Performance of contracting as a policy tool has been less than expected. This can mainly be attributed to the fact that for a contract to be effective, it requires meeting many conditions, some of which can be challenging and not always feasible. To work effectively, contracting requires suitable context, an appropriate contract design, and effective contract management such that the parties engage in consummate behavior rather than perfunctory or predatory behavior. This paper identifies the critical conditions required for effective contracting and demonstrates the challenge in meeting them, using the case of National Health Insurance in India. The paper specifically discusses the role that contract management can play in effective contracting, a point that has received little attention, but could be tweaked easily leading to significant impact on contract performance. The paper also provides some suggestions for meeting the challenge of effective contracting.

1. Introduction

Contracting out or outsourcing is a part of public sector reform strategy wherein government engages a private entity to provide a service within a set of specific conditions. Dissatisfaction with the government delivery of services and search for a low-cost, high-quality alternative drove the movement for privatization and contracting out during the 1960–70s (Savas 2005). In later years, contracting was advocated and practiced even for the goods and services that were considered sacrosanct in the public domain, such as defense and healthcare. Contracting is being adopted and practiced on a large scale even in developing countries (Loevinsohn and Harding 2005). Contracting out reduces the direct provision of services by the state; thus, rolling back the state and creating more space for the market mechanisms to allocate society’s resources (English and Skellern 2005).

Contracting was expected to grow as governments aspired for efficiency and service quality. However contrary to expectations, the practice of contracting, over the
last three decades, has remained more or less stagnant. On the contrary, a significant number of ‘contracting in’ has been observed (Denhardt and Denhardt 2015). Both economic as well as political ideology-based reasons drive the growth of contracting. Governments generally contract out because of want of resources, capacity, and information to produce the service or because of their belief in the efficiency of the market (Pallesen 2004). Supporters of contracting argue that it introduces competition, controls political interference, reduces public expenditure and improves government performance (Osborne and Gaebler 1992). Opponents, on the other hand, claim that superior efficiency of contracting is overstated as factors such as loss of skills (hollowing out) (Milward and Provan 1993), unproductive signaling effort (Acemoglu, Kremer, and Mian 2007), lower quality (Hart, Shleifer, and Vishny 1997) and reduction in real wages of workers are rarely taken into account (Quiggin 2002). Recent reviews show negligible or very low-cost savings (Petersen, Hjelmar, and Vrangbaek 2018; Bel, Fageda, and Warner 2010), a fact that is more problematic as most studies rarely take into account transaction cost and quality issues, thus, overestimate cost savings (Bel, Fageda, and Warner 2010; Petersen, Hjelmar, and Vrangbaek 2018).

Understanding the determinants of contract effectiveness and contract performance has improved over the years. Some of the key contextual factors (Ferris and Graddy 1986), elements of contract design (Kim and Brown 2012) and practices related to contract management (Poppo and Zenger 2002) that shape contract effectiveness have been identified. To deliver value, contracting requires a set of conducive conditions and may not be suitable in all contexts (Petersen, Hjelmar, and Vrangbaek 2018), and its injudicious use is sure recipe for sub-optimal results (Rho 2013). Therefore, identifying the determinants of contract effectiveness not only requires an understanding of the factors influencing contracting but also their interactions that critically shape contract effectiveness. Though contract design and governance have been studied extensively, little research attention has been paid to understanding the interaction between contract design and contract governance (Maurya and Ramesh 2018).

The paper reviews the existing literature to identify the factors and their interactions which shape contract effectiveness. However, meeting these conditions is not easy. We show this using a case of National Health Insurance in India, which is otherwise a well-designed contract. We analyze the contract design and the implementation process of the National Health Insurance program. We do a comparative case analysis of three provinces that are implementing the program, using data from 42 interviews of all stakeholders involved in the implementation. Further, secondary data sources such as reports, published and unpublished material and newspaper reports are used in the analysis. We map the contextual factors that influenced the contract design, the key elements of the contract design and the contract implementation process. We also map the gaps in contract design that give rise to perfunctory behaviors and the governance mechanisms included in the contract. Further, we demonstrate how these conditions interact and drive behaviors of the parties including sub-optimal behaviors. More specifically, based on our study, we emphasize on the role of contract governance, which has not received adequate attention in extant discussions on contract effectiveness.
1.1. **Theoretical review: conditions for designing effective contracts**

The purpose of contracting is to exploit gains from co-operation. This requires aligning incentives of different parties and mitigating conflict of interest through a well-designed contract. However, designing an effective contract is challenging to achieve because of three reasons (Hart and Moore 1999; Brousseau and Glachant 2002). First, forecasting all possible future events in a complex and unpredictable world is nearly impossible. This is more difficult in case of products or services, which have high uncertainty related to features, outcomes, and cost. Given the uncertainty involved, the parties have limited choice and have to contract without adequate information on cost and performance. Secondly, negotiating over all events that could unfold over time is difficult, given that it may not be even possible to describe them in a language understood by both parties. Thirdly, it is also extremely difficult to write down all possible conditions in a contract such that they are interpreted and enforced by a third party in the same spirit.

