagar, [‘Treatments’](#), no date

⁷⁷ MedCOI, 16 March 2020

⁷⁸ MedCOI, 11 March 2020

October 6 [2022]. Marketed under the brand name LOBG; it contains Lobeglitazone (0.5 mg) and to be taken once daily under prescription to improve glycemic control in adult diabetic patients...

'To add to the list of launches of new drugs to address type 2 diabetes is Mumbai-based Alkem Laboratories Limited. The 5th largest Indian pharmaceutical company, Alkem has launched for the first time in India on October 6 [2022], triple drug fixed dose combination (FDC) of Dapagliflozin, Sitagliptin and Metformin under the brand name of Dapanorm Trio at an affordable price for adults with type 2 Diabetes in India. Dapanorm trio is priced at Rs 19.70 per tablet which is almost 70 per cent less compared to the combined cost of innovator drugs.

'To support the diabetes patients, Ahmedabad-based Zydus Lifesciences Ltd launched the generic version of sitagliptin in India under the brand names Sitaglyn and Siglyn in July this year...

'Ahmedabad-based Cadila Pharmaceuticals has also...launched a potent combination of Sitagliptin and Metformin and branded it as Jankey M. Sitagliptin is a drug from the class of DPP-4 inhibitors, and a one-of-its-kind drug for the treatment of high glucose levels in the blood, also known as hyperglycaemia.

'During the beginning of this year Novo Nordisk India launched the world's first and only "peptide in a pill", oral semaglutide, a game changer in diabetes management. Semaglutide, a GLP-1 receptor analogue (GLP-1 RA) – one of the drug classes to treat diabetes, till now was available only in the form of injections.'⁷⁹

6.1.4 The Biospectrum India article, Pharma Hits Sweet Spot with Innovative Diabetes Drugs, also stated:

'All classes of antidiabetic drugs are well represented in India - namely. biguanides (metformin), thiazolidones (various glitazones), sulfonyl ureas (glipizide, glimepride), meglitinides (sulfonyl urea analogues such as repaglinide, nateglinide), GLP-1 receptor agonists (incretin mimetics such as liraglutide), DPP-4 inhibitors (gliptins such as sitagliptin & vildagliptin), SGLT2 inhibitors (dapagliflozin, etc.), Alpha glucosidase inhibitors (Acarbose).

'Girdhar Balwani, Professional Mentor & Independent Director, Cadila Pharmaceuticals says, "...Also, many ayurvedic products are available in India to manage diabetes."⁸⁰

6.1.5 In cases where diabetic retinopathy has been diagnosed, refer to the section on [Eye treatment](#).

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Section 7 updated: 26 April 2023

7. Ear, nose and throat diseases

7.1.1 The Vikram ENT Hospital in Coimbatore can treat ontological conditions,

⁷⁹ Biospectrum India, '[Pharma Hits Sweet Spot with Innovative Diabetes Drugs](#)', 1 November 2022

⁸⁰ Biospectrum India, '[Pharma Hits Sweet Spot with Innovative Diabetes Drugs](#)', 1 November 2022

rhinological condition, laryngological conditions, head and neck conditions, allergies, and snoring and sleep apnea.⁸¹

7.1.2 The Mehrotra ENT Hospital in Kanpur can provide hearing aids, ENT surgery, cochlear implants, speech therapy, nasal endoscopies, hearing tests, treatment for vertigo, treatment for sinus conditions, treatment for snoring, and treatment for tinnitus⁸².

7.1.3 The Department of ENT and Cochlear Implant of the Sanar International Hospital in Delhi can provide treatment for the following ENT conditions:

- basic ear, nose and throat ailments
- sinusitis and its complications
- hearing disorders in children, adults, and elderly
- voice disorders
- swallowing disorders
- airway passage disorders
- skull-base diseases
- vertigo
- hearing loss needing cochlear implants
- voice disorders
- endoscopic surgeries for sinusitis and skull-base diseases
- endoscopic DCR for lacrimal gland disease⁸³.

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Section 8 updated: 26 April 2023

8. Eye diseases and treatment

8.1.1 ASG hospitals in India (Kolkata, Amritsar, Aurangabad, Bhopal, Bhubaneswar, Bikaner) can treat the following eye diseases and conditions:

- cataracts
- corneal diseases and transplants
- glaucoma
- diabetic retinopathy
- retinal detachment
- strabismus (squint)
- amblyopia (lazy eye)⁸⁴

8.1.2 The Agarwals Eye Hospitals chain has 119 eye hospitals in India (their website provides the addresses of all these hospitals). These hospitals

⁸¹ Vikram ENT Hospital, Coimbatore, '[Treatments](#)', no date

⁸² Practo, '[Mehrotra E.N.T Hospital](#)', no date

⁸³ Sanar International Hospitals, '[Department of ENT and Cochlear Implant](#)', no date

⁸⁴ ASG Eye hospitals, '[Specialities](#)', no date

can treat the following eye diseases and conditions:

- cataracts
- glaucoma
- diabetic retinopathy
- corneal ulcers (keratitis)
- fungal keratitis
- macular holes
- retinopathy prematurity
- retinal detachment
- keratoconus
- macular edema
- squint
- uveitis
- pterygium or surfers eye
- blepharitis
- ptosis
- allergic conjunctivitis
- cornea transplants
- Behcets disease
- computer vision syndrome
- hypertensive retinopathy
- mucormycosis/black fungus⁸⁵.

8.1.3 Medindia's Doctor Directory (accessed on 19 April 2023) (provides information about medical professionals) held information on 23,381 ophthalmologists based in India⁸⁶.

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Section 9 updated: 26 April 2023

9. Gastroenterological conditions

9.1.1 The Medifree⁸⁷ website (online platform that provides information about the cost of medical treatment and diagnostic tests for diseases and health disorders) provided details of gastroenterological hospitals in India:

- Pristyn Care (private hospital chain – hospitals located in various

⁸⁵ Agarwals Eye Hospitals, '[Diseases](#)', no date

⁸⁶ Medindia, '[Ophthalmologists/Ophthalmology in India](#)', no date

⁸⁷ Medifree, '[Best Gastroenterology Hospitals](#)', no date

cities)⁸⁸

- Asian Institute of Gastroenterology, Hyderabad⁸⁹
- Apollo Hospitals, Greams Road, (private) Chennai⁹⁰
- BLK Super Specialty Hospital (private), Delhi⁹¹
- Indraprastha Apollo Hospital, (private), New Delhi⁹²
- Manipal Hospital, (private), Bangalore⁹³
- Fortis Memorial Research Institute, Gurgaon⁹⁴
- Wockhardt Hospitals (South Mumbai, North Mumbai, Rajkot, Nagpur, Nashik)⁹⁵
- Continental Hospital, Hyderabad⁹⁶
- Fortis Hospital, Bannerghatta Road, Bangalore⁹⁷
- Max Superspecialty Hospital, Saket, Delhi⁹⁸
- Fortis Hospital (private), Kolkata⁹⁹
- Nanavati Hospital (private), Mumbai¹⁰⁰
- Ruby Hall Hospital, Pune¹⁰¹.

9.1.2 The CARE Hospitals¹⁰² (runs 16 healthcare facilities in India) website provided information about its gastroenterological treatment services:

'The Department of Surgical Gastroenterology at CARE Hospitals aims at providing a standard of care in surgical gastroenterology at an affordable price. It deals with disorders of the digestive system which affect the human digestive tract, which includes the oesophagus, stomach, small intestine, appendix, colon, nasal canal, pancreas, liver and gallbladder. The department collaborates with medical gastroenterology, oncology, radiation, surgery, anaesthesia, pathology and microbiology to provide patients with multidisciplinary care. Our surgical gastroenterology hospital in Hyderabad offers patient-centered and evidence-based care.

'We treat patients with gastrointestinal problems using surgical approaches under the supervision of our top surgical gastroenterologists in

⁸⁸ Pristyn Care, '[Surgery Matlab Pristyn Care](#)', no date

⁸⁹ Asian Institute of Gastroenterology, '[Home](#)', no date

⁹⁰ Apollo Hospitals, '[Apollo Hospitals, Greem Road](#)', no date

⁹¹ BLK-MAX Super Specialty Hospital, '[Homepage](#)', no date

⁹² Apollo Hospitals, Delhi, '[Contact Us](#)', no date

⁹³ Practo, '[Manipal Hospitals Old Airport Road](#)', no date

⁹⁴ Medifee, '[Best Gastroenterology Hospitals](#)', no date

⁹⁵ Wockhardt Hospitals, '[Home](#)', no date

⁹⁶ Medifee, '[Best Gastroenterology Hospitals](#)', no date

⁹⁷ Fortis, '[Fortis Hospital BG Road Bangalore](#)', no date

⁹⁸ Max Healthcare, '[Max Super Speciality Hospital, Saket](#)', no date

⁹⁹ Fortis Healthcare, '[Fortis Hospital, Anandpur, Kolkata](#)', no date

¹⁰⁰ Nanavati Max, '[NABH Accredited Hospital Near You](#)', no date

¹⁰¹ Medifee, '[Best Gastroenterology Hospitals](#)', no date

¹⁰² CARE Hospitals, '[About Us](#)', no date

Hyderabad.¹⁰³

9.1.3 The CARE Hospitals website also stated:

‘The Institute of Colorectal Surgery at CARE Hospitals is one of India’s first dedicated centres for treating diseases of the colon, rectum, and anus. CARE Hospitals is one of the best gastroenterology hospital in Hyderabad because of this. We treat complications of the stomach and small intestine in our gastroenterology practice. In addition, our gastroenterologists treat patients who are suffering from nausea, diarrhoea, abdominal pain, and cramping.’¹⁰⁴

9.1.4 The CARE Hospitals website also stated that CARE hospitals can carry out colonoscopies, endoscopies, and enteroscopies¹⁰⁵.

