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Making Healthcare Budgets Count: A Study of State Expenditure on Healthcare

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Summary:

In this research brief, we seek to explore the differences in healthcare expenditure between States in greater depth. We study the differences in budgetary allocations for healthcare between States as a proportion of State GDP and as a portion of total expenditure overall. We also ask whether the high-performing States have a different pattern of expenditure than low-performing States, and whether this can be remedied by specific policy recommendations.

About Social Protection Initiative:

India has moved over 271 million people out of multidimensional poverty between 2006 and 2016 while halving its poverty rate. However, the analytical apparatus used to measure poverty often leaves out a significant section of households that fall in and out of poverty over time. With 85% of India's 460 million workforce currently engaged in the unorganised sector, there is a significant proportion of the workforce vulnerable to income, livelihood, longevity and health-related shocks. The lack of or insufficient access to risk protection may push these households into poverty when such risks materialise. Trends of growing informalisation of the workforce, even within the formal sector, further exacerbates these vulnerabilities.

The Social Protection Initiative at Dvara Research is a policy initiative that aims to conduct research that will inform the design and implementation of a universal social security system. We believe a universal social security system is one that protects households and individuals against the vulnerabilities faced across the life cycle. At the same time, it is important to keep in mind India's unique demographic and economic realities. These vulnerabilities are the outcomes of complex interactions of being exposed to a threat, of a threat materializing, and of lacking the defences or resources to deal with a threat.

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1. Introduction

There is little doubt that India has a long way to go with respect to public health care provision. 28 out of every 1000 Indian infants die before their first birthday, compared with just 6 in Sri Lanka (World Bank, n.d.). More than half of India's women of reproductive age are anaemic, and about a tenth are diabetic (World Bank, n.d.). Meanwhile, at just 1.8% of its GDP, India's public spending on healthcare is among the lowest in the world (Economic Survey of India 2020-21, 2021)² – well below the target of 2.5% of GDP in the National Health Policy (2017).³ The Comptroller and Auditor General of India has calculated that the number of Public Health Centres in India falls short by as much as 28% nationwide (Comptroller and Auditor General of India, 2017).

But these are national averages. At the sub-national level, there are stark differences between individual States (Indian Council of Medical Research et al., 2017). For instance, Bihar has an Infant Mortality Rate of 46.8 per 1000 live births, compared with 4.4 in Kerala (National Family Health Survey 2019-20 Key Indicators (NFHS)-5, 2020). More than 92.8% of women in Ladakh are anaemic, whereas fewer than a third of women in Manipur, Goa and Nagaland fall in this category (National Family Health Survey 2019-20 Key Indicators (NFHS)-5, 2020). Unsurprisingly, higher levels of State-level expenditure on healthcare are correlated with better health outcomes, including lower infant and maternal mortality rates and improved life expectancy and immunisation rates (Mohanty & Behera, 2020).

Why do States in the same country have such different health outcomes? One reason is in the Constitution; it is the States and not the Union that are primarily responsible for framing health policy (Constitution of India, 1949). The role of the Union is largely restricted to funding State initiatives through Centrally Sponsored Schemes and other grants⁴ The National Health Policy (2017) specifically recommended that States increase health spending to 8% of their total health expenditure by 2025. At present, healthcare amounts to 5.4% of total government spending (Economic Survey of India 2020-21, 2021). There is, however, wide variation in how much States spend as a proportion of their total expenditure – while Rajasthan planned to spend 7% of its total expenditure budget on healthcare in 2020-21, Karnataka only allocated 4% of its funds for health in the same period (Kapur et al., 2020). Several factors may influence a State's budgetary decisions on healthcare. The per capita income⁵ of States varies between Rs. 46,664 for Bihar to Rs. 4,66,585 for Goa. The wealthier States have a greater pool of resources with which to fund healthcare. Further, States receive fiscal transfers from the Union, and allocations for healthcare may depend on whether the Union's grants are general-purpose or tied to a specific scheme such as National Health Mission and Ayushman Bharat (Khullar et al., 2019). Several studies have found that when States received an increase in untied funds after the Fourteenth Finance Commission award (2015), States did not necessarily allocate the additional resources to healthcare (Alok Kumar et al., 2019) (Khullar et al., 2019) (Kotia & Roy Chowdhury, 2018) (Kapur et al., 2016).