As parties can neither ascertain all necessary information about the other party nor can they observe the action of the other party, they may exploit this information asymmetry by engaging in behaviors that increase their payoff, but reduce the overall surplus of the relationship, also known as moral hazard and adverse selection. To mitigate this problem, the parties may design performance incentives, but any performance measure is likely to be imprecise. Second, paying for performance requires the capacity to write detailed contracts ex-ante, as well as the ability to measure and verify performance ex-post. However, there are uncertainties involved in determining performance ex-ante, compounded by difficulties in measuring and verifying which together make these requirements hard to satisfy (Hart 1995). To mitigate the problem, the parties may assign decision rights, but bounded rationality stymies this ex-ante effort, necessitating the establishment of mechanisms to govern the contracted transaction (Williamson 1985). In addition to these, contracting in public sector faces some additional challenges given the uncertainties involved due to the political process, rigidities due to existing laws and the administrative system, and the conflicting goals. Besides, factors such as efficiency, transparency and fairness must also be addressed (Brown and Potoski 2009). Contextual conditions such as competitiveness between firms, institutional arrangements, values of the contracting parties and policy capacity also influence the choice of terms of contracts and governance mechanisms during implementation, shaping the incentives of contracting parties (Brown, Potoski, and Slyke 2016). Thus, the incentives of the contracting parties are determined by the contextual conditions, the contract design rules, and its implementation (Brown, Potoski and Slyke 2016).

Effective contracting leads to outcomes that leave both parties better off by engaging in contracting rather than self-production. In order to be effective, the contract needs to provide the right set of incentives and also ensure that they are managed well. To achieve this goal, the relationship between the contracting parties needs to be specified along several dimensions (Brown, Potoski and Slyke 2016). First, parties need to assure the terms of exchange by specifying the product or service being exchanged or, in other words, the product\service specification rules. Second, the rules related to appropriation of risk between parties, i.e., exchange rules, must be
specified. Thirdly, governance rules that deal with aspects of the relationship not formally included in the contract need to be detailed. Finally, contextual conditions, which influence contract should be taken into account and addressed. This requires designing rules regarding task allocation, output specification, payment mechanisms, bilateral procedures for resolving disagreements, contractual safeguards, and supervision\coercion mechanisms (Kim and Brown 2012; Iossa, Spagnolo, and Vellez 2007). The contract design needs to be further buttressed by institutional arrangements related to contract enforcement and dispute resolution which includes both formal institutions such as courts, the legal profession, and enforcement services (Hadfield 2005) as well as informal institutions such as social norms, customs and traditions (Grzymala-Busse, 2010). The gaps in institutions influence the contract design and deployment of governance mechanisms in a number of ways. First, the choices of governance mechanisms may be constrained, as desired governance mechanisms may not be available as a part of the governance mechanisms toolbox, such as in the case of lack of meta-governance rules (Rufin and Rivera-Santos 2012; Khanna and Palepu 2000). Second, deployed governance mechanisms may not be effective, as formal institutions, on which they are based, may not be enforced effectively (Viswanathan, Sridharan, and Ritchie 2010). Third, deployed governance mechanisms may also not be effective if the informal institutions such as social norms do not support their enforcement (North 1995). Contracting partners in emerging economies characterized by institutional voids face constraints in deploying desired governance mechanisms.

2. Contracting in India’s national health insurance program

This study investigates one of the most ambitious public contracting programs launched by the Government of India (GOI) – the National Health Insurance Program, also known as Rashtriya Swasthya Bima Yojana (RSBY). The program was launched in 2008 to reduce the impact of poverty on healthcare expenditures. At the time of launch, 95 percent of the population had no health insurance coverage, and catastrophic healthcare expenditures was driving approximately 40 million people to poverty every year (Selvaraj and Karan 2012). RSBY provides free hospitalization care through social health insurance to families on the national poverty register. By March 2016, RSBY had provided health insurance to approximately 41 million families in 482 districts across 29 provinces in India.

