

# Demand for Grants 2019-20 Analysis

## Health and Family Welfare

The Ministry of Health and Family Welfare (MoHFW) has two departments: (i) the Department of Health and Family Welfare, and (ii) the Department of Health Research.

The Department of Health and Family Welfare is responsible for functions including (i) implementing health schemes, and (ii) regulating medical education and training. The Department of Health Research is broadly responsible for conducting medical research.

This note analyses the financial allocation trends and key issues concerning the health sector.

### Overview of finances

In 2019-20, the MoHFW received an allocation of Rs 64,559 crore. This allocation is an increase of 15.2% over the revised estimates of 2018-19 (Rs 56,045 crore).<sup>1</sup>

Under the Ministry, the Department of Health and Family Welfare accounts for 97% of the allocation, at Rs 62,659 crore. This is followed by the Department of Health Research (3%) at Rs 1,900 crore. Table 1 provides details on the two departments under the MoHFW.

**Table 1: Budget allocations for the MoHFW (in Rs crore)**

Item	Actuals 2017-18	RE 2018-19	BE 2019-20	% Change (RE to BE)
Health & Family Welfare	51,382	54,303	62,659	15.4%
Health Research	1,732	1,743	1,900	9.0%
<b>Total</b>	<b>53,114</b>	<b>56,045</b>	<b>64,559</b>	<b>15.2%</b>

Note: BE – Budget Estimate; RE – Revised Estimates.

Source: Demand Nos. 42 & 43, Ministry of Health and Family Welfare, Union Budget 2019-20, PRS.

The revised estimate in 2018-19 for the Department of Health and Family Welfare overshoot the budget estimate of that year by Rs 1,503 crore. Whereas, the Department of Health Research fell slightly short of the budget estimate by Rs 57 crore. Table 2 contains the split in the allocation under the MoHFW for the year 2019-20.

**Table 2: Top expenditure heads for the MoHFW (2019-20) (in %)**

Expenditure head	Allocation (%)
National Health Mission	51%
Autonomous Bodies	16%
Pradhan Mantri Jan Arogya	10%
Pradhan Mantri Swasthya Suraksha Yojana	6%
National AIDS and STD Control Programme	4%
Family Welfare Schemes	1%
Others	12%
<b>Total</b>	<b>100%</b>

Source: Demand Nos. 42 & 43, Ministry of Health and Family Welfare, Union Budget 2019-20, PRS.

Note: Autonomous Bodies include the All India Institute of Medical Science, Post Graduate Institute of Medical Education and Research, Chandigarh, and the Indian Council of Medical Research, New Delhi.

Key allocation trends are as follows (see Table 3):

- The National Health Mission (NHM) received the highest allocation at Rs 32,995 crore and constitutes 51% of the total ministry allocation. The allocation is an 8% increase over the revised estimates of 2018-19. Under the NHM, the rural component, i.e., the National Rural Health Mission (NRHM) has been allocated Rs 27,039 crore, a 7% increase over the revised estimates of 2018-19. The allocation for National Urban Health Mission (NUHM) has increased by 153% at Rs 950 crore. Note that the NUHM under NHM constitutes 3% of its allocation for 2019-20.
- Pradhan Mantri Jan Arogya Yojana has seen the biggest increase in allocation at 167% (Rs 6,400 crore) over the revised estimates of 2018-19. Launched in September 2018, the scheme aims to provide a cover of Rs five lakh per family per year to about 10.7 crore families belonging to the poor and vulnerable population. The scheme subsumed the on-going centrally sponsored schemes, (i) Rashtriya Swasthya Bima Yojana and (ii) Senior Citizen Health Insurance Scheme.
- Higher allocation has been made for Pradhan Mantri Swasthya Suraksha Yojana (PMSSY) at Rs 4,000 crore (5% increase). It focuses on correcting regional imbalances in the availability of affordable and reliable tertiary healthcare services.

- Family Welfare Schemes and the National AIDS and STD Control Programme have seen an increase of 9% and 30% respectively from the revised estimates of 2018-19.
- Allocation to autonomous institutes (16%) like the AIIMS and the Indian Council of Medical Research saw an increase of 11% at Rs 9,920 crore from the revised estimates of 2018-19.

**Table 3: Allocation to major expenditure heads under the MoHFW (in Rs crore)**

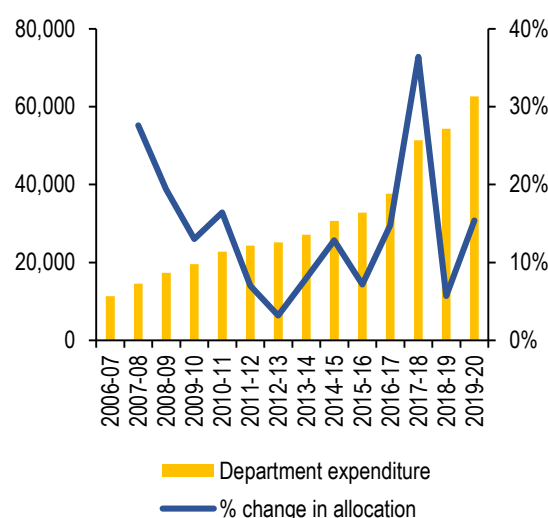
Major Heads	Actuals 2017-18	RE 2018-19	BE 2019-20	% Change (RE to BE)
NHM (total)	31,521	30,683	32,995	8%
-NRHM	26,178	25,243	27,039	7%
-NUHM	664	375	950	153%
-Others	4,679	5,065	5,006	-1%
Autonomous Bodies (AIIMS, PGIMER, ICMR)	8,264	8,964	9,920	11%
Ayushman Bharat: Pradhan Mantri Jan Arogya	-	2,400	6,400	167%
PMSSY	3,159	3,825	4,000	5%
National AIDS & STD Control Programme	2,010	1,925	2,500	30%
Rashtriya Swasthya Bima Yojna	456	300	156	-48%
Family Welfare Schemes	664.2	875	950	9%
Others	6,331	8,924	8,875	-1%
<b>Total</b>	<b>53,114</b>	<b>56,045</b>	<b>64,559</b>	<b>15%</b>

Note: BE - Budget Estimate; RE - Revised Estimates; NHM- National Health Mission; NRHM- National Rural Health Mission; NUHM- National Urban Health Mission; PMSSY- Pradhan Mantri Swasthya Suraksha Yojana. Source: Demand No. 42 & 43, Ministry of Health and Family Welfare, Union Budget 2019-20, PRS.

## Trends in allocation and expenditure

As indicated in Figure 1, the allocation to the Department of Health and Family Welfare has increased from Rs 11,366 crore in 2006-07 to Rs 62,659 crore in 2019-20. Over the period 2006-19, the Compound Annual Growth Rate (CAGR) has been 13%. CAGR is the annual growth rate over a certain period of time.

**Figure 1: Allocation to the Department of Health and Family Welfare (2006-19) (in Rs crore)**



Note: % change in allocation is BE (2019-20) over RE (2018-19) for 2019-20.

Source: Union Budgets, 2006-07 to 2019-20; PRS.

Table 4 indicates the actual expenditure of the Department of Health and Family Welfare compared with the budget estimates of that year (2010-19). The utilisation has been over 100% in the last three years.