In this research brief, we seek to explore the differences in healthcare expenditure between States in greater depth. We study the differences in budgetary allocations for healthcare between States as a proportion of State GDP and as a portion of total expenditure overall. We also ask whether the high-performing States have a different pattern of expenditure than low-performing States, and whether this can be remedied by specific policy recommendations.

²As of 2018-19 South Africa, Brazil, and Thailand spent 4.46%, 3.96% and 2.89% of their GDP respectively (World Bank, n.d.)

³See also (Ahuja, 2019)

⁴It is noted that this can still mean a high degree of Union supervision on how States spend healthcare funds. See (Anupama Kumar, 2020)

⁵This refers to Net State Domestic Product per capita and not Gross State Domestic Product per capita. See, (Reserve Bank of India, 2020)

A. Healthcare Expenditure in 11 State Budgets

1. Methodology

We used data on health expenditure for 11 large General Category States⁶ for the period 2011-12 to 2020-21, based on State budget documents. The data for 2019-20 and 2020-21 are based on revised estimates and budget estimates, respectively. Unless otherwise specified, the data used in this brief is from the Reserve Bank of India's States Database (Reserve Bank of India, 2020). We compared expenditures of 'high-performing' states with those of 'low-performing' states. This classification was based on Disability-Adjusted Life Years (DALY). DALY is a widely used summary indicator of health outcomes. As the sum of years lost and years lived with disability, DALY provides an indication of the disease burden of a population. One DALY can be understood as one lost year of healthy life, and so States with higher DALY numbers have worse health outcomes (World Health Organisation, n.d.).

We selected five high performing states (Kerala, Maharashtra, Tamil Nadu, Punjab and Gujarat) and six low performing states (Uttar Pradesh, Odisha, Chhattisgarh, Madhya Pradesh, Bihar and Haryana)⁷ based on their DALY rates. The high performing states also happened to have higher per capita incomes than the low performing states, with Haryana being an exception. Haryana was included in the study as the sixth low performing state as it provided a unique case of a wealthy state with poor health outcome.

Table 1: State DALY rate

States	DALY Rate	Per Capita Inc (2019-20)
<i>Kerala</i>	27,301	2,21,904
<i>Telangana</i>	31,646	2,25,756
<i>Maharashtra</i>	32,677	2,02,130
<i>Tamil Nadu</i>	33,527	2,18,599
<i>Punjab</i>	33,766	1,61,083
<i>Gujarat</i>	34,291	2,16,329
<i>Andhra Pradesh</i>	34,721	1,68,480
<i>Jharkhand</i>	35,095	79,873
<i>Karnataka</i>	35,277	2,23,175
<i>Haryana</i>	36,191	2,47,628
<i>Rajasthan</i>	36,556	1,15,492
<i>Bihar</i>	37,074	46,664
<i>Madhya Pradesh</i>	37,678	1,03,288
<i>Chhattisgarh</i>	38,810	1,05,089
<i>Odisha</i>	39,091	1,04,566
<i>Uttar Pradesh</i>	39,585	65,704

Source: Statistical Appendix to (Dandona et al., 2017); (Ministry of Statistics and Programme Implementation, n.d.)

⁶Special category States are States that require special assistance from the Centre. Some common characteristics of these States are their hilly terrain, low population density, low resource base and often, low HDI. The Special Category States in the Indian Union are Himachal Pradesh, Uttarakhand, Sikkim, Nagaland, Manipur, Tripura, Meghalaya, Assam, Mizoram, Arunachal Pradesh. All other States are General Category States. (Singh, 2013)

⁷Andhra Pradesh and Telangana had to be excluded as they were only bifurcated in 2014 and separate data are unavailable for the period before this. We also excluded Goa as it is an outlier with a small population and high per capita income.

2. Results

a) State expenditure to GSDP

On average, the high-performing States in our sample spent more on health per capita than the low performing States. In 2018-19, the high-performing States spent an average of Rs. 1567 per capita on healthcare, while the low-performing States spent only Rs. 1181 per capita. The variation in individual state spending is notable- while Kerala spent Rs. 2125 per capita in 2018-19, Bihar spent less than a third of this at Rs. 703 per capita in the same period.