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Section 10 updated: 26 April 2023

10. Geriatric care

10.1 Legal provisions

10.1.1 The Maintenance and Welfare of Parents and Senior Citizens Act, 2007, places a legal obligation on all ‘adult children’ in India to provide for the maintenance of their parents and grandparents who are aged 60 and older¹⁰⁶. ‘Maintenance’, as defined in the Act, includes residence, food, clothing and medical attendance and treatment¹⁰⁷. The Act extends to the whole of India, except the states of Jammu and Kashmir. It also applies to citizens of India who are outside India¹⁰⁸.

10.1.2 In the case of a senior citizen (aged 60+) who is childless, the Maintenance and Welfare of Parents and Senior Citizens Act provides that a relative has an obligation to provide for his/her maintenance if the relative has sufficient means and either has possession of the senior citizen’s property or stands to inherit from him/her¹⁰⁹.

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10.2 Residential care

10.2.1 Article 19 of the Maintenance and Welfare of Parents and Senior Citizens Act directs that state governments ‘may establish and maintain such number of old age homes, at accessible places, as it may deem necessary, in a phased manner, beginning with at least one in each district and to accommodate in such homes a minimum of one hundred [and] fifty senior citizens who are indigent.’¹¹⁰

10.2.2 The website NGOs India gives details of a number of NGOs which maintain

¹⁰³ CARE Hospitals, ‘[Gastroenterology - Surgical](#)’, no date

¹⁰⁴ CARE Hospitals, ‘[Gastroenterology - Medical](#)’, no date

¹⁰⁵ CARE Hospitals, ‘[Gastroenterology - Medical](#)’, no date

¹⁰⁶ India Code, ‘[Maintenance and Welfare of Parents and Senior Citizens Act, 2007](#)’, Articles 1, 2, 4

¹⁰⁷ India Code, ‘[Maintenance and Welfare of Parents and Senior Citizens Act, 2007](#)’, Article 2(b)

¹⁰⁸ India Code, ‘[Maintenance and Welfare of Parents and Senior Citizens Act, 2007](#)’, Article 1(2)

¹⁰⁹ India Code, ‘[Maintenance and Welfare of Parents and Senior Citizens Act, 2007](#)’, Article 4(4)

¹¹⁰ India Code, ‘[Maintenance and Welfare of Parents and Senior Citizens Act, 2007](#)’, Article 19

[‘Old age homes and old age care centres’](#)¹¹¹.

- 10.2.3 The [Alzheimer's & Related Disorders Society of India](#) also runs care homes, daycare facilities and homecare services in various centres¹¹².

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10.3 Medical care

- 10.3.1 The Express Healthcare article, The case for geriatric care in India, dated 1 October 2022, stated:

‘...geriatric services are available in tertiary care hospitals. Most facilities are based in urban areas...There are also companies that offer services such as on-premise and at-home screening for various conditions...

‘Community geriatric healthcare workers can play a big role in providing care to elderly population at home. Currently, geriatric caregivers provide need-based care. But this approach can extend to a larger level to provide care for communities provided there are relevant public-private partnerships in place.’¹¹³

- 10.3.2 A 2022 academic study by A Gaikwad and S Acharya stated:

‘In Lucknow, there was just one philanthropic organization for elderly cancer patients in need. For geriatric people, tertiary care hospitals offer most outpatient department (OPD) services for the elderly. As urban areas are developed more than rural areas, most facilities like government institutions, including daycare centers, senior living communities, counseling centers, and recreational centers, are situated out of reach of the rural population. In a study to look at the needs and requirements of older people in rural Meerut, it was shown that 96% of participants had never used any geriatric welfare services and that up to 46.3% were unaware of any specialized services for the aging population nearby their place of residence. The nearest government building, about 59% of them, is 3 km away from their houses. The inability of older people to access the available health services is caused by a lack of transportation options and their reliance on others to accompany them to the medical institution.’¹¹⁴

- 10.3.3 A number of healthcare providers in India provide health and social care for elderly persons, such as [Care 4 Parents](#)¹¹⁵, [Anvayaa](#)¹¹⁶, and [CAF India](#)¹¹⁷.

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Section 11 updated: 17 April 2023

11. Haematology

- 11.1.1 The Haematology Department of the Fortis Hospital in Gurgaon in Haryana (private facility) provides the following treatment services:

¹¹¹ NGOs India, [‘Old age homes and old age care centres’](#), no date

¹¹² Alzheimer's and Related Disorders Society, [‘Our services’](#), no date

¹¹³ Express Healthcare, [‘The case for geriatric care in India’](#), 1 October 2022

¹¹⁴ A Gaikwad and S Acharya, [‘The Future of Palliative Treatment in India...’](#), 23 September 2022

¹¹⁵ Care 4 Parents, [‘Elder Care’](#), no date

¹¹⁶ Anvayaa, [‘homepage’](#), no date

¹¹⁷ CAF India, [‘Programme & Impact – Elderly Care’](#), no date

'...accurate diagnosis and treatment for various haematological diseases such as Lymphoma, Myeloma, Leukaemia, and related malignant blood disorders; Hereditary blood diseases, Thrombocytopenia, Bleeding disorders- Haemophilia, Thrombocytopenia (Low platelet), Hodgkin's disease, anaemia- Sickle cell anaemia and Thalassemia, Pancytopenia/Aplastic anaemia, Leukopenia (low WBC), Leukocytosis (high WBC), Splenomegaly, Lymphadenopathy and Thrombosis (Excessive clotting) DVT/PE/CVT. The Haematology department offers outpatient and inpatient facility...and has a well equipped diagnostic laboratory and an extensive blood bank.'¹¹⁸

11.1.2 The Vaidam website (healthcare information source) provided details of various hospitals in India that provide medical treatment for people with haematological conditions. Some of these hospitals (a more comprehensive list is contained in the website) are the:

'Indraprastha Apollo Hospital, New Delhi...

'The hematology department of the hospital is counted amongst the top 10 hematology hospital in India, well-equipped with state-of-the-art techniques for non-invasive vascular testing, diagnostic angiography, and endovascular therapeutic procedures...

'Max Super Speciality Hospital, Saket, New Delhi...

'It is well-equipped with the cutting-edge technologies like state-of-art 1.5 Tesla MRI machine and a 64 slice CT Angio in addition to Asia's first BrainSUITE in which MRI can be taken while the surgery is surgery is going on...

'Artemis Hospital, Gurgaon...

'This is counted as one of the topmost hematology hospitals in India, specializing in Bone Marrow Transplants...

'BLK Super Speciality Hospital, New Delhi...

'BLK is center for BMT is the largest center in India and one of the biggest in Asia having performed the maximum number of transplants in north India.

'It has also been credited with Delhi's First MUD (Matched Unrelated Donor) Transplant...

'MGM Healthcare, Chennai...

'The hematology unit provides comprehensive patient care from diagnostic evaluation to social support including therapy plans, psychological support, etc. - The department uses the latest, advanced technologies to diagnose and treat hematological disorders and cancer...

'Manipal Hospitals Dwarka, Delhi...

'Manipal Hospital Dwarka has a distinct well-equipped unit for Hematology, which has all the advanced pieces of equipment to perform procedures such as bone marrow tests, cytochemistry, coagulation screening, system analyser, haemoglobinopathy screening, 24 hours blood transfusion, and

¹¹⁸ Fortis Healthcare, '[About Haematology](#)', no date

bone marrow transplant.

‘The hospital also performs procedures such as blood gas treatment, sugar & oxygen analysis, emergency management, ascites & pleural tapping, state-of-the-art critical care facilities, early diagnosis & preventive treatment.

‘All the paramedical staff including nurses and ancillary staff at Manipal Hospital are highly trained to handle patients of all age groups who suffer from blood-related disorders...

‘Medanta - The Medicity, Gurgaon...

‘The hospital has a dedicated center to treat disorders related to Haematology and Medical Oncology...’¹¹⁹

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Section 12 updated: 26 April 2023

12. HIV/AIDS

- 12.1.1 According to UNAIDS, an estimated 2,400,000 people were diagnosed with HIV infections in 2021, of whom 70,000 were children; 1,100,000 were women aged 15+, and 1,300,000 were men aged 15+¹²⁰.
- 12.1.2 MedCOI advised in January 2020 that the following treatment was available at the All India Institute of Medical Sciences (AIIMS) ART clinic, Ansari Nagar, New Delhi, a public hospital:
- laboratory research HIV: CD4 count
 - laboratory research HIV: viral load
 - outpatient treatment and follow up by a HIV specialist
 - inpatient treatment by a HIV specialist
 - inpatient or outpatient treatment and follow up by an internal specialist (internist)¹²¹.
- 12.1.3 Of the antiretrovirals investigated by MedCOI, the following were found to be available at the AIIMS ART clinic in New Delhi: abacavir, atazanavir, darunavir, dolutegravir, efavirenz, lamivudine, raltegravir, ritonavir, tenofovir alafenamide, tenofovir disoproxil, atazanavir + ritonavir (combination), Atripla® (efavirenz + emtricitabine + tenofovir disoproxil), Combivir® (combination of zidovudine/lamivudine, Descovy® (emtricitabine + tenofovir alafenamide), Kaletra® (combination of lopinavir/ritonavir) and Truvada® (combination of tenofovir disoproxil/emtricitabine)¹²².
- 12.1.4 The Hindu article, No shortage of antiretroviral drugs in India: Health Ministry, dated 26 July 2022, noted:
- “Individual antiretroviral therapy (ART) centres may have...[stock] issue at times, but the medicines are immediately relocated from nearby centres,” said a Health Ministry source. He added that there is adequate stock

¹¹⁹ Vaidam, ‘[Best Hematology Hospitals in India](#)’, no date

¹²⁰ UNAIDS, ‘[Country factsheets – India 2021](#)’, no date

¹²¹ MedCOI, 22 January 2020

¹²² MedCOI, 22 January 2020

nationally for around 95% [people living with HIV] PLHIV in the country who are on 1st & 2nd line ARV regimens like Tablet TLD (Tenofovir+ Lamivudine+ Dolutegravir) and other ARV regimens.