The enrollment to this program is voluntary and up to five members of a family are eligible to enroll in it. The program offers free hospitalization care for up to a maximum of USD 460 per year through a network of 12,000 hospitals (both public and private sector) across India. Hospitalization costs for all pre-existing diseases are covered. The central and state government jointly finance the program in the ratio of 75:25, with enrollees paying only a modest one-time registration fees of USD 0.5. The program is implemented through a series of contracts. Figure-1 presents the parties and their reporting relationships. Table 1 presents the different contracts and obligations of the parties in the contract. First, the public sector contracts with an Insurance Company (IC) to provide health insurance service in a given district on
the basis of a fixed fee per family. IC sub-contracts with hospitals (from the public as well as the private sector) and other agencies to deliver insurance services. The public sector defines the contract rules and facilitates implementation through local government departments. All contracts in the program detail explicit inputs and processes, including activities, roles and responsibilities, payment mechanisms, and risk sharing, leaving limited scope for discretion and ambiguity. The contract designs were revised frequently over the years to match with ground realities depending upon the feedback from the ground (Jain 2012). Parties in the contract believed that contracts were well designed and specific to the extent that parties simply needed to follow the specifications (Tripathi 2012). The contracting arrangement was considered to be a business model that provided win-win situation (Swarup 2011; Rai and Niha 2010) and received a number of awards from international agencies including World Bank and the International Labour Organizations (Singh 2012). Despite the contextual issues and challenges in designing contracts in healthcare, RSBY was considered to be a well-designed contracting arrangement for developing countries. Therefore, it is suitable for the context of our study to explore the factors that make contracting arrangement work. Further, the case is also suitable to understand how an effective contract can be designed and managed in case of complex products and services.

Within six years, the coverage of the scheme had increased dramatically. By April 2014, the RSBY had covered 41 million families, which is roughly 53% of the below poverty line population of the implemented districts. By February 2014, there were more than 6.5 million hospitalizations under the scheme. The average hospitalization among enrolled beneficiaries was 3.04% (Birdsall 2015).

| Party                              | Contract period                      | Obligation of party 1                                                                 | Obligation of party 2                                                                 | Deliverables                                      |
|------------------------------------|--------------------------------------|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------|
| Insurance Company                  | 3 years, renewal every year           | Provide insurance to beneficiaries - enrolling beneficiary, promoting scheme, empaneling hospitals and managing claims. | To pay premium per family, set guideline and standards for services delivered by party 1, to provide implementation support to party 1 at the district level | 1. To enroll beneficiaries in the program (target beneficiaries) 2. To provide cashless hospitalization to enrolled beneficiaries |
| State Nodal Agency                 |                                       | Have to enroll beneficiaries in the program (target beneficiaries)                     | Empanelment of hospitals, claims management                                        |
| Insurance Company                  | One year, renewal every year          | To pay service fee per card                                                           | To deliver services (hospital empanelment, claims management as per expectation of party 1) | Enrollment of beneficiaries and delivery of smart card |
| Third Party Administrator           |                                       | To pay service fee per card                                                           |                                                                                      |                                                                                                   |
| Insurance Company                  | Short-term contract (3-4 months)      | To pay service fee per card                                                           | To enroll beneficiaries and delivery of smart card                                  |                                                                                                   |
| Smart Card Service Provider        |                                       |                                                                                      |                                                                                      |                                                                                                   |
| Hospital                           | 1 year contract                       | Reimburse claims submitted by hospitals                                              | Provide healthcare services as outlined in the package                               | Provision of healthcare services to enrolled beneficiary                                      |
| Insurance Company                  |                                       |                                                                                      |                                                                                      |                                                                                                   |
3. Contract design and incentive to parties in RSBY

Effective contracting requires designing and managing contracts such that parties in the contract have the right set of incentives to consumptive behaviors and minimize perfunctory behaviors. The contextual conditions under which contracting is undertaken, the contract design rules and contract implementation interact with each other, ultimately determining the incentives to parties.

3.1. Contractual conditions and contract design

Contextual factors shape contract-design, and thus incentives to parties. First, effective contracting requires the ability to design and manage contracts, a task that requires significant capacity. Initially it is the analytical capacity, that is, governments need to have the ability to generate and analyze complex quantitative economic and financial information, and then do trend analysis and forecasting for drawing contract (Rayner, McNutt, and Wellstead 2013). In addition to analytical capacity, governments should have the operational capabilities to negotiate and coordinate with parties to design and manage contracts such that the desired goals are achieved. In the absence of these capabilities, for-profit-driven contractors could exploit the terms to their advantage, resulting in sub-optimal outcomes.

