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Ronald L. Holzacker  
Rafael Wittek  
Johan Woltjer *Editors*

# Decentralization and Governance in Indonesia

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# Decentralization and Governance in Indonesia

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# Chapter 3

## Decentralization and Primary Health Care Innovations in Indonesia

Suwatin Miharti, Ronald L. Holzacker and Rafael Wittek

**Abstract** A well-functioning primary health care system (PHCS) is fundamental for a nation's overall health performance. PHCSs are designed to improve universal access to health care, which likely leads to healthier communities, higher quality of care, and a more effective and efficient health care system. The present chapter investigates how the two large-scale decentralization waves in Indonesia affected the processes, product and structural innovations in its PHCS. We argue that adequate organizational capacity and local level innovations are a major requirement to improve the performance of a PHCS. The study uses the decision space approach (DSA) to analyse the impact of decentralization on the decision space, accountability mechanisms and organizational capacity to facilitate health improvement. To achieve the aim, first, the study uses institutional analysis to describe the transformation of the decision space and accountability mechanism from the first and second waves of decentralization based on changes to laws and regulations. Second, the study investigates the sequence of innovation of PHCS by analysing studies on cases of innovation in the two waves of decentralization. The study found that the first wave of decentralization in Indonesia resulted in institutional changes that were detrimental to innovation. Whereas discretion for

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The first author is the original researcher and serves as the author for correspondence, the remaining authors are promoters and supervisors listed in alphabetical order who also have contributed to this chapter.

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S. Miharti (✉) · R.L. Holzacker  
Faculty of Arts, Department of International Relations and International Organization,  
University of Groningen, Oude Kijk in 't Jatstraat 26, 9712 EK Groningen, The Netherlands  
e-mail: s.miharti@rug.nl

R.L. Holzacker  
e-mail: r.l.holzacker@rug.nl

S. Miharti · R. Wittek  
Faculty of Behavioural and Social Science, Department of Sociology,  
University of Groningen, Groningen, The Netherlands

local-level decision makers increased compared to the situation under the former centralized system, requirements for accountability did not. This pattern was reversed during the second wave of decentralization, suggesting that the conditions for innovation have improved. The cases of successful innovation share a specific combination of initiative, commitment and social capital of a key decision maker as a fundamental enabler of innovation.

**Keywords** Primary health care · Decentralization · Local government · Innovation · Decision space · Accountability mechanism · Organizational capacity

## 1 Introduction

A well-functioning primary health care system (PHCS) is a fundamental precondition for a nation's overall health performance. PHCSs are designed to improve universal access to health care, which in turn leads to healthier communities (Starfield et al. 2005), higher quality of care (Kringos et al. 2010) and a more effective and efficient health care system (Kruk et al. 2010). Consequently, many countries conduct public health reforms in an attempt to strengthen their PHCS (OECD 2012). Such reforms in the health sector are often embedded in a broader context of large-scale decentralization (Bossert 1998; Jimenez-Rubio 2011a, b; Trubek and Das 2003). However, relatively little is known about how decentralization affects the performance of a PHCS.

The present chapter investigates how the two large-scale decentralization waves in Indonesia affected one specific aspect of the country's health sector performance: its potential to introduce process, product, and structural innovations in its PHCS. We argue that local level innovations are a major requirement to improve the performance of a PHCS. Drawing on an in-depth analysis of institutional changes between the two phases of decentralization and selected case studies, we show that the first wave of decentralization in Indonesia actually resulted in institutional changes that were detrimental for innovation. Whereas discretion for local-level decision makers increased compared to the situation in the centralized system, but requirements for accountability did not. This pattern was reversed during the second wave of decentralization, suggesting that the conditions for innovation have improved. The rare cases of innovation, which did occur in both waves, share a specific combination of initiative, commitment, and social capital of a key decision maker.

In theory, decentralization enables public sector decision makers and providers to responsively adapt to dynamic local conditions (Arrow 1963), particularly in highly complex settings like the health sector (Plsek and Greenhalgh 2001; Mitchel and Bossert 2010). In practice, decentralization is a multi-dimensional phenomenon that complicates an assessment of its impact on health care performance (Jimenez-Rubio 2010; Martínez and Rodríguez-Zamora 2011). At least three policy domains are at the core of decentralization efforts (Cheema and Rondinelli 2007). First, administrative decentralization increases the local government's policy-making power. Second, fiscal decentralization entitles local governments to collect revenue and decide about its allocation. Finally, political

decentralization in the form of direct elections of the head of the local executive body significantly increases community members' voice and influence on the local political system (Cheema and Rondinelli 2007).