However, as a percentage of State GDP, richer states spend less on health when compared to poorer states. For instance, as a proportion of GDP, the highest spenders are Bihar (1.4%), Madhya Pradesh (1.2%) and Chhattisgarh (1.2%), with per capita income of Rs.46.7k, Rs.1.03 lakh and Rs. 1.05 lakh, respectively. Compared to this, much richer states such as Maharashtra (per capita income of ~Rs.2 lakh) and Gujarat (per capita income of Rs. 2.2 lakh) spent only 0.5% and 0.7% of their GSDP on health. Despite its poor health outcomes, Haryana (per capita income of ~Rs.2.5 lakh) also spends only 0.5% of its GDP on healthcare.

These findings point to significant disparities between States. They suggest that the wealthier States have a far larger pool from which to allocate resources to healthcare, while the poorer States have far less fiscal space for this purpose.

Table 2: Health expenditure per capita, as a percentage of Total expenditure (T%) and as a percentage of state GDP (G%)

(a) High performing states

	Kerala			Maharashtra			Tamil Nadu			Punjab			Gujarat		
	PC	T%	G%	PC	T%	G%	PC	T%	G%	PC	T%	G%	PC	T%	G%
2011-12	867	5.4	0.8	481	3.6	0.4	613	4.0	0.6	576	4.3	0.6	551	4.2	0.5
2012-13	971	5.2	0.8	569	3.9	0.4	733	4.4	0.6	686	4.3	0.6	765	4.7	0.6
2013-14	1089	5.2	0.8	656	3.9	0.4	834	4.5	0.6	710	4.1	0.6	841	4.9	0.6
2014-15	1266	5.3	0.8	798	4.3	0.5	1035	4.7	0.7	852	4.4	0.7	1053	5.5	0.7
2015-16	1428	5.2	0.8	891	4.5	0.5	1157	4.9	0.7	939	4.1	0.7	1179	5.6	0.7
2016-17	1792	5.6	0.9	954	4.2	0.5	1198	4.2	0.7	1042	2.8	0.7	1274	5.7	0.7
2017-18	1940	5.5	0.9	1083	4.3	0.5	1447	5.1	0.7	990	3.8	0.6	1409	5.4	0.6
2018-19	2125	5.5	0.9	1157	4.0	0.5	1731	5.1	0.8	1169	3.7	0.6	1652	5.6	0.7

(b) Low performing states

	Uttar Pradesh			Odisha			Chhattisgarh			Madhya Pradesh			Bihar			Haryana		
	PC	T%	G%	PC	T%	G%	PC	T%	G%	PC	T%	G%	PC	T%	G%	PC	T%	G%
2011-12	336	4.4	0.9	324	3.2	0.6	432	3.8	0.7	354	3.2	0.8	204	3.5	0.9	492	3.1	0.4
2012-13	432	5.0	1.0	420	3.7	0.7	506	3.7	0.7	455	4.0	0.9	230	3.5	0.8	631	3.4	0.5
2013-14	466	4.6	1.0	466	3.5	0.7	609	3.9	0.8	475	3.8	0.8	247	3.2	0.8	691	3.6	0.4
2014-15	599	5.1	1.2	759	4.9	1.0	913	4.9	1.1	656	4.3	1.0	346	3.8	1.1	883	4.0	0.5
2015-16	673	4.5	1.2	877	4.7	1.1	1061	5.1	1.2	751	4.4	1.0	439	4.1	1.2	996	3.1	0.5
2016-17	790	4.9	1.2	1127	5.4	1.2	1289	5.6	1.3	818	3.8	0.9	528	4.3	1.3	1201	3.7	0.5
2017-18	846	5.3	1.2	1174	5.1	1.1	1569	5.9	1.4	1026	4.4	1.0	594	4.5	1.3	1332	3.7	0.5
2018-19	906	4.6	1.1	1359	5.0	1.2	1471	5.0	1.2	1066	4.2	1.0	703	4.7	1.4	1582	4.1	0.5