**Table 4: Comparison of budget estimates and the actual expenditure (2010-19) (in Rs crore)**

Year	BE	Actuals	Actuals/BE
2010-11	23,530	22,765	97%
2011-12	26,897	24,355	91%
2012-13	30,702	25,133	82%
2013-14	33,278	27,145	82%
2014-15	35,163	30,626	87%
2015-16	29,653	30,626	103%
2016-17	37,066	37,671	102%
2017-18	48,853	51,382	105%
2018-19	52,800	54,303*	103%

Note: BE – Budget Estimates; \*Revised Estimates.

Sources: Union Budgets, 2010-19; PRS.

## Public health spending

The public health expenditure (sum of central and state spending) has remained between 1.2% to 1.5% GDP between 2008-09 and 2018-19.<sup>2,3,4</sup> India's public health expenditure as a percentage of GDP is relatively low as compared to other countries (see Table 5) Note that the National Health Policy, 2017 has proposed to increase the public health expenditure to 2.5% of the GDP by 2025.<sup>5</sup>

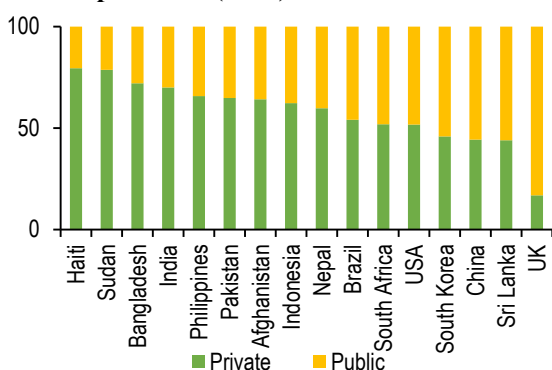
**Table 5: Public health expenditure in various countries (2015)**

Country	Public health expenditure (as a % of GDP)
India	1.1
China	3.2
South Africa	4.4
Brazil	3.8
Russia	3.4
United States	8.5
United Kingdom	7.9
Germany	9.4

Source: Public health expenditure (% of GDP), World Health Organisation, 2015; PRS.

Including the private sector, the total health expenditure as a percentage of GDP is estimated at 3.8%.<sup>6</sup> If 1.5% is attributed to public spending in India, then effectively, 2.3% is spent by the private sector. This means that out of the total expenditure, about one-third is contributed by the public sector. As per World Health Statistics (2014), this contribution by the public sector to the total expenditure on health is low as compared to other developing countries like Brazil (46%), China (56%), and Indonesia (39%).<sup>7</sup> Among developed countries, the public spending on healthcare in United Kingdom and United States of America is 83% and 48% respectively.

The public-private split in the total health expenditure is shown in Figure 2 below.

**Figure 2: Public and private split in the total health expenditure (in %)**

Source: World Development Indicators: Health systems, World Bank, 2014; PRS.

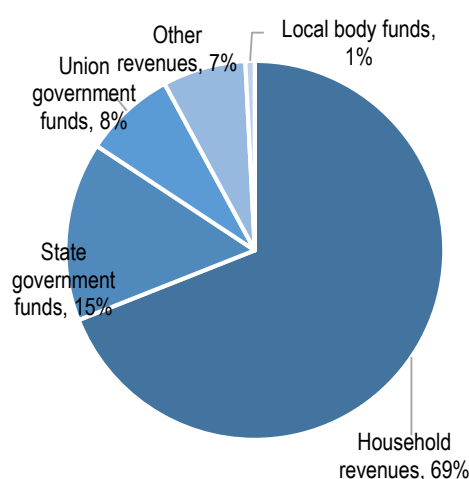
Further, India also spends one of the lowest amounts (USD 23) in terms of per capita public health expenditure, in comparison to other developing countries like Indonesia (USD 38), Sri Lanka (USD 71), and Thailand (USD 177).<sup>8</sup>

It is estimated that 65% of the health expenditure is borne by consumers in India.<sup>6</sup> Household health expenditures are the expenditures incurred by households on health care and includes out of pocket expenditures and prepayments (for example, insurance). Out of pocket expenditure are the

payments made directly by individuals at the point of service where the entire cost of the health good or service is not covered under any financial protection scheme. In India, such expenditure is typically financed by household revenues (69%) (see Figure 3). Only nine countries (out of 192) have a higher out of pocket spending as a proportion of total healthcare expenditure.<sup>12</sup>

The highest percentage of out of pocket health expenditure (52%) was made towards medicines.<sup>10</sup> This was followed by private hospitals (22%), medical and diagnostic labs (10%), and patient transportation, and emergency rescue (6%).

Due to high out of pocket healthcare expenditure, about 7% population is pushed below poverty threshold every year.<sup>10</sup>

**Figure 3: Sources of financing for current health expenditure**

Source: National Health Accounts, 2015-16; PRS.

### Insurance and Universal Health Coverage

Out of the total number of persons covered under health insurance, three-fourths of the persons are covered under government sponsored health insurance schemes and the balance one-fourth are covered by policies issued by general and health insurers.<sup>9</sup> Note that, according to the NSS (2014), 86% of rural population and 82% of urban population are still not covered under any scheme of health expenditure support.<sup>10</sup>

Currently, the two major insurance schemes funded by the central government are: (i) Central Government Health Scheme, and (ii) the Pradhan Mantri Jan Arogya Yojana.

#### Central Government Health Scheme (CGHS)

With regard to the CGHS, the allocation for 2019-2022 is Rs 1,350 crore (2% increase over the revised estimates of 2018-19). The scheme provides healthcare services to central government employees, Members of Parliament, among others.

In 2018, the Standing Committee on Health noted that the allocation for CGHS at Rs 1,305 crore was 15% less than the Departments' demand.<sup>11</sup> It also observed that 24% posts for allopathic doctors are lying vacant in CGHS wellness centres. In 2017, the Standing Committee on Health had noted that many hospitals have de-empanelled themselves from CGHS mainly due to non-settlement of their dues by the government.<sup>12</sup>

### ***Pradhan Mantri Jan Arogya Yojana (PMJAY)***

Launched in September 2018 under the Ayushman Bharat initiative, PMJAY aims to provide a cover of Rs five lakh per family per year to about 10.7 crore families (no cap on family size and age) belonging to poor and vulnerable population. As of July 3, 2019, over 4.01 crore e-cards have been issued and over 31 lakh beneficiaries have been admitted in hospitals.<sup>13</sup> PMJAY has been allocated Rs 6,400 crore for 2019-20. This is a 167% increase from the revised estimate of 2018-19.

The scheme subsumed the on-going centrally sponsored schemes, Rashtriya Swasthya Bima Yojana (RSBY) and the Senior Citizen Health Insurance Scheme. RSBY was launched in 2008 with an aim of: (i) providing financial protection against high health cost, and (ii) improving healthcare access for below poverty line households. Beneficiaries under RSBY were entitled to hospitalisation coverage up to Rs 30,000 per family on a per annum basis. The beneficiaries were required to pay Rs 30 as registration fee for a year.

The Standing Committee on Health (2018) noted that PMJAY was just a modification of RSBY and over half the target beneficiaries under PMJAY are already covered under various government schemes.<sup>11</sup> It recommended that a Committee should be formed to analyse the failures of RSBY and ensure the inadequacies in implementation are not repeated.