Despite the multi-dimensional nature of this phenomenon, most studies focused on the impact of fiscal decentralization only, arguing that fiscal decentralization is the best indicator to measure the degree of decentralization (Jimenez-Rubio 2011a, b). Many of these studies have indeed found a positive relationship between the degree of fiscal decentralization and a variety of health outcomes. For example, fiscal decentralization reduced infant mortality in several countries, including China, India and OECD countries (e.g. Jimenez-Rubio 2011a, b). Other studies showed that fiscal decentralization can have positive effects if specific conditions are present, like an institutional capacity to respond to local ethno-linguistic fractionalization (Robalino et al. 2001), recruitment of more physicians (Cantarero and Pascual 2007) and improved socio-economic condition of localities (Soto et al. 2012).

Though this research has made much progress in improving our understanding of the effect of decentralization on the performance of the health care system, several gaps still remain. First, evidence on the impact of fiscal decentralization on health is still mixed, since there are also studies that did not find any link between decentralization and improvement of health performance (Martínez and Rodríguez-Zamora 2011). Second, these studies also show that the effect of fiscal decentralization is contingent upon administrative and political decentralization. However, due to the almost exclusive focus on fiscal decentralization, little is known about the impact of administrative and political decentralization. Third, previous research neglected to answer the question under which conditions will decentralization result in local health care system innovations, which is the key for improving overall health care performance (Bossert 1998).

## 1.1 Research Question

We define innovation as “the intentional introduction and application within a role, group, or organization, of ideas, process, product and procedures new to the relevant unit of adoption, designed to significantly benefit the individual, the group or wider society” (West 1990). This definition extends the conceptualization of innovation as the application of new products, to innovation as the attempt to improve the performance of the health care system through new processes and structures. Product innovation is related to new types of service to a Community Health Centre's (CHC) stakeholders (such as services for aging people, specialist clinic). Process innovation refers to new delivery methods (e.g. payment procedures), and structure innovation relates to the creation of new internal and external infrastructures. Such innovations can occur both at the level of the district, and at the level of the organization (i.e. the PHCs).

Consequently, our main research question reads “Under which conditions does decentralization of the Indonesian public health sector favour innovations at the district and organization (CHC) level?”

## ***1.2 Social and Scientific Significance***

Improving access to health care is one of the major challenges of any country's attempt to build a more sustainable society, and many observers consider persistent or even increasing socio-economic inequalities in health as one of the major threats for a country's social and economic development. However, policy makers still have to rely on very limited evidence on which to base their decisions. Decentralization provides them with the decision space for more effective health care institutions. On the other hand, the increased autonomy and discretion also confronts them with the problem of having to choose from a large set of potential interventions. For many of these possible interventions, little to no systematic information is available concerning the context conditions under which they might be effective and efficient, nor are the mechanisms through which they work well-understood (Fleuren et al. 2004). The present study contributes to closing this gap.

## ***1.3 Research Methods and Data***

Indonesia's two waves of decentralization create the opportunity for a detailed comparative examination of how different institutional arrangements may affect health care innovation within the same socio-cultural context. Our analytical strategy, therefore, consists of two elements. First, we use the tools of comparative institutional analysis to map how key institutional dimensions in the health sector changed from the first to the second wave of decentralization. In order to identify these key dimensions, we build on the Decision Space Approach (DSA), a theoretical framework that was developed to analyse the effects of decentralization (Bossert 1998; Mitchel and Bossert 2010; Bossert and Mitchell 2011). Policy documents and administrative regulations are our major source for applying this framework to the Indonesian case. Second, given the paucity of health care innovations in the Indonesian system, we submit the few cases where innovation reportedly did occur upon closer scrutiny. In this case analytic step, our strategy is to uncover possible commonalities in the conditions for and the pathways to innovation during both waves of decentralization. Our main data sources for this step are earlier case study descriptions and media accounts.

In what follows, we first give some background information on Indonesia's PHCS and the main elements of decentralization. We then sketch our analytical framework, the DSA, followed by sections on institutional analysis and case analysis. We conclude with a discussion of the innovation potential of the current Indonesian health care system.



## **2 Indonesia's Primary Health Care System under Decentralization**

### ***2.1 The Primary Health Care System***

The Indonesian health care system was designed to implement the constitutional mandate to maintain and protect citizens' health status by providing accessible health care for all. CHCs are a major tool to achieve these outcomes. They provide primary health care that includes curative and preventive care, carry out information campaigns and empowers communities to play an active role in the health sector.