'India is one of the very few countries that provides free anti-retroviral medicines for life-long treatment of more than 14.5 lakh PLHIV [1.45 million people] through 680 antiretroviral therapy (ART) centres under its National AIDS Control Programme (NACP), which is fully funded by the Government of India.

“The mainstay of treatment for more than 85 per cent PLHIV is Tablet TLD (a fixed-dose combination of three antiretroviral drugs, namely, Tenofovir (300mg)+Lamivudine (300mg) plus Dolutegravir (50mg), for which there is sufficient stock nationally to last more than 3 months,” the source said.¹²³

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Section 13 updated: 26 April 2023

13. Kidney diseases, transplants and availability of dialysis

13.1.1 Treatment costs vary to an extent from state to state¹²⁴. The following is an example, from MedCOI, of treatment availability and cost at a public hospital in Chandigarh, in the State of Punjab (April 2020):

- Inpatient or outpatient treatment by a Nephrologist: Free
- Laboratory testing of kidney function (creatinin, ureum, proteinuria, sodium, potassium levels): Free
- Chronic haemodialysis (3 times/week): Free¹²⁵.

13.1.2 The following nephrology medicines were available free of charge at the public hospital in Chandigarh: sevelamer, lanthanum carbonate, calcium acetate, calcium carbonate, sodium (natrium) polystyrene sulphonate, calcium polystyrene sulphonate and magnesium carbonate¹²⁶.

13.1.3 The Express Healthcare report, Renal dialysis equipment market in India to reach \$225 million in 2025: GlobalData, dated 8 May 2020, stated:

'Dialysis accessories (such as blood tubing sets and dialyzers) and dialysis machines (hemodialysis machines and peritoneal dialysis equipment) account for more than 85 per cent of the Indian renal dialysis equipment market, says GlobalData...

'Bhaskar Vittal, Medical Devices Analyst, GlobalData, comments:

“The availability of very few number of transplant donors and difficulty in getting matching donors are driving patients suffering from renal diseases to continue to opt for dialysis. There has been a significant expansion in the number of standalone dialysis centers as well as hospitals providing dialysis in the past few years. This has led to the easy availability of dialysis for patients suffering from renal diseases.

¹²³ The Hindu, '[No shortage of antiretroviral drugs in India: Health Ministry](#)', 26 July 2022

¹²⁴ MedCOI, 14 April 2020

¹²⁵ MedCOI, 14 April 2020

¹²⁶ MedCOI, 27 February 2020

“While most of the outpatient healthcare facilities have been suspended due to COVID-19 pandemic, a good number of healthcare facilities are still offering dialysis as it is a necessity for patients suffering from renal failure. This is expected to lead to continued demand for renal dialysis equipment,” Vittal mentioned.¹²⁷

- 13.1.4 The Apollo Hospitals in India have facilities to treat people with kidney conditions, as explained in its website:

‘The Centre of Nephrology at the Apollo Hospitals is one of the leading kidney centers in the country and has comprehensive renal transplant programs. The centre has over 6,000 nephrology admissions in a year.

‘Kidney transplants at Apollo Hospitals offer the most cost-effective packages at a leading hospital in India. Apollo offers both compatible and ABO-Incompatible Kidney Transplantation.

‘The Centres perform minimally invasive surgeries for renal donors which minimizes the post-operative recovery time as well as hospitalization.

‘The stringent infection control practices, immunosuppressive protocols and proactive vigil for complications and their prompt management make the service a huge success.

‘The Transplant unit also integrates, analyzes and addresses the health needs of the transplant patient and his or her family. Each year, the Apollo Hospitals group performs over 400 kidney transplants.¹²⁸

- 13.1.5 The Express Healthcare report, Challenges related to dialysis care in India, dated 3 June 2022, stated:

‘One of the biggest issues is of last-mile delivery and ramping up dialysis centres in the country. There are approximately 4,950 dialysis centres, managed largely by the private sector, and located in urban centres mostly—a trend that shows a Bharat-India divide in healthcare delivery. Two-thirds of the population of India live in rural areas, where the availability of hemodialysis is limited. According to studies, nearly 60 per cent of patients on dialysis travel more than 50 kms to access dialysis...Further, women are under-represented, and there are few pediatric dialysis services. Moreover, India has one of the lowest nephrology workforce densities worldwide. There are only about 2,600 nephrologists (1.9 per million population), and there is a chronic shortage of dialysis centres, nurses and technicians...

‘The Pradhan Mantri National Dialysis Programme was rolled out in 2016 as part of the National Health Mission (NHM) to provide free dialysis services to the poor...

‘Though the Organ Transplant Bill was passed in India in 1994, organ donation rate in India is 0.01 per cent which makes renal replacement therapy beyond the reach of most people and dialysis remains the only way to prolong life.¹²⁹

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¹²⁷ Express Healthcare, [‘Renal dialysis equipment market in India to reach \\$225...’](#), 8 May 2020

¹²⁸ Apollo Hospitals India, [‘Apollo Hospital India - Kidney Centers’](#), no date

¹²⁹ Express Healthcare, [‘Challenges related to dialysis care in India’](#), 3 June 2022

14. Liver diseases and liver transplants

14.1.1 MedCOI confirmed in May 2020 that inpatient or outpatient specialist treatment both by a nephrologist and by an internal specialist (internist) were available, for example at AIIMS New Delhi (a public hospital)¹³⁰.

14.1.2 The AA report, *Elimination of hepatitis virus to take several years in India*, dated 27 July 2021, stated:

'[There were over] 40 million chronic hepatitis B (HBV) infected people in the country as per estimates by India's National Center for Disease Control (NCDC)...Dr. Yogesh Kumar Chawla, India's renowned hepatologist, said there were ramifications on patient care, screening, and delivery of services due to disruptions caused by the pandemic...

'India has set up the National Viral Hepatitis Control Program (NVHCP) in July 2018 intending to eliminate viral hepatitis by 2030...

"As of now, the program for hepatitis C treatment has shown excellent results in the states of Punjab and Haryana. The main advantage with HCV (hepatitis C) is that we use short course all-oral direct-acting antiviral agents (DAAs) that can cure HCV. So, despite the lack of a vaccine, we may achieve elimination in 10-15 years," Chawla said, who has been conferred the fourth highest civilian award of the country.¹³¹

14.1.3 The Economic Times report, *How India is ready to tackle Hepatitis with accessible and affordable diagnostics*, dated 28 July 2022, stated:

'India lacked a thorough viral Hepatitis action plan till 2018. Since 2002, India has only been confined to screening blood at blood banks for Hepatitis B and C and immunisation of infants and new-borns under the Universal Immunisation Program...

'low-income individuals...have found relief in the national Hepatitis control programme, which offers patients free Hepatitis B and C testing and medications...

'Some of the major efforts undertaken...include immunisation with Hepatitis b vaccine, surveillance of viral Hepatitis, injection safety and infection control, Pradhan Mantri national dialysis program, biomedical waste management, Hepatitis b immunisation program, awareness programmes, diagnosis and treatment of Hepatitis...

'Also, states like Punjab have...started HCV treatment. Other states include Assam, Manipur, Tripura, and Haryana, which have provided limited subsidised treatment to HIV HCV co-infected and HCV infected people, but further coverage has yet to be given to all.¹³²

14.1.4 The Greater Kashmir article, *Liver diseases in India: Hope and despair*, dated 3 January 2023, stated:

'Liver disease is fast spreading like an epidemic in India with one out of

¹³⁰ MedCOI, 8 May 2020

¹³¹ AA report, ['Elimination of hepatitis virus to take several years in India'](#), 27 July 2021

¹³² Economic Times, ['How India is ready to tackle Hepatitis with accessible...'](#), 28 July 2022

every five adults getting affected. Liver-related deaths in India have reached a staggering figure of 268,580 (3.17% of all deaths) per year contributing to 18.3% of global 2 million liver-related deaths...

'Over the years, several breakthrough measures have been adopted to fight hepatitis B and hepatitis C and India has been a beneficiary of all these measures. Screening of blood and blood products by sensitive tests has markedly reduced the risk of post-transfusion hepatitis B, hepatitis C, and HIV, though zero-risk, the ultimate goal is yet to be achieved...WHO has organized a safe injection campaign and this has reduced new HIV, HCV & HBV infections by 87%, 83% & 91% respectively, and may lead to the ultimate goal namely the elimination of such infections. Hepatitis B vaccine has been a breakthrough in the fight against global hepatitis B...Lastly, the availability of all oral direct-acting antiviral (DAA) drugs has revolutionized the treatment of hepatitis C, with a cure rate of over 90%, improved clinical outcomes, decrease mortality, and decreased the occurrence of liver cancer...

'Liver transplant story started in India in 1998 and at present around 1800 liver transplants are performed annually in 90-100 active liver transplant centers. Unlike in the Western world, where Deceased Donor Liver transplants (DDLTL) are predominant, Live Donor Liver Transplants (LDLTL) constitute around 85% of transplants in India. The liver transplant program in India is facing several obstacles. There is a large discrepancy between the number of patients requiring a liver transplant and the number of transplants being done in our country. Liver transplant costs at present are exceptional, and not affordable for most families. Donor availability is another major issue.'¹³³

14.1.5 The Medifree website (accessed on 13 April 2023) provided information about liver disease specialist doctors and their medical qualifications:

'Dr. A. Olithselvan - Liver Specialist - 20 Yrs. Exp.