Key features of the PMJAY are as follows:

- **Benefits:** The scheme provides insurance coverage for secondary and tertiary healthcare. provided at district hospitals), and tertiary healthcare (provided at specialised hospitals like AIIMS). The scheme provides for pre and post hospitalisation expenses. A defined transport allowance per hospitalisation is paid to the beneficiary and all pre-existing conditions are covered. A beneficiary under the scheme is allowed to take cashless benefits from any public or private empanelled hospitals.
- **Eligibility:** The entitlement under the scheme is decided on the basis of deprivation criteria in the Socio-Economic Caste Census database. The different categories in rural areas include: (i) families having only one room with kucha

walls and kucha roof, (ii) families having no adult member between age 16 to 59 years, and (iii) female headed households with no adult male member between age 16 to 59 years, among others. For urban areas, 11 defined occupational categories are entitled for the benefits under the scheme.

- **Financing:** The payments for treatment are done on package rate basis. The package rates include all the costs associated with treatment. States/ UTs have the flexibility to modify these rates within a limited bandwidth. The expenditure incurred in premium payment is shared between central and state governments in specified ratio as per Ministry of Finance guidelines.

While PMJAY provides coverage for secondary and tertiary levels of healthcare, most of the out-of-the-pocket expenditure made by the consumers is actually on buying medicines (52%). In addition, the High Level Expert Group (HLEG) set up by the Planning Commission (2011) observed that focus on prevention and early management of health problems can reduce the need for complicated specialist care provided at the tertiary level.<sup>16</sup> It recommended that the focus of healthcare provision in the country should be towards providing primary healthcare.

Note that, Ayushman Bharat aims to create 1,50,000 health and wellness centres providing comprehensive primary healthcare. These centres will cover maternal, child health services and non-communicable diseases.

### ***Universal Health Coverage***

Universal Health Coverage (UHC) aims to ensure equitable access for all citizens to affordable and appropriate health services of assured quality. This universal coverage is not linked to the consumer's ability to pay.<sup>16</sup> The Finance Minister mentioned in his 2018-19 Budget Speech that India is making steady progress towards UHC.

The World Bank measures the progress made in the health sector in select countries of the world according to the UHC Index. On this Index, India ranks 143 among 190 countries in terms of per capita expenditure on health.<sup>14,15</sup>

In 2011, the High Level Expert Group (HLEG) on UHC constituted under the Planning Commission made certain recommendations with respect to the provision of UHC.<sup>16</sup> Some key recommendations by the HLEG include: (i) all government funded insurance should be integrated with the UHC and all health insurance cards must be replaced by a national health entitlement card, and (ii) purchases of all healthcare services under the UHC should be undertaken either directly by the central and state governments.

The observations and recommendations made by some expert bodies on the UHC include:<sup>16,17</sup>

- **Structure of UHC:** The government must decide whether a consolidation of existing services will be undertaken or a new package will be offered in parallel with the existing services. Further, the need for flexibility in terms of healthcare services on offer under UHC owing to the diversity of states has been highlighted. The fiscal capacity of states must also be taken into account while determining the coverage which may be offered.
- It has been recommended that a national health package must be developed which offers health services at different levels (primary, secondary, and tertiary) of the healthcare delivery system with greater focus on primary healthcare. Further, a National Health Regulatory and Development Authority must be set up to regulate public and private healthcare providers.
- **Financing of UHC:** The central and state government must increase public expenditure in health to at least to 3% of GDP by 2022.<sup>16</sup> In 2014, the National Commission on Macroeconomics and Health estimated that the government would require a five-fold increase in the budget at Rs 1,160 per capita per year if it is to be the sole provider of the comprehensive package of services. This package would consist of preventive, promotive, and curative services.<sup>18</sup> Further, an estimate of costs for providing health services through a mix of public and private providers indicates that the government will need to spend approximately 3.8 % of the GDP for universalising healthcare.

## Financial allocations to outcomes

### National Health Mission

The National Health Mission (NHM) consists of two sub missions, the National Rural Health Mission (NRHM) (includes health interventions in rural areas) launched in 2005 and the National Urban Health Mission (includes health interventions in urban areas) launched in 2013.

#### Components of NHM

NHM includes various components, these include: (i) reproductive, maternal, new born and child health services (RCH Flexi Pool), (ii) NRHM Mission Flexi Pool for strengthening health resource systems, innovations and information, (iii) immunisation including the Pulse Polio Programme, (iv) infrastructure maintenance, and (v) National Disease Control Programme.

### Funding of NHM

The allocation for NHM in 2019-20 (Rs 32,995 crore) saw an 8% decrease over the revised estimates of 2018-19.

NHM's percentage share in the total budget has decreased from 73% in 2006-07 to 51% in 2019-20. This may be on account of increased devolution of resources to states following the recommendations of the 14<sup>th</sup> Finance Commission. The break up between central and state funding for NHM can be seen in Table 5 for the period between 2014 to 2017.

**Table 5: Funding for NHM (2014-17) (Rs crore)**

Year	Total outlay
2014-15	23,455
2015-16	28,017
2016-17	28,862
2017-18*	38,553

Source: Starred Question No. 97, Ministry of Health and Family Welfare, Lok Sabha, February 8, 2019.

The funding for NHM is done through flexible pools, such as NRHM-RCH flexible pool, and flexible pool for communicable diseases. The rationale for creating of the flexible pool is to allow more financial flexibility and efficient distribution of funds in order to obtain desired health outcomes.

Note that in 2019-20, among all the flexible pools, the pool of funds for non-communicable diseases has increased by 27% at Rs 717 crore. The allocation for the funding pool for communicable diseases and immunisation has increased by 19% and 8% respectively.

Between 2004-06 and 2010-13, the percentage of deaths caused by communicable diseases (27.7%) has seen the biggest decrease out of all the other causes of death (Figure 4). These diseases include fever, diarrhoea, and acute respiratory infection. Though the rate of such diseases has come down, communicable diseases still contribute to approximately 28% of deaths due to diseases.

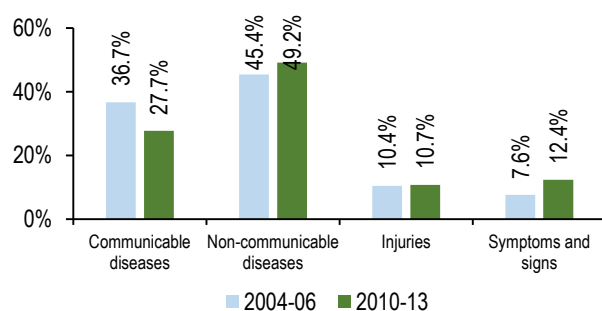
On the other hand, the percentage of deaths due to non-communicable diseases (49.2%) has risen.<sup>19</sup> These diseases include cardiovascular diseases, cancer, diabetes, and hypertension.

The Standing Committee (2017) highlighted that in view of the increasing burden of non-communicable diseases in the country, fund constraint should not be the reason for increase in disease burden.<sup>12</sup> Note that the challenge of non-communicable diseases typically arises following the elimination of communicable diseases. Non-communicable diseases are closely associated to lifestyle changes, and require large investments for both promotive and curative health.<sup>20</sup>



However, India faces a challenge to control communicable diseases even as it seeks to shift attention towards an increasing threat from non-communicable diseases. For example, a report by the 14th Finance Commission noted that the comparatively better developed states like Kerala and Tamil Nadu have better health outcomes in comparison to other states.<sup>21</sup> However, these states also face a health crisis of another kind. This leads to an additional financial burden for tackling non-communicable diseases.

