Supply side response to insurance expansion: Evidence from RSBY/MSBY in Chhattisgarh

Authors: PM-JAY POLICY BRIEF 4
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Background

Rashtriya Swasthya Bima Yojana (RSBY) was launched in selected districts of Chhattisgarh in June 2009 to provide cashless secondary hospital care to poor and vulnerable households. While 22 lakh below poverty line (BPL) families were eligible, only 47% or about 1 million were enrolled by 2011. In August 2012, the state Government announced the launch of Mukhyamantri Swasthya Bima Yojana (MSBY), extending coverage to non-BPL families in the state, aiming to achieve universal health coverage, with a total enrollment target of 62 lakh families under the two programs combined.

The policy brief aims to provide evidence on the supply side response to RSBY/MSBY in Chhattisgarh on a macro level. In particular, how did hospital capacity evolve during scheme expansion? In principle, several types of supply side response are possible: new provider market entry, expansion of service capacity among existing providers, more existing providers contracting with the scheme, and existing providers increasing service volume without capacity expansion. The supply side response to large social health insurance programs can be complex to measure, especially to establish a causal relationship with clear attribution. This is because many other factors (including government investment in public hospitals, household income growth, demographic transition and a shifting disease burden) co-exist with the launch of health insurance programs, and health care supply and demand is a highly dynamic system. There can also be variation across regions and specialties, and for different hospital types. The analysis presented here also faced significant data constraints (see Methodology box).

Highlights

- There is strong evidence of a positive impact of RSBY/MSBY expansion on the private health care market – including more active market entry by private hospitals, and service volume expansion of all providers.
- However, this trend is highly concentrated on smaller, dental & eye hospitals. The high growth in these two "low entry barrier" specialties raises questions about potential supplier-induced demand and distorted incentives given to hospitals under RSBY/MSBY.
- The Chhattisgarh RSBY/MSBY experience highlights policy implications in two broad areas: the hospital market entry environment (for example, policy predictability, marginal cost pricing, land subsidies, tax breaks, region-specific pricing, and empanelment waiting periods); and how current insurance package pricing impacts provider behavior (including potential for cherry-picking lucrative packages and less complex cases). Further analysis is needed to better understand these issues.

The policy brief analyzes Chhattisgarh RSBY/MSBY private hospital empanelment data and claims data from 2012 (the year of scheme expansion) onwards. Data for previous years was not available. The brief focuses on the evidence on each type of supply side

response, without establishing causality due to the constraints noted above.

Findings and implications

Methodology

Time period: 2012-2017

Data source:

- RSBY/MSBY private hospital empanelment data
- RSBY/MSBY total claims volume and value data (public and private), including for eye and dental services

Data limitations:

- No data on trends prior to 2012
- No information on the universe of hospitals in Chhattisgarh (i.e. those not empaneled)
- Does not analyze public hospitals
- No detailed data on capacity and operation of hospitals (staffing, occupancy rates, etc.)
- No non-RSBY/MSBY service volume data

A large number of new private hospitals entered the market after 2012 scheme expansion, and newly established hospitals immediately empaneled with the scheme

In 2012, the year of RSBY/MSBY expansion, there were 308 private hospitals empaneled (Figure 1). Among these, most (273) had been established at least a year earlier. From 2012 to 2017, the total number of empaneled private hospitals more than doubled. All hospitals that empaneled with RSBY/MSBY after 2012 did so in the same year as year market entry (Figure 2). In other words, no hospitals empanelled after 2012 had been in operation for more than a year at the time of empanelment. This strongly suggests that RSBY/MSBY expansion represented a business opportunity that motivated the market entry decision of new hospitals. However, qualitative stakeholder studies would be needed to confirm this hypothesis.

Figure 1. Total number of empaneled private hospitals (2012-2017)

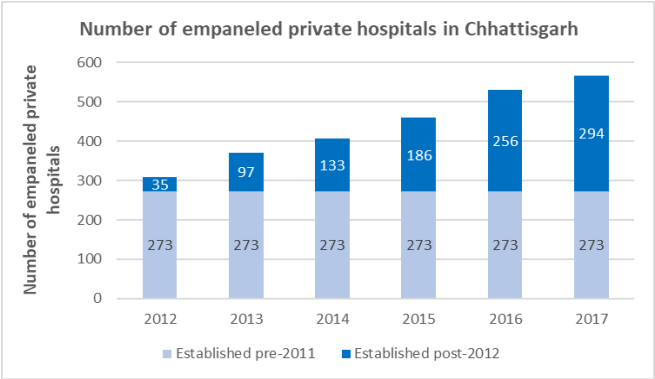
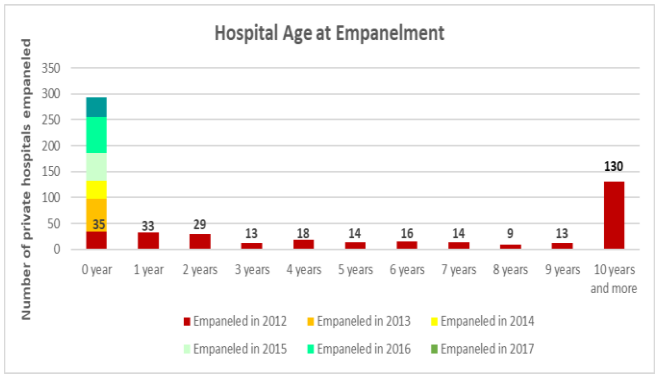