M.B.B.S., M.D., C.C.T (Gastroenterology), M.R.C.P.

'Hospital(s): Manipal Hospital (HAL Airport Road)

'He is a well renowned hepatologist who specializes in treating all types of liver disorders...

'Dr. Anand Khakhar - Liver Specialist - 20 Yrs. Exp., MBBS, MS, DNB

'Hospital(s): Apollo Hospitals (Greaves Road)

'His areas of expertise include liver donor tran[s]plantation, hepatobiliary & pancreatic surgery, adult and paediatric liver transplant surgery procedures and cadaveric liver transplantation...

'Dr. Jayanth Reddy - Liver Specialist - 18 Yrs. Exp.

M.B.B.S., M.S. (General Surgery), M.R.C.S., D.N.B., M.Ch (Liver Surgery)

'Hospital(s): Aster CMI Hospital (Sahakara Nagar)

¹³³ Greater Kashmir, '[Liver diseases in India: Hope and despair](#)', 3 January 2023

'Expertise in performing organ transplant for liver and portions of intestine. Has expertise in diagnosis and treatment of infections of liver, pancreas and gallbladder...

'Dr. Ravichand Siddachari - Liver Specialist - 15 Yrs. Exp.

'M.B.B.S., M.D., M.S. (General Surgery), D.N.B (General Surgery), F.R.C.S., M.Ch, M.R.C.S.Ed

'Hospital(s): Manipal Hospital (HAL Airport Road)

'Has rich experience in performing organ transplant, specifically liver and pancreas transplant...Expertise in open and laparoscopic surgery of liver, pancreas and intestines...

'Dr. Goutham Kumar - Liver Specialist - 14 Yrs. Exp., MBBS, MS (General Surgery)

'Hospital(s): Manipal Hospital (HAL Airport Road)

'Dr. Goutham Kumar is a renowned liver specialist having expertise in HPB surgery, GI cancer surgeries and multi-organ transplant surgeries...

'Dr. Magnus Jayaraj Mansard - Liver Specialist - 13 Yrs. Exp.

'M.B.B.S., M.S. (General Surgery), D.N.B (Gastrointestinal Surgery), M.R.C.S.

'Hospital(s): Manipal Hospital (HAL Airport Road)/Manipal Hospital (Whitefield)

'Well known organ transplant specialist...

'Dr. Rehan Saif - Liver Specialist - 13 Yrs. Exp.

'M.B.B.S., M.S. (General Surgery), F.R.S. (HPB and Transplant Surgery)

'Hospital(s): Aster CMI Hospital (Sahakara Nagar)

'Specializes in diagnosis and treatment of gallbladder, pancreatic and liver disorders...Expertise in treating cancer of liver, gallbladder and pancreas...

'Dr. Naveen Ganjoo - Liver Specialist - 13 Yrs. Exp.

'M.B.B.S., M.D. (Internal Medicine), Fellowship in Gastroenterology, Fellowship in Hepatology and Multi-Organ Transplant

'Hospital(s): Aster CMI Hospital (Sahakara Nagar)

'Has rich experience in diagnosis and treatment of disorders pertaining to liver and gall bladder...

'Dr. P Balachandran Menon - Liver Specialist - 12 Yrs. Exp.

'MBBS, M.Ch (Gastrointestinal Surgery), PDCC (Vascular Surgery)

'Hospital(s): Yashoda Hospitals (Malakpet)

'An experienced liver specialist with areas of expertise including surgical gastroenterology and liver transplant...

'Dr. Swapnil Sharma - 'Liver Specialist - 9 Yrs. Exp., MBBS,MS, DNB (GI surgery)

'Hospital(s): Apollo Hospitals (Belapur)

'Liver transplant and HPB surgeon specializing in treatment of various disorders of liver.'¹³⁴

14.1.6 The Max Centre Liver Transplant and Biliary Sciences can carry out liver transplants¹³⁵.

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Section 15 updated: 26 April 2023

15. Mental health

15.1 Availability of mental health care facilities

15.1.1 The Commonwealth Fund's IHCSP country profile for India, published in June 2020, noted:

'Despite recent policy measures to strengthen mental health care, resources are extremely limited. Across India, there is only one trained psychiatrist for every 250,000 people and fewer than one mental health worker for every 100,000 people. In addition, few hospital beds are dedicated to inpatient psychiatric care...

'National health initiatives have established psychiatric centers within specialized public hospitals. With the launch of the National Health Protection Scheme, comprehensive mental health care will also be available for beneficiaries at newly established Health and Wellness Centre programs.'¹³⁶

15.1.2 The DFAT 2020 Country Information Report – India stated:

'Access to mental health care is not uniform across the country, with availability of services significantly more limited in rural areas than in urban cities and large towns. Across the country, an estimated 150 million people (12.5 per cent of the population) are in need of active interventions for mental illnesses, including nearly 12 million who are living with serious mental disorders. Given the shortfall of specialist and health services for mental illness, treatment is often unavailable or inaccessible even for those who actively seek health care.'¹³⁷

15.1.3 A blog by Dr. Manik Sethi (psychiatry resident at SRM Medical College Hospital and Research Centre, Chennai), published on the British Medical Journal (BMJ) website in 2021, stated:

'There is less than one psychiatrist for every 100,000 individuals, which poses challenges for both mental health professionals and those seeking help...

'From the beginning of my residency, I noticed there was a gross mismatch

¹³⁴ Medifee, '[Best Liver Specialists in India](#)', no date

¹³⁵ Max Healthcare, '[Liver Transplant and Biliary Sciences - Overview](#)', no date

¹³⁶ Commonwealth Fund, IHCSP: '[India](#)', 5 June 2020

¹³⁷ DFAT, '[Country Information Report – India](#)' (page 16), December 2020

between the number of untoward mental health incidents and the utilization of services. My hospital is well equipped with a multidisciplinary team of psychiatrists, clinical psychologists, and psychiatric social workers (a luxury very few centers in India have). The ER was flocked with young adults escorted by the campus security either intoxicated, suicidal, psychotic, or in withdrawal from a substance. Despite this, there were hardly any students who were utilizing mental health services voluntarily.¹³⁸

15.1.4 The Health Systems Global report, Mental Health Promotion, dated 23 February 2022, stated:

‘Accessing mental healthcare is still a challenge in India even two and half decades after the implementation of the District Mental Health Program (DMHP)...The DMHP has several key components; prevention activities such as suicide prevention services; promotional activities such as life skills education, counselling services at schools, colleges, and workplaces; awareness camps at the community level; establishment of linkages with self-help groups and non-governmental organizations, families and care-givers.’¹³⁹

15.1.5 The WHO report, Indian Health System Review, stated:

‘There are 42 mental health institutions with fewer than 26 000 beds, and 50% of these beds are occupied by long-stay patients. There are almost 4000 mental health outpatient facilities and 10 000 psychiatric beds in general hospitals, though little is known about the mix of beds for acute, chronic and long-term care. The mental health workforce faces major shortages. It is estimated that there are 3 psychiatrists, 1.6 mental health nurses, 0.47 psychologists, and 0.33 social workers per 1 million population in India. A significant proportion of the mental health workforce is concentrated in the private sector. The lack of training facilities in clinical psychology, psychiatric social work and psychiatric nursing is a major limitation for the delivery of mental health services in community and rural areas where access to medically trained psychiatrists tends to be limited.’¹⁴⁰

15.1.6 MedCOI confirmed that the following treatment was available at the All India Institute of Medical Sciences (AIIMS) in New Delhi, a public hospital at which treatment costs are subsidised:

- inpatient or outpatient treatment and follow up by a psychiatrist
- outpatient treatment and follow up by a psychologist
- psychotherapy, e.g. cognitive behavioural therapy¹⁴¹.

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15.2 National legal and policy framework

15.2.1 The [Mental Healthcare Act 2017](#) was described in its opening paragraph as: ‘An Act to provide for mental healthcare and services for persons with mental illness and to protect, promote and fulfil the rights of such persons during

¹³⁸ Dr. Manik Sethi, BMJ, ‘[Mental Health Services in India: challenges and innovations](#)’, 4 June 2021

¹³⁹ Health Systems Global, ‘[Mental Health Promotion](#)’, 23 February 2022

¹⁴⁰ WHO, ‘[Indian Health System Review](#)’ (page 187), 2022

¹⁴¹ MedCOI, 18 February 2020

delivery of mental healthcare and services and for matters connected therewith or incidental thereto.¹⁴² The Act sets out the rights of a person with a mental illness including, for example, a right to access mental healthcare and treatment services run by or funded by the appropriate state government or central government, and a right to specify, in advance, the way the patient wishes to be cared for and treated¹⁴³.