**Figure 4: Percentage of deaths by disease type (all India)**



Source: Causes of death, 2010-13, Office of the Registrar General & Census Commissioner; PRS

Further, differences in the cost of delivery of health services in several states, have contributed to health disparities among and within states.

**Table 6: Targets as per NHM framework**

Targets (2012-17)	Status (as on Dec 2018)
Reduce IMR to 25	IMR has reduced to 34 in 2016.
Reduce MMR to 100/1,00,000 live births	MMR has reduced to 139 in 2015.
Reduce TFR to 2.1	TFR has reduced to 2.3 in 2016.
Annual Malaria Incidence to be < .001	Annual Malaria Incidence is 0.17 in 2018.
Less than 1 % microfilaria prevalence in all districts	Out of 256 endemic districts, 99 have reported incidence less than 1% till 2018.
Kala-Azar elimination by 2015, <1 case per 10,000 population in all blocks	Out of 633 endemic blocks, 48 have achieved elimination till 2018.
Reduce annual prevalence and mortality from Tuberculosis by half	Incidence reduced from 300 per lakh in 1990 to 204 per lakh in 2017. Mortality reduced from 76 per lakh in 1990 to 31 per lakh in 2017.

Source: Unstarred Question No. 2961, Ministry of Health and Family Welfare, Lok Sabha, December 28, 2018; PRS.  
Note: IMR-Infant Mortality Rate; MMR-Maternal Mortality Rate; TFR-Total Fertility Rate.

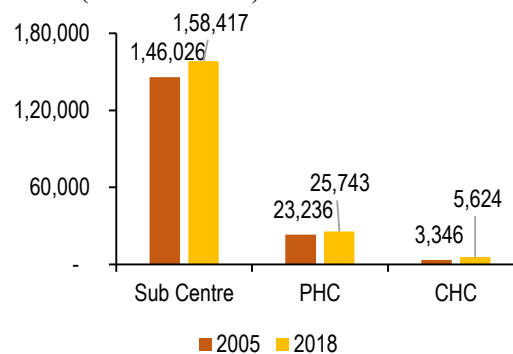
### Healthcare infrastructure

Depending on the level of care required, health institutions in India are broadly classified into three types. This classification includes primary care (provided at primary health centres), secondary care (provided at district hospitals), and tertiary care

(provided at specialised hospitals like AIIMS). Primary health care infrastructure provides the first level of contact between health professionals and the population.<sup>22</sup> The HLEG (2011) observed that focus on prevention and early management of health problems can reduce the need for complicated specialist care provided at the tertiary level.<sup>16</sup> It recommended that the focus of healthcare provision in the country should be towards providing primary health care.<sup>16</sup>

Broadly, based on the population served and the type of services provided, primary health infrastructure in rural areas consists of a three tier system. This includes Sub-Centres (SCs), Primary Health Centres (PHCs), and Community Health Centres (CHCs).<sup>23</sup> A similar set up is maintained in urban areas.<sup>24</sup> The number of SCs, PHCs, and CHCs in 2005 and 2018 respectively are given in Figure 5.

**Figure 5: Number of Sub Centres, PHCs, and CHCs (2005 and 2018)**



Source: Comparative Statement, Health Management Information System; PRS.

A shortfall has been observed at different levels of the healthcare delivery system. As of 2016, there is a shortage of 2,188 CHCs, 6,430 PHCs and 32,900 SCs.<sup>25</sup> It has also been noted that the existing ones are also poorly equipped and have inadequate infrastructure with many PHC's functioning in erstwhile single room SCs and many SCs in thatched accommodation.<sup>26</sup> Note that under NRHM, states were permitted to establish facilities as per need. However, not many states did so due to lack of funds and the inability to close down even existing facilities (not in use) due to administrative bottlenecks.<sup>26</sup>

The Standing Committee on Health and Family Welfare (2018) observed that the proposal to establish 1,50,000 Health and Wellness Centres (as announced in the Budget Speech 2018-19) has not been implemented and has no "solid roadmap" as of now.<sup>11,27</sup>

As of 2015, there are 20,306 government hospitals (including community health centres) in India, of which 82.8% are rural hospitals and 17.2% are urban hospitals.<sup>28</sup> With regard to secondary and

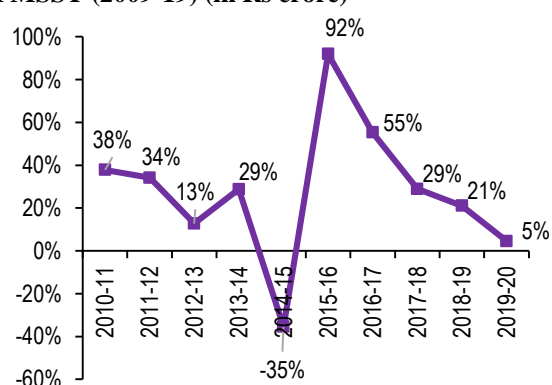
tertiary care, the HLEG (2011) recommended that in order to guarantee secondary and tertiary care, equitable access to functional beds must also be provided.<sup>16</sup> According to the World Health Statistics, India ranks among the lowest in this regard, with 0.7 beds per 1000, far below the global average of 3.4 beds.<sup>29</sup> It recommended functional bed capacity should be expanded to 2 beds per 1000 population by 2022.

### **Pradhan Mantri Swasthya Suraksha Yojana**

Pradhan Mantri Swasthya Suraksha Yojana (PMSSY) has been implemented since 2003 with objective of: (i) correcting regional imbalances in the availability of affordable and reliable tertiary healthcare services, and (ii) augmenting facilities for quality medical education in the country. This includes establishing AIIMS like institutions and upgrading certain state government hospitals. Over the years, the scheme has been expanded to cover 20 new AIIMS and 71 state government hospitals.

In 2018, the Comptroller and Auditor General (CAG) noted that all new AIIMS overshoot their completion time by almost five years.<sup>30</sup> There were similar delays observed in the upgradation of state government hospitals. Further, it was found that the Ministry had estimated the capital cost for setting up six new AIIMS in Phase 1 to be Rs 332 crore per institute. After four years, this cost was revised to Rs 820 crore per institute, on account of shortcomings in planning and assessment of requirements. The Standing Committee on Health and Family Welfare (2017 and 2018) noted that this indicates poor assessment of time and cost which have left the allocated funds unused.<sup>11,27</sup>

**Figure 6: Yearly change in the allocation to PMSSY (2009-19) (in Rs crore)**



Notes: Values for 2018-19 and 2019-20 are revised estimates and budget estimates respectively  
Sources: Union Budget 2008-09 to 2019-20; PRS.

In 2019-20, the allocation to PMSSY increased by 5% over the revised estimates of 2018-19 (see Figure 6) at Rs 4,000 crore. Note that, the Standing Committee (2018) noted that the budget estimate for PMSSY in 2018-19 at Rs 3,825, was 54% less than the projected demand of Rs 8,398 crore.<sup>11</sup>

### **Regulation of private health services**

As per the National Sample Survey 2015, most hospitalisation cases were seen in private hospitals (68% in urban and 58% in rural areas).<sup>31</sup> Further, in case of hospitalised, the cost of treatment (excluding childbirth) was four times higher in private hospitals (Rs 25,850) as compared to that in public hospitals (Rs 6,120).<sup>31</sup>

The HLEG observed that regulatory standards for public and private hospitals are not adequately defined and are poorly enforced. Further, the quality of healthcare services varies considerably in the public and private sector.<sup>32</sup> It has also been observed that many practitioners in the private sector are not qualified doctors.<sup>32</sup>

The 14<sup>th</sup> Finance Commission study group observed that the unregulated nature of the private sector is one of the issues leading to the high financial burden on households (which is not commensurate with the quality of care).<sup>33</sup> It recommended that a policy measure must be taken to regulate the private healthcare sector.