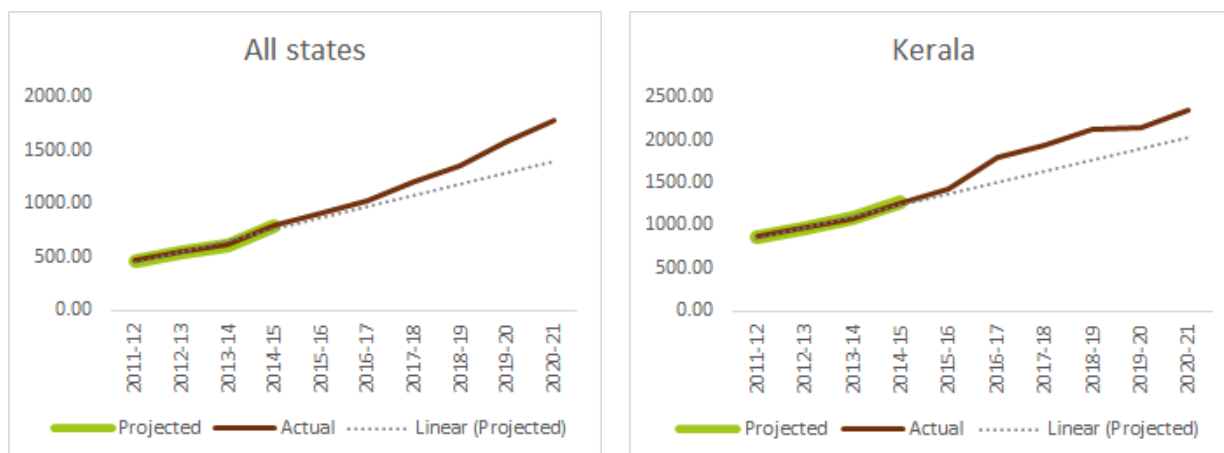
b) Health Expenditure before and after the Fourteenth Finance Commission

The National Health Policy (2017) specifically recommended that States increase health expenditure to 8% of their total expenditure by 2025. As of 2018-19, our sample of States only spent 3.7% to 5.6% of their total expenditure budget on health (Table 2). Thus, in both absolute and relative terms, spending on healthcare remains low in India. This leads us to ask – would increasing the quantum of untied funds available to States make a difference in absolute and relative health spending?

The award of the Fourteenth Finance Commission (FFC) in 2015 might provide one way to study this. Prior to 2015, States only received 32% of the divisible pool⁸ of taxes. The Fourteenth Finance Commission (2015) recommended that this increase to 42%. The effect of this was that States now had a greater share of untied funds to spend on the sectors that most needed attention.