15.2.2 The Mental Health Care Act also stated: ‘The right to access mental healthcare and treatment shall mean mental health services of affordable cost, of good quality, available in sufficient quantity, accessible geographically, without discrimination on the basis of gender, sex, sexual orientation, religion, culture, caste, social or political beliefs, class, disability or any other basis and provided in a manner that is acceptable to persons with mental illness and their families and care-givers.’¹⁴⁴

15.2.3 According to the Ministry of Health and Family Welfare ‘National Health Mission’ website:

‘The Government of India launched the [National Mental Health Programme](#) (NMHP) in 1982, with the following objectives:

- to ensure the availability and accessibility of minimum mental healthcare for all in the foreseeable future, particularly to the most vulnerable and underprivileged sections of the population;
- to encourage the application of mental health knowledge in general healthcare and in social development; and
- to promote community participation in the mental health service development and to stimulate efforts towards self-help in the community.’¹⁴⁵

15.2.4 The WHO report, Indian Health System Review, stated:

‘India was one of the first developing countries to have a national programme for mental health, launched as the National Mental Health Programme (NMHP) in 1982. The Indian Mental Healthcare Act, 2017 replaced the earlier 1987 Mental Healthcare Act, as the latter was considered inadequate for dealing with issues around consent, and was focused on legal considerations rather than medical considerations, on criminal intent of patients admitted to hospitals with mental illness, and placed less emphasis on community and family-level psychiatry. The (new) Act of 2017 aspires to establish the parity of mental disorders with physical disorders, and to regulate all facilities providing psychiatric care, irrespective of whether they practise allopathy or AYUSH. It also seeks to promote systems that help protect personal liberties, and to establish guidelines for insurance agencies to avoid discrimination against mental illness along with other changes. Policy changes in the past few decades have also led to the establishment of general hospital psychiatry units (GHPUs) at government teaching and other major hospitals and increased the accessibility of mental

¹⁴² India Code, ‘[Mental Healthcare Act 2017](#)’, no date

¹⁴³ India Code, ‘[Mental Healthcare Act 2017](#)’, no date

¹⁴⁴ India Code, ‘[Mental Healthcare Act 2017](#)’, no date (section 18(2))

¹⁴⁵ MOHFW, ‘[National Mental Health Programme](#)’, 1982

health-care services. The NMHP now provides community mental health services in 123 districts through a District Mental Health Programme, which integrates primary-level mental health-care with support from local health teams (WHO, 2011). In other districts, mental health services are delivered by psychiatrists based at tertiary-level facilities.¹⁴⁶

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15.3 Available medication

15.3.1 CPIT was unable to find information about the availability of drugs used to treat mental illnesses and their costs, from the sources used and consulted (see [Bibliography](#)).

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15.4 Stigma

15.4.1 The Times of India opinion piece, *We don't take mental health seriously here in India*, dated 27 August 2021, stated:

‘...There is a big stigma around people suffering from any kind of mental health issues.

‘Since people have limited finances, physical problems are given preference and mental issues take a back seat as it's impact is not as visible as physical issues. There is a lack of education and awareness about mental health. People consider mental issues as taboo and they try to hide them. They don't discuss it openly with others and feel low and a sense of guilt for suffering from mental illness.’¹⁴⁷

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15.5 Mental health helplines

15.5.1 The Vogue India article, *17 verified mental health helplines and services that will help you through these uncertain times*, dated 26 April 2021, stated that some NGOs can provide psychosocial help through their helplines. The article provided details about these NGO services:

NIMHANS, Bengaluru – offers free 24-hour telephone psychosocial support and mental health services to people experiencing stress, anxiety, fear or any kind of emotional discomfort.

Peak Mind - offers counselling sessions at subsidised prices.

Sumaitri - offers telephone counselling for people experiencing depression or suicidal thoughts.

Mpower - provides free mental-health support via a 24-hour helpline

Sneha – provides emotional support for individuals who are feeling distressed or suicidal.

Kashmir Lifeline offers anonymous one-to-one conversations with a trained professional, free of cost¹⁴⁸.

¹⁴⁶ WHO, '[Indian Health System Review](#)' (page 186), 2022

¹⁴⁷ Times of India, '[We don't take mental health seriously here in India](#)', 27 August 2021

¹⁴⁸ Vogue India, '[17 verified mental health helplines and services that will help you...](#)', 26 April 2021

15.5.2 AASRA (NGO) suicide prevention [helplines](#) are available.

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Section 16 updated: 26 April 2023

16. Malaria

16.1.1 The WHO World Malaria Report 2022 provided statistical information about malarial infections in India (as of 2021)¹⁴⁹.

16.1.2 The Times of India report, [How Is India Moving Towards Achieving Malaria Elimination?](#), dated 19 February 2023, stated:

‘In 2018, Malaria No More began implementing its five-year strategy to demonstrate and document innovations impacting the malaria fight, and mobilizing the political will and resources needed to support India’s 2030 malaria elimination goal. Malaria No More and its network of advisers and partners, such as UNICEF and Abbott are now supporting the Governments of Odisha and India to replicate Odisha’s success across India. Odisha carries India’s highest malaria burden and is also the state that reduced malaria cases by more than 80% between 2017 and 2018...

‘India has made tremendous progress in its malaria elimination journey in the recent years - observing a reduction of close to 66% in its official malaria burden between 2018 and 2022...

‘Currently, the only source of epidemiological data for the national program is public health facilities. However, a large proportion of the disease burden is diagnosed and treated by the private health sector – the World Malaria Report published by World Health Organization estimates 80 times the cases officially reported by the national program, the difference presumably those that are treated in the private sector...

‘Advancements in innovative tools and inventive approaches are the cornerstone of addressing any complex challenge - the fight against malaria is no different. Encouragingly, many such advancements already exist or are in the pipeline; notably - data management and analysis systems (AI-based technology tools), drugs and diagnostics (advanced anti-malarial for radical cures and highly sensitive rapid diagnostic testing kits), vector control tools (latest generation of long-lasting insecticidal nets), and preventive vaccines...’¹⁵⁰

16.1.3 For further information on the prevalence of malaria in India, refer to the Malaria Site statistics on [‘Malaria in India’](#)¹⁵¹.

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Section 17 updated: 26 April 2023

17. Musculoskeletal (joints, bones, muscles) conditions and physiotherapy

17.1.1 The Credihealth website (provides details of doctors and medical treatment) provided the names, medical qualifications, and other details of some of the musculoskeletal doctors in India, who can treat people with musculoskeletal

¹⁴⁹ WHO, [‘World Malaria Report 2022’](#), 2022

¹⁵⁰ Times of India, [‘How Is India Moving Towards Achieving Malaria Elimination?’](#), 19 February 2023

¹⁵¹ Malaria Site, [‘Malaria in India’](#), 13 February 2019

conditions¹⁵².

- 17.1.2 The Lybrate article, Musculoskeletal Disorders - Procedures, Side Effects, Recovery Time, Costs And Alternatives, dated 10 April 2023, stated:

‘The musculoskeletal system in a human body comprises of ligaments, nerves, muscles, joints, tendons and the structures that are responsible for supporting the neck, back, and limbs. Any injury or pain and inflammation to the musculoskeletal system comes under musculoskeletal disorders...

‘The cost of the treatment for a musculoskeletal disorder with non-steroidal anti-inflammatory drugs would cost around 50 to 200 rupees (48p to £1.95)¹⁵³ per strip in India. The cost of treatment with physiotherapy depends on the type of city and the experience of the therapist. In a small city the cost of physiotherapy is approximately 300 to 600 rupees (£2.93 to £5.86)¹⁵⁴ per session. In bigger cities, the cost of physiotherapy ranges from 1000 to 1500 rupees (£9.77 to £14.66)¹⁵⁵ per session. OMT therapy for the treatment may cost around 2500 rupees (£24.43)¹⁵⁶ per session.’¹⁵⁷

- 17.1.3 The Prohealth Asia Physiotherapy and Rehabilitation Centre (New Delhi) website provided information about its services:

‘Prohealth Asia Physiotherapy & Rehab Centre is a renowned high-end modern clinic for physiotherapy treatment and pain rehabilitation in Defence Colony, New Delhi.

‘We are part of the Prohealth international physiotherapy group established since 2000 with centres in Hong Kong, Singapore, Manila, and New Delhi.

‘At our centre in Delhi, patients can expect a thorough assessment and evaluation followed by a custom made plan, designed by our expert physiotherapists.

‘Prohealth Asia Physiotherapy & Rehab Centre has the expertise for back and neck pain, knee pain, spinal rehabilitation, musculoskeletal, acute and chronic pain, occupational, and sports physiotherapy.

‘We also have specialized programmes for women’s health, pre and post surgery, and also physiotherapy protocol for children with various developmental and musculoskeletal conditions.’¹⁵⁸

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Section 18 updated: 26 April 2023

18. Neurological conditions

- 18.1.1 MedCOI advised that the following treatment was available in India, for example at the Postgraduate Institute of Medical Education and Research (PGIMER) in Chandigarh (a public hospital in Punjab):

¹⁵² Credihealth, ‘[Musculoskeletal Diseases Doctors in India](#)’, no date

¹⁵³ XE Currency Converter, ‘[Indian rupees to British pounds](#)’, 19 April 2023

¹⁵⁴ XE Currency Converter, ‘[Indian rupees to British pounds](#)’, 19 April 2023

¹⁵⁵ XE Currency Converter, ‘[Indian rupees to British pounds](#)’, 19 April 2023

¹⁵⁶ XE Currency Converter, ‘[Indian rupees to British pounds](#)’, 19 April 2023

¹⁵⁷ Lybrate, ‘[Musculoskeletal Disorders -Procedures, Side Effects, Recovery Time...](#)’, 10 April 2023

¹⁵⁸ Prohealth Asia Physiotherapy and Rehabilitation Centre, ‘[About](#)’, no date

- inpatient treatment by a neurologist
- outpatient treatment and follow up by a neurologist
- long term institutional around the clock care
- outpatient treatment and follow up first line doctor (GP)
- laboratory testing and diagnostic imaging, e.g. by means of EEG¹⁵⁹.

18.1.2 MedCOI stated in 2020 that levetiracetam, carbamazepine, valproic acid/valproate and diazepam were available in India¹⁶⁰.