### **Human resources in health**

Between 2010 and 2017, the number of registered doctors increased from 8,27,006 to 10,41,395.<sup>34</sup> Note that despite the increase, there has been a steady increase in the shortfall of doctors, specialists and surgeons. For example, as of 2015, there is a shortfall of 83.4% of surgeons, 76.3% of obstetricians and gynaecologists, 83.0% of physicians and 82.1% of paediatricians. Table 8 shows the number of health professionals in India.

**Table 8: Number of public health professionals in India (2008-18)**

Profession	2008	2018	% increase
Allopathic Doctors	84,852	1,14,969	35%
AYUSH Doctors**	7,51,926	7,73,668	3%
Nurses and Pharmacists	22,54,055	37,85,494	68%

Notes: \*\*includes Ayurveda Unani Siddha Naturopathy Homeopathy.

Source: Human Resources in Health Sector, National Health Profile, 2008, 2018, Ministry of Health and Family Welfare, PRS.

### **Issues concerning medical practice**

Certain reasons identified for the shortage of personnel in government facilities include: (i) poor working environment, (ii) poor remuneration making migration to foreign countries and to the private sector more attractive, and (iii) procedural delays in recruitment and poor forward planning for timely filling up of positions. It has been estimated that filling up human resource gaps in 16 states,

would require an outlay equivalent to 0.6% to GDP.<sup>16</sup>

With regard to health professionals, the HLEG (2011) recommended that adequate number of trained healthcare providers and workers must be ensured at different levels of the health system.<sup>16</sup>

#### *Issues concerning medical education*

Expert committees have examined issues related to medical education in India. Certain key observations and recommendations include:<sup>35,36</sup>

- i. **Issues with the Medical Council of India:** The Medical Council of India (MCI) regulates medical education and practice. Issues with the functioning of the Council include: (i) conflict of interest where the regulated (including management of medical colleges) elect the regulators, preventing the entry of skilled professionals for the job; (ii) centralisation of powers allowing no segregation of responsibilities; (iii) input based regulation consisting of inspection and a focus on infrastructure rather than on teaching quality and outcomes; and (iv) failure to meet the contemporary challenges of medical education.
- ii. **Focus on infrastructure over education quality:** Major focus on maintenance of quality in medical education only in terms of fulfilling infrastructural requirements which has meant inadequate evaluation of the other standards of medical education.
- iii. **Post-graduation qualification:** Presently, there are two systems of post graduate certification, namely Diplomate of National Board and MD/MS (master's degree). The Standing Committee recommended that the current system of postgraduate admission must be integrated into one national qualification.
- iv. **'For-profit' organisations to establish medical colleges:** Currently, only 'not-for-profit' organisations are permitted to establish medical colleges. It has been observed that many private institutions of higher education charge exorbitant fees. In the absence of well-defined norms, fees charged by such universities have remained high.<sup>37</sup> In 2002, the Supreme Court ruled that the fees charged by private unaided educational institutes could be regulated.<sup>38</sup> Also, while banning capitation fee (fees exceeding the tuition fee), it allowed institutes to charge a reasonable surplus. NITI Aayog recommended that the sector should be opened to 'for-profit' organisations as well to address the supply gaps in medical education.<sup>35</sup>
- v. **Accreditation:** The MCI is entrusted with the responsibility of establishing as well as ensuring the quality of medical institutions.

Committees have observed that these functions of the MCI may lead to a conflict of interest. Therefore, an independent and autonomous accreditation body must be set up which will be responsible for ensuring the quality of education.

- vi. **Examinations:** The Standing Committee recommended a transparent admissions process based on merit rather than the ability to pay capitation fees. Students would be admitted to medical colleges based on an all-India National Eligibility cum Entrance Test. This would ensure standardised set of skills for doctors following objective benchmarks to promote uniform outcomes.

Passing a common exam would be mandatory obtain a license and to subsequently apply for post-graduate courses. This exam would also test for skill sets prescribed by the central government keeping with the changing societal requirements of medical competencies.

#### **The National Medical Commission Bill, 2017**

A legislation regarding the medical regulatory authority is pending in Parliament which shall oversee medical education and practice. The National Medical Commission Bill, 2017 was introduced in Lok Sabha in December 2017. It was referred to the Standing Committee on Health for examination and the report was tabled in March 2018. The Bill seeks to repeal the Indian Medical Council Act, 1956 and dissolve the current Medical Council of India (MCI). The MCI was established under the 1956 Act to establish uniform standards of medical education and regulate its practice.

The Bill seeks to provide for a medical education system which ensures: (i) availability of adequate and high quality medical professionals, (ii) adoption of the latest medical research by medical professionals, (iii) periodic assessment of medical institutions, and (iv) an effective grievance redressal mechanism.

#### **Health research**

The Standing Committee on Health and Family Welfare (2018) noted that there is a huge, persistent, and recurring mismatch between the projected demand for funds and actual allocation to the Department of Health Research.<sup>39,40</sup> In 2019-20, its allocation has seen an increase of 9% over the revised estimates of 2018-19 at Rs 1,900 crore. The Committee also noted that the Department had reported shortfall of funds for implementation of projects and on the other hand, there was underutilisation of funds released.

This mismatch between the demanded and allocated funds has led to impact in terms of restrictions in the sanctioning of new labs, providing recurring grants



to the ongoing projects, and upgradation of health research infrastructure.<sup>39</sup> This also led to repercussions in the medical research output. For example, in two years i.e. 2015 and 2016, only 1,685 research papers have been published by the Indian Council of Medical Research and 3 patents have been granted against the 45 patents filed.<sup>39</sup>

### **Drug regulation**

The central and state agencies for drug regulation are governed by the Drugs and Cosmetics Act, 1940 (DCA). The DCA provides for the regulation of import, manufacture, sale, and distribution of drugs. Although the DCA is a central legislation, it is implemented by the states.

Over the years, various Committees have examined the issues relating to the regulation of drugs.

The Mashelkar Committee Report (2003) highlighted the following challenges of the drug regulatory system: (i) inadequacy of trained and skilled personnel at the central and state levels, (ii) lack of uniformity in the implementation of regulatory requirements and variations in regulatory enforcement, and (iii) inadequate or weak drug control infrastructure at the state and central level.<sup>41</sup>

Expert committees have recommended many steps to address these concerns regarding drug regulation in the country.<sup>41,42,43</sup> They include: (i) a new independent and professionally run regulatory body, Central Drug Administration reporting directly to MoHFW, (ii) categorising the states in terms of scale of industry (manufacturing and sale) and investment in their regulation accordingly, (iii) the revision and imposition of higher fees for drug applications, clinical trials, and registration of imported drugs and foreign manufacturers, and (iv) establishment of technical expert committees for new drug approvals.