In India, provincial governments have limited capacity to draft and manage contracts (Venkataraman and Björkman 2009). To overcome this limitation in RSBY, standardized and extensively detailed contracts were created, and a dedicated agency was appointed at the state level (SNA) to monitor contracts with the help of professional staff hired on contractual basis. However, this has been of limited help given the complexity of health insurance and variation in contextual conditions across provinces, which required the use of discretion. The lack of contract design and management capability was not limited only to the public sector. Private agencies such as insurance companies were found to have limited capability in designing and managing contracts with Third Party Administrators (TPA) and hospitals. The small size of health insurance business 2, lack of standardization in various areas of healthcare (such as treatment, records, the billing process, etc.) and slim profit margins had prevented investment in capacity building by ICs (Maurya, Virani, and Rajasulochana 2017). Health insurance was still at an infantile stage, and insurance companies unable to control providers were hesitant to expand operations due to the losses incurred (Bearing Point 2008).

Second, the competitiveness of the market, another contextual condition influences efficiency and quality. Ex-ante competition drives cost consciousness and improves the quality which in turn improves efficiency (Ferris and Graddy 1986). The ex-ante competition is not the same across products/services. Services such as solid waste collection may have a highly competitive market, but the same is not true for services such as healthcare and education (Savas 2005). In healthcare, comparing quality and cost across vendors is notoriously difficult given the uncertainty, information asymmetry, and agency issues. This is more so in the case of underdeveloped healthcare markets such as India. Before the launch of RSBY, healthcare market in India was fragmented, underdeveloped and poorly regulated. Hospitals were not required to
The illiterate beneficiary did not have any means except peer feedback to determine the quality of care at hospitals ex-ante. Given the post experience nature of healthcare services, these ex-ante mechanisms were also not very useful. The link between cost and quality needed for competition to drive efficiency and deliver value did not exist.

Third, value alignment between parties in the contract determines the specificity of the contract and the need for contract monitoring (Brown, Potoski, and Van Slyke 2006). In this context, values refer to stakeholders preferences about equity, efficiency, profits, relationships etc. Contracting between partners with similar values was observed to be less specific and required limited monitoring (Van Slyke 2003). For example, when governments contracted with not-for-profit agencies, the monitoring was limited (Brown, Potoski, and Van Slyke 2006). In RSBY, the government’s contract with for-profit agencies required contractual specificity and extensive monitoring. However, the government had limited experience in contracting and lacked competency to design and manage contracts (Bhat et al. 2007; Venkataraman and Björkman 2009). As the government anticipated their inability to control insurance companies, hospitals and consequently budget over-runs, contract design focused extensively on cost control through various means (such as fixed cost payment method, bidding based on cost, etc. Refer Table 2). This allowed the government to achieve two competitive objectives- covering as many people as possible, but at the same time keeping the expenditure within budget limits. However, the extensive focus on cost control and limited feasibility and ability to monitor quality provided agencies incentives for various perfunctory behaviors as listed in Table 2.

### 3.2. Contract rules and incentives to parties

Effective contracting tries to align the incentives of the parties through contract design, which includes specification of products and services and exchange rules. The contract must set the contract rules which help the parties to identify possible perfunctory and consummate behavior and also include appropriate incentives and sanctions so that parties are motivated to engage in the consummate behavior. Table 2 presents a summary of the salient features of the contracts in RSBY, the contract design gaps, and shortcomings that characterize them, and the governance mechanisms in place to address them during implementation.

#### 3.2.1. Specification of products and services

For contracts to be effective, each party needs to have some level of certainty about the value it brings and receives in the process (Brown, Potoski, and Van Slyke 2015). For the buyer, this includes value received from the specific features and characteristics of product/services and the cost incurred. For the seller, this includes cost incurred to produce a product or service of particular characteristics and features. However, characteristics of goods such as post experience goods, and goods with high asset specificity and difficulty in measurability pose challenges in specifying the value of the product or service exchanged. Healthcare is a post experience good as even after consuming healthcare, patients can only determine the quality of care after
substantial time. Specifying products and services in post experience goods could be addressed, but it would not be feasible in all contexts. In case of RSBY, asset investments are in the form of human and procedural assets, however dependence and hold up problems are limited as the shorter contract duration, and multiple jurisdictions offer easy deployment of these assets. However, healthcare being a post-experience good, makes it difficult to specify outputs and outcomes. Further, there are significant challenges in measuring outputs, outcomes, and quality in healthcare. RSBY contracts are extensively detailed when it comes to inputs and processes.