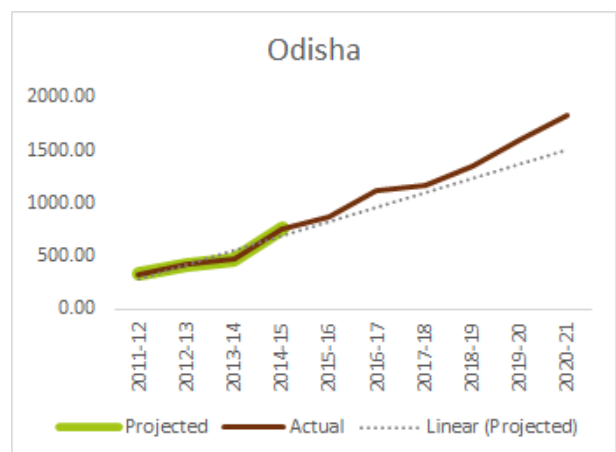
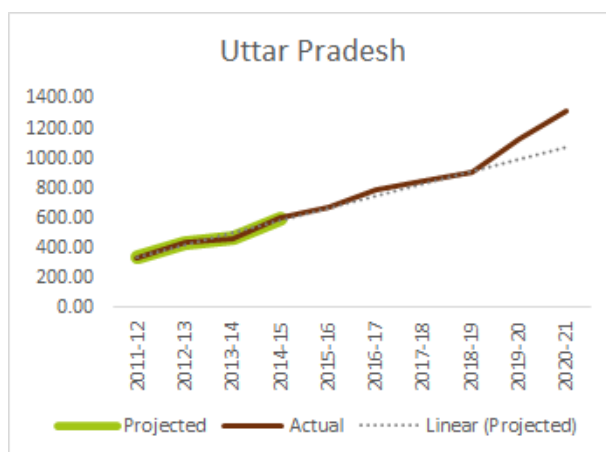
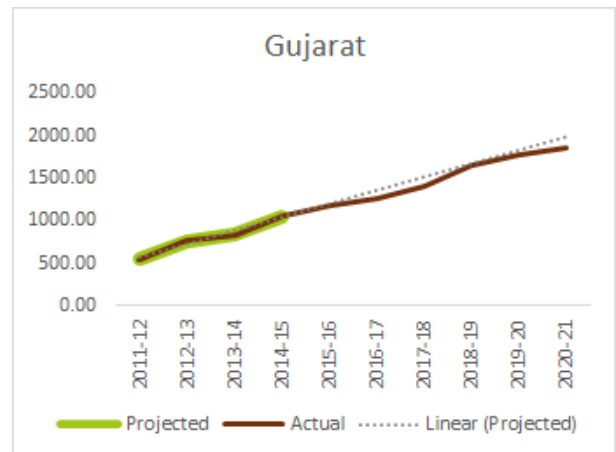
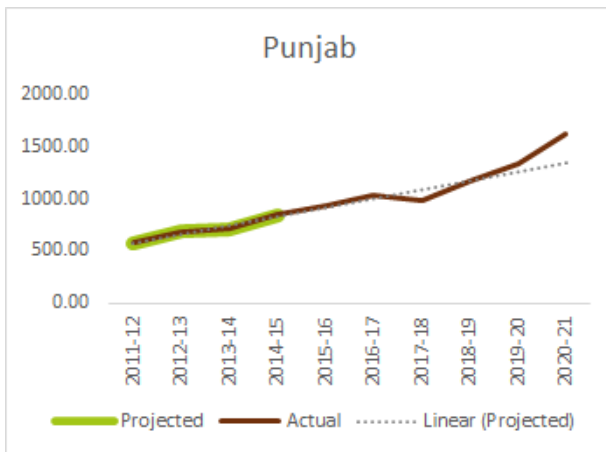
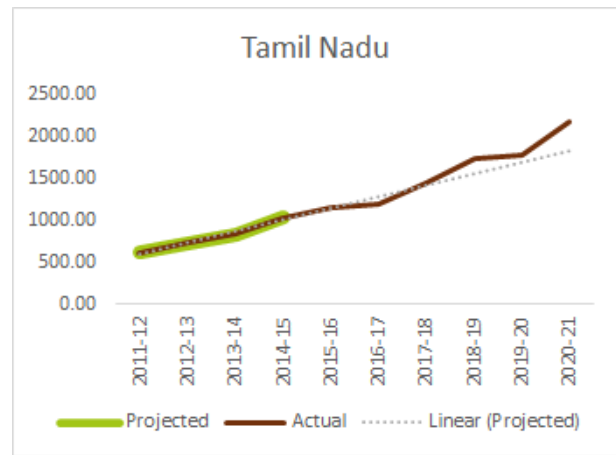
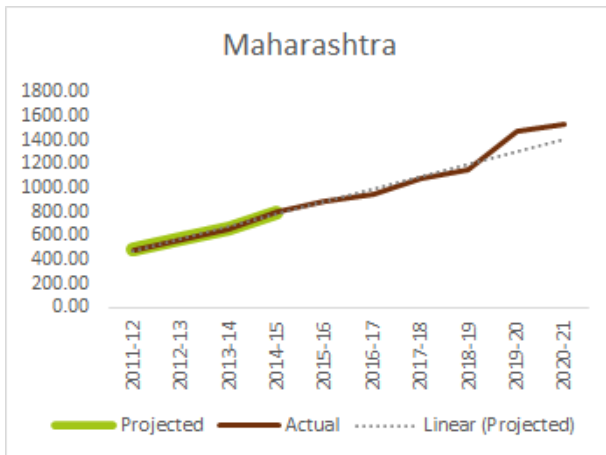
To see the impact of untied grants on health expenditure, we compared the preliminary projected spending on health in the absence of untied grants with actual health spending in the years that followed the grant. While nominal spending on health has been rising slowly over the years, we observed no marked difference in the projected and actual expenditure post FFC across states, regardless of their health outcome status (Fig 1). In fact, in some states, actual expenditure was even lower than projected expenditure after the Fourteenth Finance Commission award. Kerala was one state that showed a visible hike in actual health expenditure post FFC⁹.