### **Quality of drugs**

The Parliamentary Standing Committee Report (2013) found that the prevalence of poor quality

drugs to be around 7-8 % where non-standard drugs outnumber spurious drugs.<sup>44</sup>

The extent of 'non-standard quality' drugs in the National Drug Survey between 2014 and 2016 was 3.2%.<sup>45</sup> The extent of 'spurious' drugs during the same time period was 0.02% (see Table 9).<sup>45</sup> A drug is deemed to be 'spurious' if: (i) it is manufactured under a name which belongs to another drug, (ii) if it is an imitation of another drug, (iii) if it has been substituted wholly or partly by another drug, and (iv) if it wrongly claims to be the product of another manufacturer.<sup>46</sup>

With regard to quality of drugs, the Mashelkar Committee recommended that: (i) states should take more samples to check the quality of drugs manufactured and sold in the market, (ii) states should also monitor the source of purchase and quality of drugs stocked by registered medical practitioners, and (iii) number of drug inspectors and their skills must be upgraded according to the load of work of inspections and monitoring.<sup>41</sup>

### **Drug pricing**

The National Pharmaceutical Pricing Authority (NPPA) monitors the availability and pricing of drugs in the country. NPPA fixes the prices of drugs/devices included in Schedule I of Drugs (Prices Control) Order (DPCO), 2013 after their notification under National List of Essential Medicines (NLEM). NLEM, 2015 consists of 3754 medicines in total. Wherever instances of manufacturers/ importers charging prices higher than the prices fixed by the NPPA are reported, these cases are examined in detail. Since the inception of NPPA in 1995 till 2019, 2,038 demand notices have been issued to pharmaceutical companies for having overcharged patients on the sale of formulations at prices above the ceiling prices notified by NPPA.<sup>47</sup> An amount of Rs 5,477 crore is still remaining to be paid and an amount of Rs 4,033 is under litigation.<sup>47</sup>

<sup>1</sup> Demand Nos. 42 & 43, Ministry of Health and Family Welfare, Union Budget 2019-20,

<https://www.indiabudget.gov.in/doc/eb/sbe42.pdf>;  
<https://www.indiabudget.gov.in/doc/eb/sbe43.pdf>.

<sup>2</sup> Economic Survey, 2015-16, Ministry of Finance,  
<http://indiabudget.nic.in/budget2016-2017/es2014-15/echapter-vol1.pdf>.

<sup>3</sup> Economic Survey, 2016-17, Ministry of Finance,  
<http://indiabudget.nic.in/es2016-17/echapter.pdf>.

<sup>4</sup> Economic Survey, 2018-19, Ministry of Finance,  
[https://www.indiabudget.gov.in/economicsurvey/doc/vol2chapter/echap10\\_vol2.pdf](https://www.indiabudget.gov.in/economicsurvey/doc/vol2chapter/echap10_vol2.pdf).

<sup>5</sup> National Health Policy, 2017, Ministry of Health and Family Welfare, March 16, 2017, <http://mohfw.nic.in/showfile.php?lid=4275>.

<sup>6</sup> National Health Accounts, estimates for 2015-16, Ministry of Health and Family Welfare,  
<http://nhsrcindia.org/sites/default/files/NHA%20Estimates%20Report%20-%20November%202018.pdf>.

<sup>7</sup> Unstarred question no. 2201, Ministry of Health and Family Welfare, Lok Sabha, Answered on July 29, 2016,  
<http://164.100.47.190/loksabhaquestions/annex/9/AU2201.pdf>.

<sup>8</sup> Unstarred Question No. 5019, Ministry of Health and Family Welfare, Lok Sabha, answered on March 31, 2017,  
<http://164.100.47.190/loksabhaquestions/annex/11/AU5019.pdf>.

<sup>9</sup> Annual Report, 2017-18, Insurance Regulatory and Development Authority of India,  
[https://www.irdai.gov.in/ADMINCMS/cms/Uploadedfiles/english\\_hindi\\_annual%20report%202018%20webcopy.pdf](https://www.irdai.gov.in/ADMINCMS/cms/Uploadedfiles/english_hindi_annual%20report%202018%20webcopy.pdf).

<sup>10</sup> "Chapter three, Summary of Findings, Key Indicators of Social Consumption in India in Health", 71st Round, National Sample Survey (NSS), Ministry of Statistics and Programme,  
<http://mail.mospi.gov.in/index.php/catalog/161>.

<sup>11</sup> "Report no. 106: Demands for Grants 2018-19 (Demand No. 42) of the Department of Health and Family Welfare", Standing Committee on Health and Family Welfare, March 8, 2018,  
[https://rajyasabha.nic.in/rsnew/Committee\\_site/Committee\\_File/ReportFile/14/100/106\\_2018\\_6\\_16.pdf](https://rajyasabha.nic.in/rsnew/Committee_site/Committee_File/ReportFile/14/100/106_2018_6_16.pdf).