Table 2. Contract rules and contract governance.

| Rules | Gaps | Governance response |
|-------|------|---------------------|
| **Contract rules** | | |
| Selection of Vendor | Competitive bidding for contracts | Limited quality standards for assessing bids or contracts' performance. | DA and SNA monitor quality of services delivered by IC. |
| Exchange rules | Contract duration of three years renewable every year | Short contract period, which stymies investments in preventive care, management capability, etc. | None. |
| **Compensation Rules and Risk Allocation** | (a) Insurance company receives premium payment based on enrolment | (a) Insurance company has incentive to encourage enrolment but discourage utilization. | (a) State and National nodal agencies monitor claims and hospitalization. Hospitals can approach district grievance addressable system. |
| | (b) Family as a unit of enrolment | (b) IC may not enroll all family members. | (b) Field level monitoring by DA. |
| | (c) Validation of benefit eligibility by District field officers | (c) IC is dependent on DA for making Field Officers available for verifying eligibility. | (c) SNA instructs DA to comply with the guidelines. In case of non-compliance SNA raises the issue with state government |
| | (d) IC is responsible for promoting beneficiaries' awareness of the scheme | (d) IC has incentive to increase enrolment but not utilization | (d) Field Officer and DA monitor the enrolment process and trends |
| | (e) Empanelment of hospitals by the IC | (e) IC has incentive to keep utilization low and therefore empanels hospitals with reputation for low utilization. | (e) DA recommends hospitals for empanelment. |
| | Empanelment of both private and public hospitals | Private providers may induce demand. Incentive to induce demand but reduce quality of services. | Develop and impose Quality standards on hospitals TPA and IC are expected to monitor utilization and service quality |
| | Fixed price treatment packages to hospitals. | | |
| **Governance Rules** | Performance Monitoring System | Opportunistic behavior difficult to monitor. | SNA and DA monitor compliance by IC. Grievance redress system. In case of persistent non-compliance, the contract may not be renewed or IC may be blacklisted from future bids. |
| Contract Duration | One year | Short contract period, which stymies investment in preventive care, capability in claims management, etc. | None. |
However, contract specifies outputs only selectively, and outcomes are neither specified nor measured. Three output measures – enrolment of the beneficiary, health service utilization and claims management – are specified and measured, but there are neither any targets for them nor any incentive or disincentive attached to them due to difficulty in determining them ex-ante. As a result incentives are tied to inputs and processes. As Table-2 shows, insurance companies are paid on the basis of families enrolled; Hospitals on the basis of the package of care provided; and TPA on the basis of families serviced. Attaching incentives to inputs and process is known to encourage agencies to induce volume of inputs and process without a commensurate increase in outputs or outcomes (Mcbeath and Meezan 2010). Further, only quantitative dimensions are measured, and not the quality due to inherent challenges in measuring quality in healthcare services and limited standardization in India’s healthcare industry as well as limited government capability. As quality is not measured, it plays a limited role in contract bidding, payment to agencies, monitoring of performance, thus, incentivizing agencies to shed quality.

3.2.2. Exchange rules
Apart from specifying the value, exchange rules- details about the exchange – when, where, amount of compensation and payment method, allocate the contract risks and determine incentives to parties under different circumstances. Ideally, risk should be allocated to a party that has more control over the risk factor, and the extent of allocation should depend upon the vendor’s ability to manage and minimize the risk (De Bettignies and Ross 2004). The most common exchange rule that allocates the risks is the compensation rule, that is, how much and in what way the seller is compensated. Two common forms of compensation are fixed-price contracts and cost-reimbursement contracts. In fixed-price contracts, a fixed price per unit of service/product is paid to the seller, who bears the risk of cost variation. As this requires knowing cost ex-ante, it is used for simpler products for which cost is easy to determine (Kim and Brown 2017). Fixed cost method is known to incentivize shedding of quality, especially if not observable by the other party (Hart 2003). In the cost-reimbursement method, the price is determined after the production, leaving the risk of cost variation to the buyer. However, the seller may focus only on particular dimensions of quality (gold plating) to give a false impression of high quality, to inflate price (Brown et al. 2015). Therefore, the tradeoff between cost and quality needs to be linked. Linking this is all the more challenging in the context of high information asymmetry and uncertainty regarding production costs and quality. As discussed earlier, in RSBY, the government, in order to control cost, used the fixed cost payment method to contractors, who in turn also used the same method to control cost while subcontracting. The use of fixed cost method incentivizes agencies to shed quality, more so as the quality is neither specified, measured nor incentivized,