Figure 1: Per capita State spending on healthcare



⁸The divisible pool is “that portion of gross tax revenue which is distributed between the Centre and the States. The divisible pool consists of all taxes, except surcharges and cess levied for specific purpose, net of collection charges.” See (Economic Survey of India 2014-15, 2015:130).

⁹The reasons for this rise in expenditure are beyond the scope of this research brief. However, we note that Kerala faced specific health emergencies, such as the outbreak of Nipah virus in 2018, which may explain this (World Health Organisation, n.d.-b).



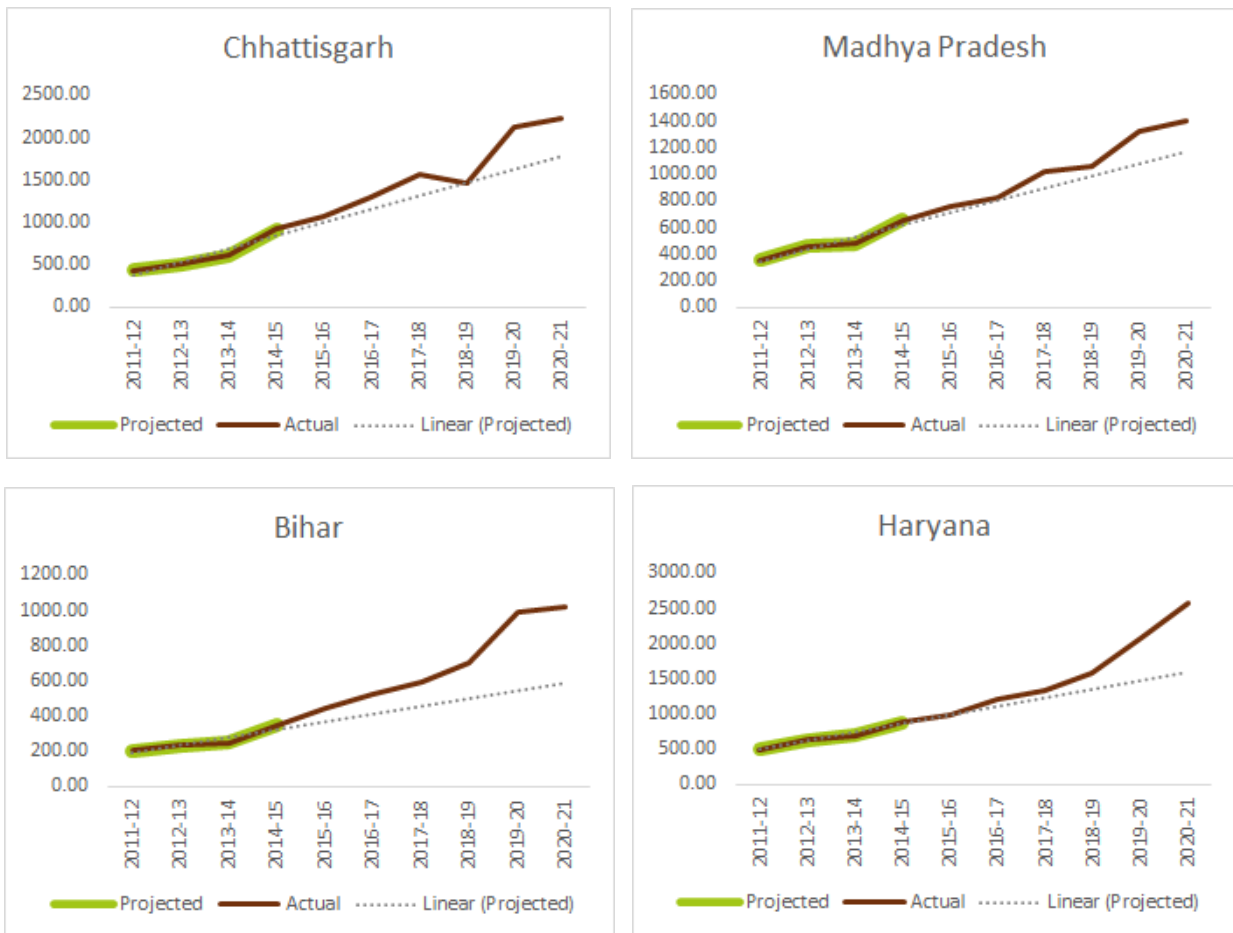
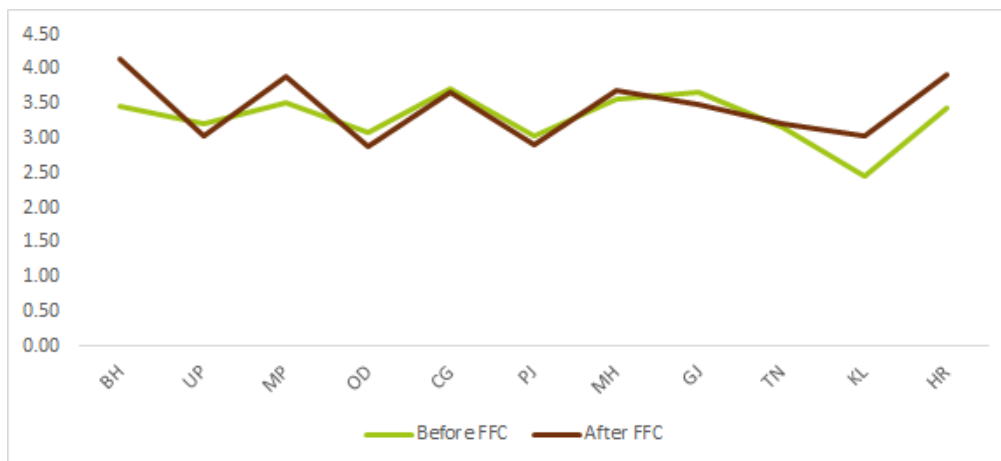