18.1.3 The Neurogen BSI (Brain and Spine Institute) website provided information about its neurodisorder treatment services:

‘Neurogen BSI is one of the pioneering centers in Mumbai as well India which provides cell therapy and neurorehabilitation under one roof. At NeuroGen we have three specializations in physiotherapy – namely Adult physiotherapy, Pediatric physiotherapy and Spinal cord injury rehabilitation. Physiotherapists at NeuroGen Hospital, Mumbai are working as a team with cell therapy experts and other therapists to find the best possible treatment for incurable neurological disorders by combining stem cell transplantation with physiotherapy and other rehabilitative therapies.’¹⁶¹

18.1.4 The Neurogen BSI website also stated:

‘Our therapy schedule is adjusted to meet the needs of every individual case with the combined input from a core team of neurosurgeon, neurologist, physiotherapists, neuropediatric therapist, speech therapist, occupational therapist, aquatic therapist, psychologist, dietitian, and/or the caregivers. With achievable and set goals, it gives patients hope and encouragement required to achieve increased mobility that results in increased independence and a better quality of life.’¹⁶²

18.1.5 The MedSurge India website provided the names, medical qualifications and other details of some of the neurologists who work in India:

‘Dr. Praveen Gupta Neurologist Director , MBBS, MD, DM, 16 years of experience

Fortis Memorial Research Institute, Gurgaon

Dr. Praveen Gupta is now affiliated with Fortis Memorial Research Institute in Gurgaon as Director and Unit Head of Neurology...

‘Dr. Mukul Varma Neurologist Senior Consultant , MD, DM, MBBS, 28 years of experience

Indraprastha Apollo Hospital, New Delhi

Brief About Dr. Mukul Varma Dr. Mukul Varma has over 28 years of expertise as a Neurologist. He is also interested in mobility problems, multiple sclerosis, and headache treatment...

¹⁵⁹ MedCOI, 29 April 2020

¹⁶⁰ MedCOI, 29 April 2020 and 27 February 2020

¹⁶¹ Neurogen BSI, ‘[Therapies](#)’, no date

¹⁶² Neurogen BSI, ‘[Facilities](#)’, no date

'Dr. Dinesh Nayak Neurologist M.B.B.S, M.D...D.M (Neurology) Director, Neurology Senior Consultant Neurologist and Epileptologists...

Global Hospital, Perumbakkam, Chennai

Dr. S Dinesh Nayak has a total of 25 years of experience and is currently employed at Gleneagles Global Health City as the Director Of Neurology, Program Director, Advanced Centre For Epilepsy...

'Dr. Anand Kumar Saxena Neurologist Head of Department, DM, 26 years of experience

Max Super Speciality Hospital, Saket, New Delhi

Dr. Anand Kumar Saxena is currently the Head of Neurology at Max Super Specialty Saket City Hospital in New Delhi...

'Dr. Dinesh Sareen Neurologist Senior Consultant , DM, MD, MBBS...

Venkateshwar Hospital, New Delhi

Dr. Dinesh Sareen is a well-known Neurologist who has been in practise for more than 21 years...

'Dr. Rajiv Anand Neurologist Director , MBBS, MD, DM...

BLK Super Speciality Hospital, New Delhi...

Rajiv Anand is a well-known neurologist in New Delhi...

'Dr. Puneet Agarwal Neurologist Associate Director , Fellowship, DM, MBBS...

Max Super Speciality Hospital, Saket, New Delhi

Dr. Puneet Agarwal has 22 years of expertise as a Neurologist...

'Dr. Abhaya Kumar

Neurology & Neurosurgery Head of Department , FRCS, DNB, MBBS...

Kokilaben Dhirubhai Ambani Hospital, Mumbai

Dr. Abhaya Kumar is a well-known neurosurgeon with more than 16 years of expertise...

'Dr. Mohit Bhatt Neurologist Director , DM, MD, MBBS...

Kokilaben Dhirubhai Ambani Hospital, Mumbai...

'Dr. Mohit Bhatt is a Neurologist with over 33 years of expertise...

'Dr. Atma Ram Bansal Neurologist Associate Director , DM, MD, MBBS...

Medanta - The Medicity, Gurgaon

Dr. Atma Ram Bansal is a neurologist with more than 13 years of experience.¹⁶³

18.1.6 CPIT was unable to find information about the cost of neurological medical care, from the sources consulted (see [Bibliography](#)).

¹⁶³ MedSurge India, '[Top 10 Neurologist in India](#)', no date

18.2 Neurosurgery

18.2.1 The Deccan Herald report, Top Ten Best Neurosurgeons And Spine Surgeons In India – 2022 Edition, dated 30 November 2022, provided the names, medical qualifications, and other details of some of the neurosurgeons who work in India:

‘Dr. Rao is one of the best Neurosurgeon and spine surgeons in India practicing at Guntur, Andhra Pradesh.

‘...Dr. Mohana Rao Patibandla is a highly experienced neurosurgeon having almost every fellowship in neurosurgery from the USA...

‘Dr. K.E. Turel is a neurosurgeon considered one of the best in India for brain tumor surgery. He has over 45 years of experience and has performed surgeries at some of the most prestigious hospitals in the country, such as the Beach Candy trust hospital...

‘Dr. Chandra Sekhar Deopujari is yet another neurosurgeon considered one of the best in India for Neurosurgery but mostly does the brain surgeries and working in Bombay hospital...

‘Dr. B. K. Misra is a neurosurgeon who is based in Mumbai...He has successfully treated many patients with brain tumors, cerebral aneurysms, and other conditions...

‘Dr. Suresh Shankla is a neurosurgeon who is based in Mumbai having multiple fellowships from abroad...He has successfully treated many patients with brain tumors, cerebral aneurysms, and other conditions...

‘Dr. V. P. Singh is a neurosurgeon considered one of the best in India for brain tumor surgery, stereotactic radiosurgery, skull base surgery, and epilepsy surgery...

‘Dr. Rana Patir is one of the finest brain tumor surgeons in India...He did more than 10000 surgeries. He does minimally invasive surgeries, also. He is available in Fortis, New Delhi...

‘Dr. Sandip is a neurosurgeon considered one of the best in India for brain tumor surgery...He is also the director of the Neurosurgery Department at the Park Clinic, Kolkata...

‘Dr. Sarath Chandra is a neurosurgeon considered one of the best in India for brain tumor surgery. He has over 25 years of experience and has performed surgeries at some of the most prestigious hospitals in the country, such as the All India Institute of Medical Sciences (AIIMS)....

‘Dr. Ashish Suri is a neurosurgeon considered one of the best in India for brain tumor surgery. He has over 25 years of experience and has performed surgeries at many renowned hospitals, such as the All India Institute of Medical Sciences (AIIMS).’¹⁶⁴

¹⁶⁴ Deccan Herald, [‘Top Ten Best Neurosurgeons And Spine Surgeons...’](#), 30 November 2022

19. Obstetrics and gynaecology

19.1.1 The website of the BLK-Max gynaecology and obstetrics hospital in Delhi provided information about its services:

'The department has Birthing Suites and a well equipped maternity complex with fetal monitors to follow the progress of labour and provides the facility for painless delivery round the clock. The patient is under observation by doctors on duty and supported by well trained & experienced nursing staff. There are dedicated operating rooms for cesarean section in the same complex.

'The department vision is to serve women by advancing the safest and most efficacious diagnostic and therapeutic techniques that provide less invasive treatments for gynecologic conditions. Advanced Laparoscopic surgery is offered for removal of tumors & cysts through very small incisions. Minimally Invasive Surgery is used for removing even large sized uterus and tumors with the help of Morcellator, Ligasure and harmonic knife.

'Highly skilled services are available for Hysteroscopic surgery in the management of complex disorders like double uterus, intrauterine fibroids and adhesions (without any incision or stitches)...

'We offer complete panel of investigations and therapies to prevent and treat disorders related to women belonging to postmenopausal and geriatric group.'¹⁶⁵

19.1.2 The website of the BLK-Max gynaecology and obstetrics hospital in Delhi also stated that it can carry out hysterectomies and laparoscopic fibroid removals, and also provide treatment for uterine fibroids, and ovarian cysts¹⁶⁶.

19.1.3 The WHO India Health System Review report noted:

'Several policy initiatives have been launched to address India's health system challenges. The NRHM/NHM, which was intended to strengthen the health systems of state governments, initially started and continues to primarily confine its activities to addressing maternal and neonatal conditions, and various infectious disease control programmes, with uneven progress across states...However, especially at more peripheral locations, quality of delivery services, including difficulties in handling birth complications, shortfalls in emergency obstetric-care facilities, shortages of key essential medicines, diagnostics, etc., remain a concern.'¹⁶⁷

19.1.4 The Medsurge India website provided the names, medical qualifications, and other details of various gynaecologists in India:¹⁶⁸:

'Dr. Aradhana Singh Gynaecologist and Obstetrician

Senior Consultant, MBBS, MS, FICMCH...Fortis Hospital, Noida...

¹⁶⁵ BLK-Max hospital, '[Centre for Women Health Best Gynaecology & Obstetrics Hospital...](#)', no date

¹⁶⁶ BLK-Max hospital, '[Centre for Women Health Best Gynaecology & Obstetrics Hospital...](#)', no date

¹⁶⁷ WHO, '[Indian Health System Review](#)', (pages 2-3), 2022

¹⁶⁸ Medsurge India, '[Top 10 Gynecologists in India](#)', no date

She has competence over the surgery of High-risk pregnancy, Infertility, Laparoscopy, Hysteroscopy, Colposcopy, Adolescent Gynecology, and Management of menopause...

'Dr. Neera Bhan Gynaecologist and Obstetrician Senior Consultant, MBBS, MD, MRCOG...Fortis Hospital, Noida...

'Dr. Monika Wadhwan

Gynaecologist and Obstetrician Senior Consultant , MBBS, MD...
Fortis Hospital, Noida...

'Dr. Padmapriya Vivek Gynaecologist and Obstetrician

Head of Department...Gleneagles Global Hospital, Chennai...

She is an expert in managing high-risk pregnancies, as well as diabetic and hypertensive pregnancies...

'Dr. Madhu Srivastava Gynaecologist and Obstetrician Director, MBBS, MS...