The second exchange rule is about contract duration. For cases, which require flexibility and adaptation investment, shorter contract duration is more optimal allowing switching of providers, whereas an investment with higher specificity would require longer contract duration to protect the party from hold-up (Iossa, Spagnolo, and Vellez 2007). Shorter contract duration, along with frequent contract renewal
and retendering imposes market discipline on inefficient partners (Calzolari and Spagnolo 2006). On the other hand, a long-term contract signals a credible commitment by each party to deliver value to the other (Amirkhanyan, Kim, and Lambright 2012). Thus, contract duration influences competition and efficiency if aligned with the nature of the transaction. Investment in preventive care yield benefits in the long term making healthcare delivery efficient (Wang, Wang, and Huang 2016). Similarly, long-term perspective is also required if agencies need to build capabilities that are developed over a period. In RSBY, the contract duration is for three years, renewable every year. This short contract duration promotes competition, but at the same time reduces incentives to invest in preventive care and capabilities in premium pricing and monitoring both of which have long-term returns. In the absence of this, agencies have incentives to use work around strategies in order to cut cost by not providing care or refusing care when cost escalates beyond a certain level.

The third exchange rule relates to the bundling of tasks. Tasks that have positive externality with each other, when bundled together generate higher social welfare even if the quality is not observable (Iossa, Spagnolo, and Vellez 2007). On the contrary, tasks with negative externality should not be bundled together. Task bundling rules in the RSBY result in conflict between individual interest and program objectives. IC is responsible to pay for the hospitalization of the beneficiary and thus, bears the financial risk of healthcare utilization. Therefore, IC is keen to reduce healthcare utilization to increase profitability. However, at the same time, IC is also made responsible for promoting hospitals and increasing awareness about the process of utilizing healthcare services. These two tasks – responsibility for financial risk of healthcare utilization and promoting healthcare utilization – are, thus, in conflict with each other. As expected, IC does not have the incentive to promote healthcare utilization.

4. Implementation arrangement and incentive to parties

As the principal, the government also needs to ensure that contracts are implemented as intended. Since contracts are always incomplete except for the most simple ones, they provide partners with considerable room for maneuver, leading to unexpected or sub-optimal results. This risk is higher in public contracting due to third-party opportunism, rigidity, and inflexibility of contracts (Moszoro, Spiller, and Stolorz 2016). The gaps in contract represent the governance needs of the transaction which have remained unfulfilled. This unfulfilled governance needs are filled to some extent by values of the parties and institutions of the society. As these are not sufficient, parties in the contract generally design governance mechanisms to meet the unfulfilled governance needs (Williamson 2005). Parties use a varying mix of both formal governance mechanisms such as monitoring, authority, and penalty, as well as informal mechanisms, such as reciprocity, trust and relational norms (Williamson 2005), creatively mixing and tailoring them to meet governance needs of the context (Girth 2017). The effectiveness of the governance arrangement depends upon the institutional arrangement- both formal institutions - courts, the legal profession, and enforcement services, as well as informal institutions - social norms, customs,
traditions – and need to be considered while designing contracts (Grzymala-Busse, 2010; Williamson 2005). If formal institutions are weak, parties may use informal arrangements to address disputes at a lower transaction cost. The governance mix is effective to the extent it is aligned with the institutional arrangement and fulfills the needs of the transaction (Maurya and Srivastava forthcoming).

Contracts in the RSBY are complex and unavoidably incomplete due to limitations to assessing quality, costs, and outcomes in healthcare. The contract document is very detailed and has been revised extensively, however, many gaps remain, as discussed earlier. Table 2 lists governance mechanisms that have been put in place to address these gaps. Detailed performance indicators are defined, measured, and monitored regularly. Meetings of national and state-level officers are held regularly to review the program’s implementation. At the field level, monitoring is carried out through field visits. As sanctions are difficult to use in public contracting due to the transaction cost (Girth 2014), penalties are not included in RSBY and the only penalty is termination of the contract. Parties are expected to resolve their dispute through discussion using a three-tiered internal grievance redressal system, chaired by a public functionary. Though the private sector parties could be penalized, there are no penalties for public agencies for defaulting because of the nature of public administration. The parties are expected to work as a team, facilitating and supporting each other (Swarup 2012). The informal collaboration and trust-building measures are expected to supplement the formal governance system to overcome the limits of the contract.