Figure 2 below provides a comparison of the Compounded Annual Growth Rate (CAGR) of health expenditure before and after FFC fund devolution. The growth rate of health expenditure in Maharashtra, Punjab, Gujarat, Uttar Pradesh and Chhattisgarh actually declined post FFC.

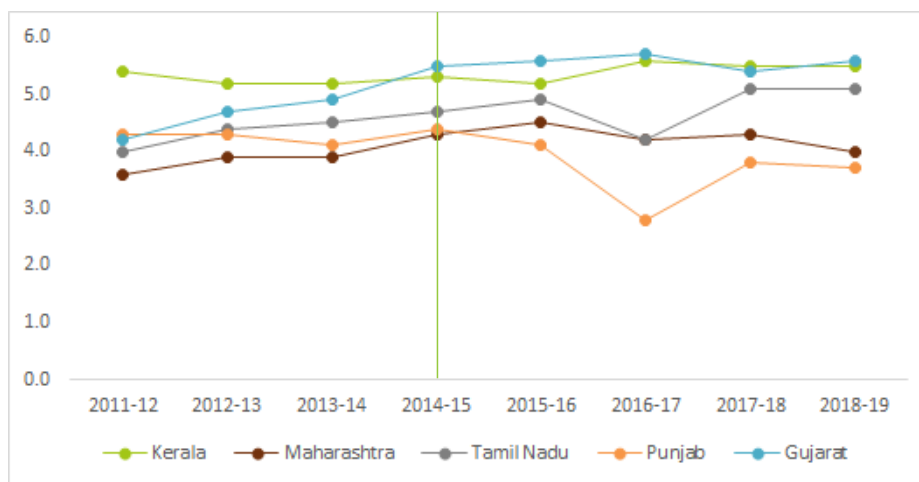
Figure 2: Growth rate of health expenditure before and after FFC