'Dr. Sita Rajan Gynaecologist and Obstetrician Senior Consultant, MD, MBBS...

Columbia Asia Hospital, Bangalore...

'Dr. Aanchal Agarwal Gynaecologist and Obstetrician Senior Consultant, MBBS, DNB, Fellowship...

BLK Super Speciality Hospital, New Delhi...

'Dr. Sarada M. IVF Specialist Consultant, MBBS, DNB...

Continental Hospitals, Hyderabad...

Dr. Sarada M. is currently associated as a Consultant with the Department of Obstetrics and Gynecology at Continental Hospitals, Hyderabad...

'Dr. Puja Dewan Infertility Specialist Consultant , MBBS, Diploma, Diploma, DNB, MRCOG, Diploma, Diploma, 20 years of experience

Kokilaben Dhirubhai Ambani Hospital, Mumbai...

'Dr. Dinesh Kansal Gynaecologist and Obstetrician Head of Department, MBBS, MD...

BLK Super Speciality Hospital, New Delhi

Dr. Dinesh is an esteemed Gynaecology and Obstetrics based in New Delhi, India. Dr. Kansal has an more than 27+ years of experience in his field.¹⁶⁹

19.1.5 See also [Rural/urban facilities](#).

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Section 20 updated: 26 April 2023

20. Paediatric care

¹⁶⁹ Medsurge India, '[Top 10 Gynecologists in India](#)', no date

20.1 Paediatric medical treatment

20.1.1 CARE Hospitals in Hyderabad can provide the following paediatric care services:

'The department of paediatrics comprises of many subspecialties including paediatric oncology, paediatric neurology, paediatric orthopaedics, paediatric endocrinology, kidney transplants, paediatric surgery and urology, physiotherapy and rehabilitation, and paediatric gastroenterology and liver diseases...

'The department has performed many complex procedures and surgeries successfully with excellent outcomes. Common conditions that are frequently treated are allergies, dyslexia, asthma, seizures, cerebral palsy, and congenital heart defects such as Patent ductus arteriosus (PDA) and atrial septal defect (ASD) etc.'¹⁷⁰

20.1.2 The Kangaroo Care Hospital in Bangalore can provide the following paediatric care services:

- 24/7 emergency services
- ambulance services
- neonatal intensive care units and paediatric high dependency units
- wide variety of pediatric sub-specialists
- vaccinations for childhood diseases immunisation¹⁷¹.

20.1.3 The Apollo Cradle and Children's Hospitals - located in Amritsar, Bengaluru, Delhi, Hyderabad, Haryana, and Chennai, can provide a wide variety of paediatric-healthcare services¹⁷².

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Section 21 updated: 26 April 2023

21. Palliative care

21.1.1 A 2022 academic study by A Gaikwad and S Acharya stated:

'According to a recent survey, more than 108 entities currently provide facilities to improve the quality of life and palliative treatment services in 16 states/union territories. These are mainly restricted to major cities and regional cancer centers, with the exception of Kerala, where services are more readily available than in other states.

'NGOs, public and private hospitals, and hospices are primary care providers...with the south having more services than the north. The majority of states have subpar coverage. Palliative care is hardly used in 19 states or union territories....

'...in Uttar Pradesh, only 14 practitioners (28%) could specify more than three crucial aspects of end-of-life healthcare. Only two doctors (4%), none of whom had undergone training, used palliative care services. Most of the

¹⁷⁰ CARE Hospitals, '[Paediatrics](#)', no date

¹⁷¹ Kangaroo Care Hospital, '[Child Care Hospital in Bangalore](#)', no date

¹⁷² Apollo Cradle and Children's Hospitals, '[Paediatrician & Child Specialist Clinic Services...](#)', no date

time, doctors' explanations and counseling fell short of the expectations of patients and their loved ones...95% of end-stage cancer patients wanted to use specialized services but did not know the existence of palliative care-providing institutes.¹⁷³

21.1.2 A Livemint (financial and business news portal) report, *How India is failing those at the end of life*, dated 2 January 2020, stated:

'...just 2% of India's population has access to palliative care, said Reena Sharma, head of field services at CanSupport, a Delhi-based non-profit which offers free home care. The emerging specialty is also heavily concentrated in state capitals and is mostly limited to cancer facilities. In rural areas, where two out of three Indians live, palliative care is unheard of. The only exception is Kerala, where an extensive community-based neighbourhood network offers support. The state accounts for 1,400 of the estimated 1,600 service delivery points in India.

'What we have now are islands of excellence in large medical colleges and tertiary cancer centres, and a palpable void a few hours away from these facilities, said Manjiri Dighe, medical director at the Cipla Palliative Care and Training Centre, Pune.'¹⁷⁴

21.1.3 The WHO report, *Indian Health System Review*, stated:

'While some elements of palliative care have been integrated into national health programmes, the area is still in a nascent stage of development in India. In India, the first pain clinic and palliative care service was opened in the 1980s under the department of Anaesthesiology at Gujarat Cancer and Research Institute, and alongside the formation of the Indian Association of Palliative Care (IAPC) in Ahmedabad...Currently, there are 25 regional cancer centres, and some of these have developed palliative care services for their patients. However, the adequacy and accessibility of palliative services remains poor, with less than 50% of regional cancer centres having palliative care facilities (Directorate General of Health Services, 2011) and less than 3% of India's cancer patients having access to adequate pain relief...This gap in services is exacerbated by drug unavailability problems, particularly morphine, caused by the Narcotic Drugs and Psychotropic Substances (NDPS, 1985) Act of India, which hinders procurement of morphine...In 1998, the Government of India recommended that state governments try to simplify their narcotic regulations, but not enough has happened in terms of regulations, so that drug procurement remains a serious problem.'

'There are limited national-level data on the availability of palliative care services, but available evidence points to a serious gap between needs and available services...A study from Kerala found the elderly population facing extreme financial distress, with home-based palliative care under existing programmes being largely clinically focused and irregularly provided. Moreover, suboptimal housing conditions such as lack of water, sewage system and indoor air quality meant that home-based palliative care was unlikely to provide an adequate answer to the end-of-life quality care needs

¹⁷³ A Gaikwad and S Acharya, '[The Future of Palliative Treatment in India...](#)', 23 September 2022

¹⁷⁴ Livemint, '[How India is failing those at the end of life](#)', 2 January 2020

of the geriatric population...¹⁷⁵

21.1.4 The WHO report, Indian Health System Review, also stated:

‘Not surprisingly, given the decentralized nature of health-care in India, states, public and private charitable trusts have adopted different approaches to palliative care:

- Kerala has been a pioneer, with a network of more than 100 facilities supported by about 4000 trained volunteers during 2008 (Government of Kerala, 2008). It was also the first state to formulate and implement a palliative care policy in 2008, and currently all districts in the state have palliative services through a partnership, under the leadership of the Local Self Government department...The focus of the policy is largely centred around home-based care and involvement of the family. Currently, the Kerala Social Security Mission is implementing the Vayomithram project that provides free medicines, palliative care, counselling service to the old age population...
- Karunashraya Bangalore Hospice Trust is a 55-bed hospice with both home and hospital-based services. The Neighbourhood Network of Palliative Care (NNPC) was formed in 2001 as a joint venture with four NGOs and eight palliative care centres...The Network aims to develop a “community-led” service capable of offering comprehensive long-term and palliative care through trained neighbours.
- The Chandigarh Palliative Care service was started by the Department of Radiotherapy, Postgraduate Institute of Medical Education and Research and the Chandigarh branch of Indian Red Cross Society, with the aim of ensuring continuity of cancer care by integrating palliative aim of ensuring continuity of cancer care by integrating palliative care into comprehensive cancer treatment...¹⁷⁶

21.1.5 A directory of hospice and palliative care providers in India appears on the website of the [International Association for Hospice and Palliative Care](#)¹⁷⁷.

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Section 22 updated: 26 April 2023

22. Speech, hearing and language therapy

22.1.1 The All India Institute for Speech and Hearing (AIISH) is an autonomous institute fully funded by the Indian Ministry of Health and Family Welfare¹⁷⁸. The AIISH Therapy Clinic deals with patients of all ages and provides diagnostic and therapeutic services ‘to all varieties of speech, hearing and language disorders’. The clinic also provides:

- comprehensive assessment procedures for all types of communication disorders, for different age and language groups

¹⁷⁵ WHO, ‘[Indian Health System Review](#)’ (page 187), 2022

¹⁷⁶ WHO, ‘[Indian Health System Review](#)’ (pages 185-186), 2022

¹⁷⁷ International Association for Hospice and Palliative Care, ‘[Directory: Asia](#)’, no date

¹⁷⁸ All India Institute for Speech and Hearing, ‘[About AIISH](#)’, no date

- consultancy services by allied professionals - ENT, clinical psychology, paediatrician, neurologist, phonosurgeon, plastic surgeon, prosthodontist
- counseling and guidance
- guidance for caregivers, teachers and employers for family, educational and vocational management
- voice therapy
- fluency therapy
- articulation therapy
- language therapy, including reading and writing
- listening training
- physiotherapy
- occupational therapy
- alternate and augmentative communication (AAC) training
- behavior modification¹⁷⁹.

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Section 23 updated: 26 April 2023

23. Tuberculosis (TB) and other lung diseases

23.1.1 The Indian government's Ministry of Health and Family Welfare (last updated: 12 April 2023) website stated: 'TB treatment is available free of cost at all government and identified private and NGO health facilities called treatment centres.'¹⁸⁰

23.1.2 MedCOI advised in February 2020 that the following treatment was available in India, for example at the National Institute of TB and Respiratory Diseases in New Delhi (a public facility):

- inpatient treatment by a tuberculosis specialist
- outpatient treatment and follow up by a tuberculosis specialist
- laboratory research: sputum smear microscopy (tuberculosis)
- laboratory research: resistance test for tuberculosis drugs
- diagnostic imaging: ECG¹⁸¹.