5. Contract dynamics and performance

As all stakeholders are paid on the basis of fixed cost, there is an extensive focus on containing cost. The contracts are awarded to the lowest cost bidder in the program; healthcare packages are priced lower than market rates, and contract duration is kept short to contain cost. Further, as quality is neither specified measured or incentivized, winning the contract or revenue of agencies is contingent on quality, and therefore agencies have limited incentive to provide it. This excessive focus on cost and too little on quality has led to fierce cost-based competition among insurance companies, driving down the premium price to an unsustainable level, over the years (See Figure 3). In some districts, the premium price has gone down to as low as around INR 220 out of which the IC incurs INR 100 for enrolment and is left with only INR 120 to deliver health insurance coverage of INR 30000 for a year. In order to reduce operations cost, IC hire low-cost agencies and spend little on monitoring and building capacity. During enrollment, they do not include details of all family members, issue the cards on the spot or provide complete information about accessing benefits. TPA does not empanel high-quality hospitals, and delays claims. This leads to underutilization of services, which is desired, as it reduces the cost for the ICs and their subsidiaries. To contain cost, healthcare providers’ package rates are priced at lower than market rates and are sufficient to cover only the cost over a certain volume (Reddy et al. 2011; La Forgia and Nagpal 2012). In the absence of proper monitoring of the quality of health services, providers compromise on quality to reduce their cost by
selecting the cheapest treatment plan, using low-quality instruments, consumables, and drugs (Laforgia and Nagpal, 2012).

As agencies are paid by inputs or process, this incentivizes them to increase volume of services that may not necessarily lead to improvement in desired outcomes. ICs have the incentive to focus on the enrolment of beneficiaries and control health-care utilization for increasing profit margins. Hospitals paid on the basis of volume of services, so they tend to induce demand, convert ambulatory care into inpatient care and provide unnecessary care. Providers also engage in claiming high-cost conditions or claiming without providing care. An example of this was the Hysterectomy scandals in 2013, which attracted the attention of the parliament (Press Trust of India, 18th June 2013). This scandal was possible as the monitoring system detected only blatant opportunistic behaviors and done only when it can reduce cost. This limited monitoring allows agencies to survive despite fraudulent behaviors (especially the subtle ones), thus attracting fraudulent hospitals. Unable to control them, IC’s also use unethical approaches to control cost such as delaying and denying claims payment to hospitals for trivial reasons.

Except for the termination of the contract, there are no other penalties which can be imposed. This simplifies program management, but at the same time, leaves aggrieved agencies toothless. If the agencies expect that their contract would not be renewed, they engage in blatant opportunistic behaviors. Given the limited monitoring and ineffective controls, fraudulent behaviors do not carry much risk. Accessing grievance redressal system also imposes significant transaction cost on users and therefore is used only in case of major issues. This has attracted fraudulent agencies, especially hospitals. Keen to get empaneled, these hospitals collude with district administration and pressurize ICs for their empanelment. ICs are dependent on District Administration (DA) support for implementation. This dependence of the IC is exploited by the DA, which pressurizes the former to empanel hospitals from whom the latter has received kickbacks (Asher, Vora, and Maurya 2015). The ICs cannot turn down this recommendation due to their dependence on the DA. In some states, DA is kept out of the hospital empanelment process (for example, Himachal Pradesh) or instructed not to interfere in matters related to hospital empanelment (e.g., Punjab), to limit their interference. On the other hand, some states had given more authority to the DAs, considerably heightening their veto power (e.g., Uttar Pradesh). Once empaneled, these hospitals under the immunity of the DA engaged in extensive fraudulent claims. Unable to control fraudulent hospitals, ICs resort to counter-opportunistic behaviors – delaying and denying claims payment and exploiting certain rules to prevent the submission of claims. This leads to a vicious cycle of opportunism and counter-opportunism. In many districts of states such as UP where the DA protected hospitals, the hospitalization ratio surpassed 10%, while the claims ratio escalated between 100 and 600% (Jain 2013), which could only be explained by other reasons (see figure 4).