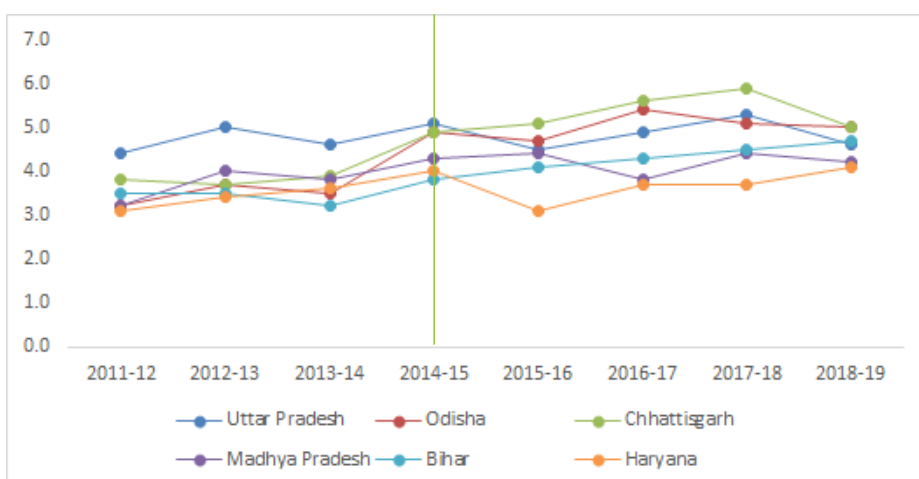
Even in terms of proportionate spending, the grant of untied funds did not result in any significant progress (Figure 3). Among high performing states, only Tamil Nadu (despite fluctuations) and Gujarat marked a growth in health spending (as a proportion of total expenditure) of more than one percentage point between 2011-12 and 2018-19. In the same period, the share of health expenditure in the total expenditure budget stagnated in Kerala and declined in Punjab. This is in contrast to the low-performing States, which, with the exception of Uttar Pradesh, increased the share of health expenditure in total expenditure by at least a percentage point during the same period. This was, however, not a steady increase over the period of study, and every State except Bihar had significant fluctuations in the share of health spending.

Figure 3: Health expenditure as a proportion of total expenditure

(a) High performing states



(b) Low performing states



These figures show that, while some States may lack fiscal resources for healthcare, simply increasing the availability of untied funds is not enough. For some States, despite poor health outcomes, other sectors may take precedence over healthcare.

B. Conclusion and Recommendations

Our research shows that there is little variation in State expenditure on healthcare as a proportion of total expenditure. States spend between 3.7% and 5.5% of their total expenditure budgets on healthcare – well below the target of 8% of spending in the National Health Policy. These figures do not differ significantly between the high-performing and low-performing States. Nor has the growth rate varied significantly after the States' share of untied Union funds increased after the Fourteenth Finance Commission award.

Additionally, high-performing States spend a far greater rupee amount per capita than low-performing States. Even so, higher-performing States spend a far lower share of GSDP on healthcare compared to the low-performing States. This indicates a wide disparity in fiscal resources between the high-performing and low-performing States and suggests that low-performing States may not have the resources to increase spending on healthcare.

The reasons for the slow increase in healthcare expenditure are beyond the scope of this research brief. Some commentators have argued that States are required to contribute a large share of their funds to Centrally Sponsored Schemes, which might in turn crowd out State-level initiatives (Kapur, 2019)¹⁰. Others have argued that States may simply choose to prioritise sectors other than healthcare (Khullar et al., 2019). In any event, it is vital that we investigate the reasons for these inter-State disparities in health spending and ask how States may be incentivised to do more with the funds available to them. We further note that this research brief only examines spending on healthcare in the budget. This is not to say that higher spending is the sole determinant of health outcomes. For instance, Bihar has a lower DALY than Madhya Pradesh, Chhattisgarh and Odisha, despite having a per capita health expenditure that is well below these three States. While we do not address specific heads of spending on healthcare by States, the efficiency of fund utilisation, the availability and quality of health infrastructure, or spending on other allied sectors such as sanitation or women and child development in this research brief, we acknowledge that each of these sectors also impacts health outcomes significantly and merits closer study.

Finally, we acknowledge that government resources for social sector spending are limited, and it is crucial that all government resources for healthcare are spent in the most efficient manner possible. Commercial health insurance may provide one means to bridge the gap in government funding and to enable the government to concentrate its resources on those areas that it is best equipped to handle (Venkateswaran & Mor, 2021). This must also be examined more carefully in the future.

¹⁰The Fourteenth Finance Commission award increased the States' share of untied Union funds. However, shortly thereafter, the Union government changed the funding pattern of many Centrally Sponsored Schemes. General category States were now required to contribute 40% of the funds of each scheme, up from an average of 33% in the period before 2015. This may also have impacted how much fiscal space States had. See, (Report of the Sub Group of Chief Ministers on the Rationalisation of Centrally Sponsored Schemes (Chauhan Committee), 2015).

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