- <sup>12</sup> “Report no. 99: Demands for Grants 2017-18 (Demand No. 42) of the Department of Health and Family Welfare”, Standing Committee on Health and Family Welfare, March 20, 2017, <http://164.100.47.5/newcommittee/reports/EnglishCommittees/Committee%20on%20Health%20and%20Family%20Welfare/99.pdf>.
- <sup>13</sup> Pradhan Mantri Jan Arogya Yojana website, last accessed on July 8, 2019, <https://www.pmjay.gov.in/>
- <sup>14</sup> “Health expenditure per capita (US \$)”, World Health Organisation, <http://data.worldbank.org/indicator/SH.XPD.PCAP>.
- <sup>15</sup> National Health Profile, 2016, Ministry of Health and Family Welfare, <http://www.cbhidghs.nic.in/E-Book%20HTML-2016/index.html>.
- <sup>16</sup> “High Level Expert Group Report on Universal Health Coverage in India”, Planning Commission of India, November, 2011, [http://planningcommission.nic.in/reports/genrep/rep\\_uhc0812.pdf](http://planningcommission.nic.in/reports/genrep/rep_uhc0812.pdf).
- <sup>17</sup> “Essential Health Package for India: Approach and Costing”, Institute of Economic Growth, Finance Commission, [http://fincomindia.nic.in/writereaddata/html\\_en\\_files/fincom14/others/40.pdf](http://fincomindia.nic.in/writereaddata/html_en_files/fincom14/others/40.pdf)
- <sup>18</sup> Report of the National Commission on Macroeconomics and Health, Ministry of Health and Family Welfare, 2005, <https://www.who.int/macrohealth/action/Report%20of%20the%20National%20Commission.pdf>.
- <sup>19</sup> Causes of death, 2010-13, Office of the Registrar General & Census Commissioner, [http://www.censusindia.gov.in/vital\\_statistics/causesofdeath.html](http://www.censusindia.gov.in/vital_statistics/causesofdeath.html).
- <sup>20</sup> “Inter-State Comparisons on Health Outcomes in Major States and a Framework for Resource Devolution for Health”, Centre for Economic & Social Studies, Hyderabad, 14<sup>th</sup> Finance Commission, [http://fincomindia.nic.in/writereaddata/html\\_en\\_files/fincom14/others/39.pdf](http://fincomindia.nic.in/writereaddata/html_en_files/fincom14/others/39.pdf).
- <sup>21</sup> “Inter-State Comparisons on Health Outcomes in Major States and a Framework for Resource Devolution for Health”, Centre for Economic & Social Studies, Hyderabad, 14<sup>th</sup> Finance Commission, [http://fincomindia.nic.in/writereaddata/html\\_en\\_files/fincom14/others/39.pdf](http://fincomindia.nic.in/writereaddata/html_en_files/fincom14/others/39.pdf).
- <sup>22</sup> Chapter VIII: Public Health Care System, Planning Commission of India, [http://planningcommission.nic.in/aboutus/committee/strgrp/stgp\\_fmlywel/sgfw\\_ch8.pdf](http://planningcommission.nic.in/aboutus/committee/strgrp/stgp_fmlywel/sgfw_ch8.pdf).
- <sup>23</sup> Part I, Rural Health Care System in India, Rural Health Statistics, [https://nrhm-mis.nic.in/RURAL%20HEALTH%20STATISTICS/\(A\)%20RHS%20-%202014/Rural%20Health%20Care%20System%20in%20India.pdf](https://nrhm-mis.nic.in/RURAL%20HEALTH%20STATISTICS/(A)%20RHS%20-%202014/Rural%20Health%20Care%20System%20in%20India.pdf).
- <sup>24</sup> Framework for Implementation, National Urban Health Mission, May, 2013, [http://nrhm.gov.in/images/pdf/NUHM/Implementation\\_Framework\\_NUHM.pdf](http://nrhm.gov.in/images/pdf/NUHM/Implementation_Framework_NUHM.pdf).
- <sup>25</sup> Rural Health Statistics 2018, Health Management Information Systems, Ministry of Health and Family Welfare.
- <sup>26</sup> “Survey Report & Recommendations of Clinical Establishments”, Ministry of Health and Family Welfare, 2013, <http://clinicalestablishments.nic.in/WriteReadData/788.pdf>.
- <sup>27</sup> “Report no.99: Demands for Grants 2017-18 (Demand No.42) of the Department of Health and Family Welfare”, Standing Committee on Health and Family Welfare, Rajya Sabha, March 20, 2017, <http://164.100.47.5/newcommittee/reports/EnglishCommittees/Committee%20on%20Health%20and%20Family%20Welfare/99.pdf>.
- <sup>28</sup> Health and Family Welfare Statistics 2017, Ministry of Health and Family Welfare, <https://data.worldbank.org/indicator/SH.MED.BEDS.ZS>
- <sup>29</sup> Report No. 10, Performance Audit on Pradhan Mantri Swasthya Suraksha Yojana, August 7, 2018, <https://cag.gov.in/content/report-no10-2018-performance-audit-pradhan-mantri-swasthya-suraksha-yojana-ministry-health>.
- <sup>30</sup> “Chapter three, Summary of Findings, Key Indicators of Social Consumption in India in Health”, 71<sup>st</sup> Round, National Sample Survey (NSS), Ministry of Statistics and Programme Implementation, June 2015, [http://mospi.nic.in/Mospi\\_New/upload/nss\\_71st\\_ki\\_health\\_30june15.pdf](http://mospi.nic.in/Mospi_New/upload/nss_71st_ki_health_30june15.pdf).
- <sup>31</sup> “Chapter: 20, Health, Twelfth Five Year Plan (2012-17)”, Planning Commission of India, [http://planningcommission.gov.in/plans/planrel/12thplan/pdf/12fyp\\_vol3.pdf](http://planningcommission.gov.in/plans/planrel/12thplan/pdf/12fyp_vol3.pdf).
- <sup>32</sup> “Essential Health Package for India Approach and Costing”, Report submitted to the 14<sup>th</sup> Finance Commission, Ministry of Finance, September 2014, [http://fincomindia.nic.in/writereaddata%5Chtml\\_en\\_files%5Cfincom14/others/40.pdf](http://fincomindia.nic.in/writereaddata%5Chtml_en_files%5Cfincom14/others/40.pdf).
- <sup>33</sup> National Health Profile, 2018, Ministry of Health and Family Welfare, <https://cdn.downtoearth.org.in/pdf/NHP-2018.pdf>.
- <sup>34</sup> “A Preliminary Report of the Committee on the Reform of the Indian Medical Council Act, 1956”, NITI Aayog, August 7, 2016, [http://niti.gov.in/writereaddata/files/document\\_publication/MCI%20Report%20.pdf](http://niti.gov.in/writereaddata/files/document_publication/MCI%20Report%20.pdf).
- <sup>35</sup> “Report no. 92 on ‘Functioning of the Medical Council of India’”, Standing Committee on Health and Family Welfare, March 8, 2016, <http://164.100.47.5/newcommittee/reports/EnglishCommittees/Committee%20on%20Health%20and%20Family%20Welfare/92.pdf>
- <sup>36</sup> “Report no. 236: Prohibition of Unfair Practices in Technical Educational Institutions, Medical Educational Institutions and Universities Bill, 2010”, Standing Committee on Human Resource Development, May 30, 2011, <http://164.100.47.5/newcommittee/reports/EnglishCommittees/Committee%20on%20HRD/236.pdf>.
- <sup>37</sup> TMA Pai Foundation vs. State of Karnataka & Ors [(1994)2SCC195].
- <sup>38</sup> “Report no. 100: Demands for Grants 2017-18 (Demand No.43) of the Department of Health Research”, Standing Committee on Health and Family Welfare, March 20, 2017, <http://164.100.47.5/newcommittee/reports/EnglishCommittees/Committee%20on%20Health%20and%20Family%20Welfare/100.pdf>.
- <sup>39</sup> Report No. 107, Demand for Grants 2018-19 (Demand No. 43) of the Department of Health Research, Standing Committee on Health and Family Welfare, March 2018, [https://rajyasabha.nic.in/rsnew/Committee\\_site/Committee\\_File/ReportFile/14/100/107\\_2018\\_6\\_16.pdf](https://rajyasabha.nic.in/rsnew/Committee_site/Committee_File/ReportFile/14/100/107_2018_6_16.pdf),
- <sup>40</sup> Report of the Expert Committee on “A Comprehensive Examination of Drug Regulatory Issues, including the problem of Spurious Drugs”, Ministry of Health and Family Welfare, November, 2003, <http://pharmaceuticals.gov.in/sites/default/files/MashelkarCommitteeReport.pdf>.
- <sup>41</sup> “Report no.59: The Functioning of the Central Drugs Standards Control Organisation (CDSCO)”, Standing Committee on Health and Family Welfare, Ministry of Health and Family Welfare, May 8, 2012, <http://164.100.47.5/newcommittee/reports/EnglishCommittees/Committee%20on%20Health%20and%20Family%20Welfare/59.pdf>.
- <sup>42</sup> Report of the (late) Prof. Ranjit Roy Chaudhury Expert Committee to “Formulate Policy and Guidelines for Approval of New Drugs, Clinical Trials and Banning of Drugs”, July, 2013, [http://www.cdsc.nic.in/writereaddata/Report\\_of\\_Dr\\_Ranjit\\_Roy.pdf](http://www.cdsc.nic.in/writereaddata/Report_of_Dr_Ranjit_Roy.pdf).
- <sup>43</sup> “Report no.59: The Functioning of the Central Drugs Standards Control Organisation (CDSCO)”, Standing Committee on Health and Family Welfare, Ministry of Health and Family Welfare, May 8, 2012, <http://164.100.47.5/newcommittee/reports/EnglishCommittees/Committee%20on%20Health%20and%20Family%20Welfare/59.pdf>.
- <sup>44</sup> National Drug Survey 2014-16, Ministry of Health and Family Welfare, <https://mohfw.gov.in/sites/default/files/Chapter10SurveyReslutandAnalysis.pdf>.