Figure 2. Hospital age at RSBY/MSBY empanelment

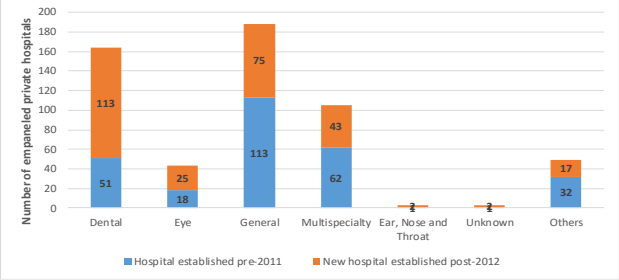


Eye and dental services were hotspots for new private hospital market entries

There are clear differences in the specialization of hospitals empanelled before and after scheme expansion in 2012 (Figure 3). Most newly established hospitals were registered as dental (113), general (75), multispecialty (43), and eye (25) hospitals. When comparing the proportion of new and existing hospitals empaneled for each specialty, dental and eye services are dominated by new hospitals. Over 50% of the providers in these two specialties were established after 2012. While the generous coverage of RSBY/MSBY for dental and eye services might have boosted demand, it is more likely that the greater market entry in these two specialties was due to lower entry barriers (e.g., lower investment costs) and possibly higher profit margins. However, the extent of supplier-induced demand could be explored further.

Subsequently, benefit package review (including price-setting) may be used to reduce supplier-induced demand, unnecessary care and low-quality care.

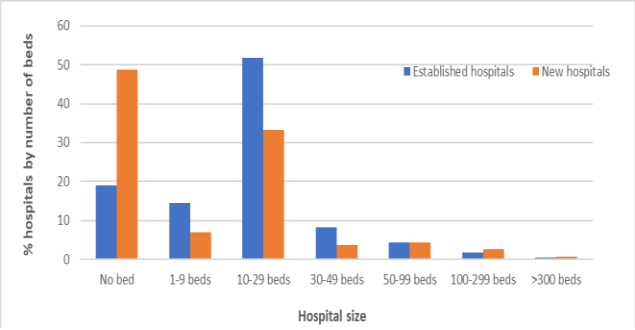
Figure 3. Specialties of existing and new hospitals



Newly established and empaneled hospitals tended to have lower bed capacity

Nearly 50% of hospitals newly established after 2012 had no general ward beds (Figure 4), whereas fewer than 20% of hospitals established before 2012 were in this category. This is strongly suggestive of new entrants focused on services requiring minimal investments. 77% of the newly established hospitals with no general ward beds are dental hospitals and 11% are ophthalmology hospitals. Close monitoring of hospitals without bed capacity would appear to be important.

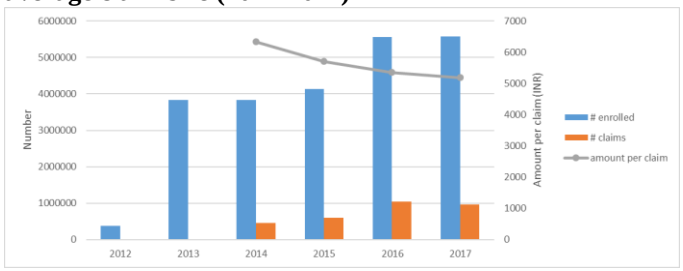
Figure 4. Hospital general ward bed capacity



There was rapid expansion of beneficiary enrollment and total claims volume after 2012, however claims size decreases

From 2012 to 2013, beneficiary enrollment rapidly increased from less than 5 lakh to nearly 40 lakh individuals (Figure 5). By 2016, this had reached 55 lakh individuals. Based on available claims data, the volume of claims more than doubled from 5 lakh in 2014 to over 10 lakh in 2016. These services likely reflected increased supply-side capacities, either due to new hospitals entering the market or expansion of existing hospitals (incomplete hospital capacity data prevent any definitive conclusion). At the same time, average claim size decreased from 2014 to 2017. The most likely cause is the increased utilization of relatively low-cost dental and eye packages.