5. Discussion

The purpose of contract design is to align the incentives of implementing partners such that there are incentives for minimizing perfunctory behavior, at the same time
maximizing consummate behavior. The case of RSBY demonstrates that even with the best of efforts, writing effective contracts faces numerous challenges given the high uncertainty, information asymmetry, and contextual conditions. In the case of RSBY, measuring outputs are challenging and therefore, agencies end up measuring and incentivizing inputs and processes, resulting in higher volumes of inputs that may not translate into corresponding outputs or outcomes. Further, the payment method adopted ended in misallocating risk, leading to predatory behaviors. One specific challenge is to manage the trade-off between cost and quality. Contracting needs to ensure incentives for reducing cost, while ensuring quality at the same time. In the case of RSBY, the focus on controlling cost with no attention to quality, has led to the compromises on quality. Further, this linkage between reducing cost and increasing quality needs to be established during different stages of contracting, otherwise implementing agencies may exploit this tradeoff, as seen in the case of RSBY.

Apart from contract design, incentives of the parties may also get distorted during implementation, due to various factors. As contracts are not governed with required governance mechanisms, given that they are unavailable in the public sector context, the misaligned governance mechanisms inflates the gaps in the contracts, heightening predatory and perfunctory behaviors leading to contract failure. Preventing this requires the availability of desired governance tools; the capability for deploying them; the flexibility and agility to deploy in the required manner and sequence; and the inclusion of incentives for managers to do so, all of which is found missing in the case of RSBY.

In addition to above, in national-level public programs, as contextual conditions vary, implementation dynamics differ significantly across jurisdictions. The critical among them is institutional arrangement and ex-ante competition. In jurisdictions with weak institutional arrangements, contracts need to be complemented with informal governance mechanisms to address contract gaps. Complementing the formal institutional arrangements with informal ones is not an easy task, as informal arrangements take a longer time to develop and synergy between the formal and informal is not easy to achieve, as seen in RSBY. This challenge is higher in case of large public programs involving multiple agencies, over multiple jurisdictions with varying contextual conditions. Private order arrangements such as grievance committees in RSBY reduce dependence on formal institutions for day-to-day operations, however, they are still embedded in the larger institutional context and rely on them for credibility.

6. Conclusions
The choice of contracting as a governance tool requires careful consideration as it is not an easy substitute for public production. In theory, contracting seems to be more efficient as it improves focus on cost and quality; but contrary to expectations, evidence suggests that efficiency gains are not realized in many cases. Effective contracting requires multiple conditions to be met, including careful consideration of the type of product and service, context, and contracting rules and dynamics during contract implementation. The contracting process influences how service is produced and
distributed, both of which have an impact on the outcome. To be effective, the complete contracting process should be able to incentivize agencies to engage in consummate behavior and minimize the incentives for perfunctory and predatory behaviors. Though this may sound easy at the conceptual level, it is challenging to get it operationalized beyond contract design. The interaction between contract design, contextual conditions, and contract implementation decide the incentives for agencies to engage in either perfunctory behavior or consummate behavior. Contract design and contract implementation could be controlled to some extent. However, the outcome of the interaction between them and with the context is difficult to determine ex-ante. Therefore, contracts need to have the required flexibility in governance design.

Governments in emerging economies are implementing large national programs through contracting, but changes in context across jurisdictions lead to variation in the nature of transactions, in turn leading to change in governance needs. Our study suggests that as governance needs change, organizations need to adapt governance design, to effectively address perfunctory behaviors. This case implies that, despite imperfections in contract design and contract implementation, contracting could still deliver public value at least to some extent if governed effectively. This would include tolerating some inefficiencies.

Despite the enormous challenges in making contracting work, there are instances where significant benefits have been reaped through contracting out. However, it is not as easy a governance tool as is often suggested by its protagonists. In order to be effective, contracting requires many conditions to be met and therefore, calls for its judicious use.

**Acknowledgements**

This paper was presented at the International Workshop on The Governance of Collaboration: Co-Production, Contracting, Commissioning and Certification, Dubrovnik 21-22 August 2017. I am thankful to all the participants of their useful comments.

**Disclosure statement**

No potential conflict of interest was reported by the author.

**Notes**

1. BPL population in India is considered as the number of people earning less than a dollar per person per day. Based on Below poverty line estimates of 2011-12, 270 million people were below poverty line (accessed from data.gov.in)
2. According to IRDA (2006), health insurance comprised only 6 percent of the total insurance sector business.
3. Refer Brown, Potoski, and Van Slyke 2015 that lists strategies to address these issues.

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