23.1.3 MedCOI confirmed that: 'Treatment facilities for Multi-Drug Resistant Tuberculosis (MDR-TB) is available in almost all district hospitals and Medical College Hospitals.' MedCOI also stated that a broad range of drugs for TB treatment is available in India - these include idelamanid, terizidone, bedaquiline (Sirturo®), clofazimine and cycloserine¹⁸².

¹⁷⁹ All India Institute for Speech and Hearing, '[About AIISH](#)', no date

¹⁸⁰ Ministry of Health and Family Welfare, Central Tuberculosis Division, '[FAQs](#)', 12 April 2023

¹⁸¹ MedCOI, 4 February 2020

¹⁸² MedCOI, 4 February 2020

23.1.4 The Print (Indian news portal) report, Private hospital partners with central govt to administer DR-TB medications free of cost, dated 6 July 2022, stated:

‘A private hospital in Delhi has partnered with the central government to administer new drug-resistant Tuberculosis (DR-TB) medications free of cost, officials said on Wednesday [6 July 2022].

‘The new drug will be available only at government designated centres and BLK-Max Hospital, they said. To provide DR-TB treatment services to patients residing in Delhi and seeking care in private sector, Delhi State TB Control Office recently proposed to partner with BLK-Max Super Speciality Hospital, they said...

‘He said the new drugs available for treatment of TB, have a reduced treatment time of six months in comparison to the earlier 12 to 15 months course.’¹⁸³

23.1.5 The Guardian report, ‘Patients are falling through the cracks’: drug costs hinder India’s response to TB, dated 11 August 2022, stated:

‘India has the world’s highest number of multi-drug-resistant TB cases – where the disease is resistant to two first-line TB drugs – and Mumbai, the country’s densely populated financial capital, is a hotspot...

‘However, a large number of cases are going undiagnosed, and the high cost of drugs is hindering India’s chances of eliminating the disease...

‘However, untrained doctors – particularly in the private sector, which treats 60% of the country’s TB patients – often fail to redirect patients towards these free services, leaving many people undiagnosed, receiving inadequate care, or dropping out of treatment regimens because of high out-of-pocket costs.

‘The national TB programme provides free diagnosis and treatment, but doctors warn that patients with multi-drug-resistant TB do not always have access to the right drugs...

‘All patients with multi-drug-resistant TB should be given bedaquiline, a relatively new antibiotic. However, data acquired from the public health department in Mumbai, where drug-resistant cases are steadily rising, showed that only half of patients in the city received it...

‘A big reason for this is price: a six-month course of bedaquiline costs the government about \$350 (£290) a patient, because of a patent held by the pharmaceutical company Johnson & Johnson. Another recommended drug, delamanid, is patented by the Japanese firm Otsuka Pharmaceutical and costs \$1,200 a head.’¹⁸⁴

23.1.6 The Asthma Bhawan Hospital (Jaipur) has facilities to treat people with lung diseases, as explained in its website:

‘Asthma Bhawan (48 bedded, Respiratory super speciality hospital) is undoubtedly one of the best Respiratory hospital in Jaipur, which is blessed

¹⁸³ The Print, [‘Private hospital partners with central govt to administer DR-TB...’](#), 6 July 2022

¹⁸⁴ The Guardian, [“‘Patients are falling through the cracks’: drug costs...”](#), 11 August 2022

with all the advanced technology & instruments to make your loved ones healthy. Asthma Bhawan has been a pioneer in offering modern healthcare services for asthma patients in India since 2007. Over the last three decades we have regularly embraced the latest advancements in medical science and introduced cutting-edge medical technology to offer ‘best-in-class’ clinical outcomes and patient experiences.’¹⁸⁵

23.1.7 Gleneagles Global Hospitals have facilities in its hospitals (Hyderabad, Chennai, Bengaluru, Mumbai) to treat people with lung diseases, such as ARDS, Croup, Legionnaires’ disease, tuberculosis, asthma, lung cancer, bronchitis, emphysema, pneumonia, COPD, interstitial lung disease, and pulmonary embolisms¹⁸⁶.

23.1.8 The WHO report, Indian Health System Review, stated:

‘The National Tuberculosis Elimination Programme (NTEP), which replaced the Revised National Tuberculosis Control Programme (RNTCP), is responsible for TB diagnosis, treatment, prevention and control in India. As per the national strategic plan, during 2020–2021, the TB programme is to receive INR 30.34 billion, with half of that funding intended for diagnostics and drugs procurement...The NTEP has detected and notified an additional 1.2 million TB cases in the past three years through government facilities and engaged and provided incentives for 1.6 million private providers to report cases...

‘Under the national TB programme, TB medications are provided free of cost to 1.5 million TB patients annually, through 662 RNTCP district units, 2698 functional subdistrict TB units and more than 13 000 designated microscopy centres. India was also a pioneer of the directly observed treatment, short-course (DOTS) strategy in 1997, delivered by over 600 000 trained DOTS providers...More than 15 million TB patients have been treated since the Programme began...The Programme also launched DOTS-Plus for the management of multidrug-resistant tuberculosis (MDR-TB), with services available in all states and union territories.’¹⁸⁷

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¹⁸⁵ Asthma Bhawan Hospital, Jaipur, ‘[Home](#)’, no date

¹⁸⁶ Gleneagles Global Hospitals, ‘[Bringing the Latest Technologies from Around the Globe...](#)’, no date

¹⁸⁷ WHO, ‘[Indian Health System Review](#)’ (pages 159-160), 2022

Research methodology

The country of origin information (COI) in this note has been carefully selected in accordance with the general principles of COI research as set out in the [Common EU \[European Union\] Guidelines for Processing Country of Origin Information \(COI\)](#), April 2008, and the Austrian Centre for Country of Origin and Asylum Research and Documentation's (ACCORD), [Researching Country of Origin Information – Training Manual](#), 2013. Namely, taking into account the COI's relevance, reliability, accuracy, balance, currency, transparency and traceability.

All the COI included in the note was published or made publicly available on or before the 'cut-off' date(s). Any event taking place or report/article published after these date(s) is not included.

Sources and the information they provide are carefully considered before inclusion. Factors relevant to the assessment of the reliability of sources and information include:

- the motivation, purpose, knowledge and experience of the source
- how the information was obtained, including specific methodologies used
- the currency and detail of information
- whether the COI is consistent with and/or corroborated by other sources

Wherever possible, multiple sourcing is used and the COI compared and contrasted to ensure that it is accurate and balanced, and provides a comprehensive and up-to-date picture of the issues relevant to this note at the time of publication.

The inclusion of a source is not, however, an endorsement of it or any view(s) expressed.

Each piece of information is referenced in a footnote.

Full details of all sources cited and consulted in compiling the note are listed alphabetically in the [Bibliography](#).

Terms of reference

A 'Terms of Reference' (ToR) is a broad outline of what the medical CIN seeks to cover. They form the basis for the [country information section](#). The Home Office's Country Policy and Information Team uses some standardised ToRs, depending on the subject, and these are then adapted depending on the country concerned.

For this particular medical CIN, the following topics were identified prior to drafting as relevant and on which research was undertaken:

- Healthcare system
- Overview of structure including patient access to:
 - Public facilities
 - Private facilities
 - Health insurance system – private, public and community-based insurance systems, cost and contributions
 - Non-government organisation (NGO) provision and assistance
 - Costs – to:
 - consult a general practitioner
 - consult a specialist and receive treatment
 - contribute to an insurance scheme
 - Infrastructure and staffing
 - Number, location and type of medical facility (and specialism) – primary, secondary and tertiary
 - Number and location in absolute and as per head of population of nurses and doctors, including specialists
 - Links to medical, dental and other healthcare practitioners, and hospitals
 - Pharmaceutical sector
 - Availability and accessibility of therapeutic drugs
 - Costs and other factors affecting access
 - Impact of Covid-19
 - Specific diseases/conditions:
 - Cancer
 - Prevalence and types
 - National programme for control and treatment
 - Available treatment: facilities, personnel and location
 - Accessibility: cost of treatment and other factors affecting access, such as location of particular treatment centres

- Support in obtaining treatment from state, private or civil society sectors
- Cardiovascular diseases
- Dental disease and conditions
- Diabetes
- Ear, nose and throat conditions
- Eye disease treatment
- Gastroenterological conditions
- Geriatric care
- Gynaecological and obstetric conditions
- Hepatitis
- HIV/AIDS
- Kidney diseases
- Liver diseases and transplants
- Lung diseases
- Musculoskeletal conditions
- Mental health
- Neurological diseases
- Nursing homecare
- Paediatric diseases
- Palliative care

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Version control

Clearance

Below is information on when this note was cleared:

- version **2.0**
- valid from **26 April 2023**

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Changes from last version of this note

Updated country of origin information.

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Feedback to the Home Office

Our goal is to provide accurate, reliable and up-to-date COI and clear guidance. We welcome feedback on how to improve our products. If you would like to comment on this note, please email the [Country Policy and Information Team](#).

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Independent Advisory Group on Country Information

The [Independent Advisory Group on Country Information](#) (IAGCI) was set up in March 2009 by the Independent Chief Inspector of Borders and Immigration to support him in reviewing the efficiency, effectiveness and consistency of approach of COI produced by the Home Office.

The IAGCI welcomes feedback on the Home Office's COI material. It is not the function of the IAGCI to endorse any Home Office material, procedures or policy. The IAGCI may be contacted at:

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Information about the IAGCI's work and a list of the documents which have been reviewed by the IAGCI can be found on the Independent Chief Inspector's pages of the [gov.uk website](#).

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