Figure 5. RSBY/MSBY enrollment, claims volume and average claim size (2012-2017)



Claim volume for dental and eye services soared after 2013 and peaked in 2016. In that year, nearly 50% of all RSBY/MSBY claims were for dental and eye care.

An unusual pattern of RSBY/MSBY claims is the high proportion and rapid increase of claims for eye and dental services (Figure 6, Figure 7). From 2013 to 2016, the volume of dental claims increased from 5,000 to 3 lakh, and the volume of eye claims reached 1.6 lakh from 32,000. At their peak in 2016, nearly 50% of all RSBY/MSBY claims were for dental and eye services. Although impossible to pinpoint an optimal service mix, this is clearly an extraordinarily high ratio. It suggests significant supplier-induced demand for unnecessary dental and eye packages, and possibly the under-provision of other important services. Moreover, there was a large public-private divide. Private hospitals tended to provide higher price packages that were on average over twice the cost of those offered by public hospitals. Based on this finding, a review of the dental and eye packages provided by private hospitals is critical to improve the value and efficiency of insurance fund utilization.

Figure 6. RSBY/MSBY dental claim volume and value

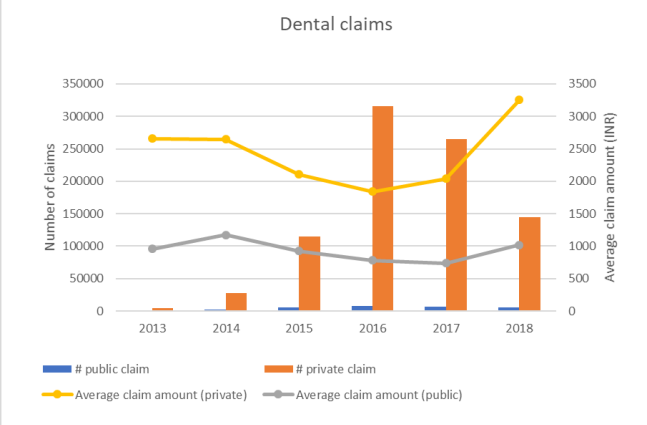
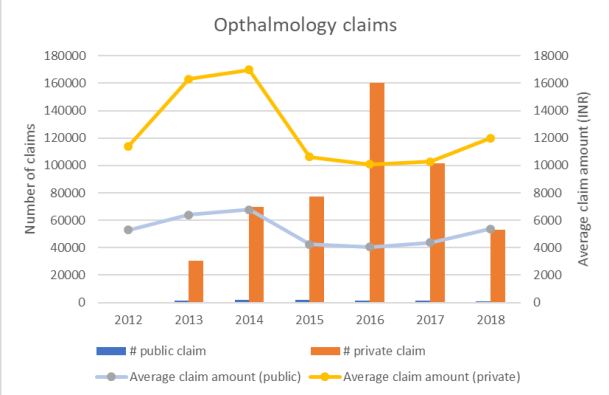


Figure 7. RSBY/MSBY ophthalmology claim volume and value



Summary and Conclusion

There is strong evidence that RSBY/MSBY expansion had a positive impact on the supply-side availability of care, particularly in the private sector. A large number of private hospitals entered the market after RSBY/MSBY expansion, and the scheme was likely a major factor in these market entry decisions. Data are not available to assess whether RSBY/MSBY also led to capacity expansion (e.g., more staff, beds, etc.) of existing hospitals. Total service volume and value also significantly increased after RSBY/MSBY expansion.

However, the worrying finding is that a large share of the additional supply capacity was concentrated in smaller dental and eye hospitals and related services. In 2016, nearly 50% of all claims were for dental and eye services, indicating inefficient utilization of RSBY/MSBY funds. The very high growth in these low-barrier, high-profit specialties raises concerns about supplier-induced demand and distorted incentives for both existing and potential new hospitals.

With the nationwide launch of Pradhan Mantri Jan Arogya Yojana (PM-JAY) in September 2018, the RSBY/MSBY schemes were integrated with PM-JAY. The review of dental and ophthalmology packages and their prices will be important to improve efficient fund utilization and achieve better health outcomes. One option is to reserve packages subject to frequent misuse for government hospitals only. Better data collection and monitoring of small specialized hospitals will be important to ensure provider capacity and quality. Moving forward with PM-JAY, the Chhattisgarh experience also highlights two areas for more in-depth research: the hospital market entry environment (embracing issues such as policy predictability, marginal cost pricing on new hospitals, land subsidies, tax breaks, region-specific pricing and empanelment waiting periods); and how current insurance package pricing impacts provider behaviors (including the potential for cherry-picking lucrative packages and less complex cases).

Disclaimer

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