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<sup>46</sup> Drugs and Cosmetics Act 2008, Ministry of Health and Family Welfare, December 5, 2008, [http://www.cdscsco.nic.in/writereaddata/D&C\\_ACT\\_AMENDMENT\\_2008\\_file.pdf](http://www.cdscsco.nic.in/writereaddata/D&C_ACT_AMENDMENT_2008_file.pdf)

<sup>47</sup> Year-wise Summary of Overcharging as on June 2019, National Pharmaceutical Pricing Authority, Department of Pharmaceuticals, Ministry of Chemical and Fertilizers, <http://www.nppaindia.nic.in/en/utilities/overcharging-status/year-2019/>.

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## Annexure

### Union Budget, 2019-20

**Table 1: Allocations to the Ministry of Health and Family Welfare for 2019-20 (in Rs crore)**

Major Heads	2017-18 Actuals	2018-19 BE	2018-19 RE	2019-20 BE	% Change RE (2018- 19)/Actuals (2017-18)	Change between RE 2018- 19 and BE 2019- 20
<b>Department of Health Research</b>	1,732	1,800	1,743	1,900	1%	9%
<b>Department of Health and Family Welfare</b>	51,382	52,800	54,303	62,659	6%	15%
Pradhan Mantri Swasthya Suraksha Yojana	3,159	3,825	3,825	4,000	21%	5%
Family Welfare Schemes	664.2	875	875	950	32%	9%
National AIDS and STD Control Programme	2,010	2,100	1,925	2,500	-4%	30%
<b>National Health Mission</b>	<b>31,521</b>	<b>30,130</b>	<b>30,683</b>	<b>32,995</b>	<b>-3%</b>	<b>8%</b>
-National Rural Health Mission	26,178	24,280	25,243	27,039	-4%	7%
-National Urban Health Mission	491	752	652	875	33%	34%
Tertiary Care Programs	653.89	750	345	550	-47%	59%
Strengthening of State Drug Regulatory System				206	-	-
-Human Resources for Health and Medical Education	4025	4225	4220	4250	5%	1%
Infrastructure Development for Health Research	124.09	138	107	160.35	-14%	50%
Rashtriya Swasthya Bima Yojna	455.98	2,000	300	156	-34%	-48%
Ayushman Bharat			2400	6,400	-	167%
Autonomous Bodies	8,264	8,456	8,964	9,920	8%	11%
Others	6,915	7,576	7,466	7,478	8%	0%
<b>Total</b>	<b>53,114</b>	<b>54,600</b>	<b>56,045</b>	<b>64,559</b>	<b>6%</b>	<b>15%</b>

Sources: Demand for Grants, Ministry of Health and Family Welfare, Union Budget, 2019-20; PRS.

## State-wise numbers on the health sector

**Table 2: Average health expenditure (2012-13) (urban and rural, in Rs)**

State	Average health expenditure (rural)	Average health expenditure (urban)
Andhra Pradesh	13,227	31,242
Arunachal Pradesh	5,678	8,926
Assam	6,966	47,064
Bihar	11,432	25,004
Chhattisgarh	12,149	22,647
Delhi	30,613	34,730
Goa	29,954	23,165
Gujarat	14,298	20,155
Haryana	18,341	32,370
Himachal Pradesh	18,860	28,590
Jammu & Kashmir	8,442	13,948
Jharkhand	10,351	13,151
Karnataka	14,091	22,190
Kerala	17,642	15,465
Madhya Pradesh	13,090	23,993
Maharashtra	20,475	29,493
Manipur	6,061	10,215
Meghalaya	2,075	18,786
Mizoram	8,744	13,461
Nagaland	5,628	15,788
Odisha	10,240	19,750
Punjab	27,718	29,971
Rajasthan	12,855	16,731
Sikkim	8,035	9,939
Tamil Nadu	11,842	23,757
Telangana	19,664	20,617
Tripura	5,694	11,638
Uttar Pradesh	18,693	31,653
Uttarakhand	9,162	25,703
West Bengal	11,327	24,875
Andaman & Nicobar Islands	3,373	8,389
Chandigarh	16,389	35,158
Dadra & Nagar Haveli	4,219	7,749
Daman & Diu	10,223	6,930
Lakshadweep	10,418	8,604
Puducherry	7,965	14,076
<b>All India</b>	<b>14,935</b>	<b>24,436</b>

Sources: District Level Household and Facility Survey -4 (2012-13); PRS.



**Table 3: Comparison of key health indicators across states**

State	Population (Million) 2011	Crude Birth Rate 2016	Total Fertility Rate, 2016	Under 5 mortality rate, 2016	Infant Mortality Rate (per 1000 live Births) 2016	Underweight children (%) 2015	Life Expectancy at Birth (Years) 2012-16	Maternal Mortality Ratio	Mortality 2014-16
Andhra Pradesh	49	16	1.7	37	34	32%	70		74
Assam	31	22	2.3	52	44	30%	66		237
Bihar	104	27	3.3	43	38	44%	69		165*
Chhattisgarh	26	23	2.5	49	39	38%	65		**
Gujarat	60	20	2.2	33	30	39%	70		91
Haryana	25	21	2.3	37	33	29%	69		101
Jharkhand	33	23	2.6	33	29	48%	68		*
Karnataka	61	18	1.8	29	24	35%	69		108
Kerala	33	14	1.8	11	10	16%	75		46
Madhya Pradesh	73	25	2.8	55	47	43%	65		173**
Maharashtra	112	16	1.8	21	19	36%	72		61
Odisha	42	19	2.0	50	44	34%	68		180
Punjab	28	15	1.7	24	21	22%	73		122
Rajasthan	69	24	2.7	45	41	37%	68		199
Tamil Nadu	72	15	1.6	19	17	24%	71		66
Telangana	35	18	1.7	34	31	29%			81
Uttar Pradesh	200	26	3.1	47	43	40%	65		201***
West Bengal	91	15	1.6	27	25	32%	71		101
Arunachal Pradesh	1	19	2.7	..	36	20%			..
Delhi	17	16	1.6	22	18	27%	74		..
Goa	1	13	1.6	..	8	24%			..
Himachal Pradesh	7	16	1.7	27	25	21%	72		..
Jammu & Kashmir	13	16	1.7	26	24	17%	74		..
Manipur	3	13	1.5	..	11	14%			..
Meghalaya	3	24	3.1	..	39	29%			..
Mizoram	1	16	2.0	..	27	12%			..
Nagaland	2	14	2.0	..	12	17%			..
Sikkim	1	17	2.1	..	16	14%			..
Tripura	4	14	1.7	..	24	24%			..
Uttarakhand	10	17	1.9	41	38	27%	72		***
Andaman & Nicobar Islands	0	12	1.5	..	16	22%			..
Chandigarh	1	14	1.8	..	14	25%			..
Dadra & Nagar Haveli	0	25	3.3	..	17	39%			..
Daman & Diu	0	24	1.9	..	19	27%			..
Lakshadweep	0	19	2.1	..	19	23%			..
Puducherry	1	14	1.6	..	10	22%			..
<b>All India</b>	<b>1,211</b>	<b>19</b>	<b>2.3</b>	<b>43</b>	<b>35</b>	<b>36%</b>	<b>69</b>		<b>130</b>

Note: Data on Bihar includes Jharkhand, Uttar Pradesh includes Uttarakhand, and Madhya Pradesh includes Chhattisgarh. Sources: Census Data 2011; Sample Registration System; Health and Family Welfare Statistics 2017; PRS.