Within the local government structure, CHCs fall under the responsibility of the Department of Health (DoH), which also coordinates their activities. The DoH, in turn, reports their performance to the Ministry of Health (MoH). Local governments facilitate CHCs through allocating funds for health staff and facilities. Health staff may include physicians, midwives, nurses, pharmacists, nutritionist, public health practitioners and administrative staff, while health facilities may include buildings, medical devices, laboratories, ambulances and pharmacies. Due to variations in local government policies and other local conditions, CHCs may differ considerably with regard to number and type of health staff and facilities.

CHCs are established at the sub-district (Kecamatan) level, based on a service coverage ranging from 10,000 to 30,000 inhabitants. CHCs may have auxiliary CHCs at the village level to enable them reach out to the community in the villages. In areas with large distances to the nearest hospital, CHCs are equipped with a small number of beds (about 10) for in-patient care, and with motorized vehicles for visits in remote areas.

Two major reforms were carried out in the PHCS. During the first reform in 2004, the central government obliged local governments to provide health insurance for the poor (Law 40/2004 on the national social security system). Fiscal transfers from the central government flanked this measure. The law increased local governments' decision space with regard to how to implement health policies. Also in 2004, a decree by the MoH granted CHCs with the authority to propose their own programmes and budget allocation, based on the health needs of their community and the capacities of their CHC. Furthermore, every local government was required to allocate at least 5 % of its total budget to the health sector.

The second reform started in 2014, when the central government changed the out-of-pocket payment system to the universal coverage system. In this system, all citizens with health problems first have to visit the CHC. In case the patient requires further medical care, the CHC will refer the patient to the appropriate hospital. The system is implemented by the Social Security Management Agency (Badan Penyelenggara Jaminan Sosial), which manages health insurance for all citizens (Law 24/2011).

## ***2.2 Two Waves of Decentralization***

Indonesia has implemented two waves of decentralization, the first wave started in 2000 and ended when the second wave started in 2004, the second wave continues up to present. In the following, we briefly describe them, focusing on their differences. The descriptions are based on the law on local governments (Law 22/1999 and Law 32/2004), the law on financial balance between central and local governments (Law 25/2000 and Law 34/2004), and government regulations on structuring local government organizations (PP 8/2000, PP 38/2004, PP 41/2007).

### **2.2.1 Political Decentralization**

In the first wave, elected members of the local council had the authority to elect and to impeach the mayor/governor and vice mayor/governor. There was an annual accountability report from the mayor to the local council. If the mayor's performance failed to satisfy the expectation of the local council, it could impeach the mayor. During the second wave, the local community directly elected the mayor and governors. Local councils had the authority to propose impeachment of the mayor/governor, but this now required legal proof by the Supreme Court, confirming that the mayor/governors had violated the rules. The final decision concerning the impeachment was with the president.

During both waves, the local council had the authority to approve or disapprove of local policy and regulations, including local strategic planning and budget allocations.

### **2.2.2 Administrative Decentralization**

During the first wave, the central government transferred all sectorial decision space to the local governments. They now had the authority to establish and design new local government organizations, without any restrictions on number, size and function.

During the second wave, the possibility to establish new local government organizations was now limited by local revenue, population, the width of local jurisdiction, and other unique characteristics of a local government.

The first wave enabled local governments to hire new employees on a contract basis, and promote and transfer employees between institutions in the local government. During the second wave however, the central government banned these practices in order to limit local government expenditures.

### **2.2.3 Fiscal Decentralization**

During the first wave, the law on financial balance allowed local governments to determine local taxes and levies to increase local revenue, without restrictions on

the type and extent of these taxes. Central government amended the law on financial balance in the second wave that applied detailed restrictions on local taxes and complex anti-corruption procedure.

### 3 Analytical Framework: The Decision Space Approach

The link between decentralization and performance DSA of the health sector refers to macro-level phenomena. Following the social mechanism logic as advocated by Analytical Sociology (Hedstrom and Udehn 2009), we use a theory of action that explicates the mechanisms linking the macro-level of societal phenomena with the micro-level of individual decisions and actions (see Fig. 1) the DSA. This approach draws on principal agent reasoning. It argues that decentralization changes the degree of decision space, accountability and organizational capacity that decision makers have in order to develop effective innovations. The micro-level actions aggregate to macro-level outcomes. Our study focuses on the micro-level, specifying the interplay between the decision space, accountability and organizational capacity and their impact on local health care innovations.

The DSA is one of the few general analytical frameworks explicating how decentralization affects policy outcomes through changing preferences and constraints of local decision makers. It proposes that decentralization has the potential to improve health care outcomes. The idea is that decentralization bestows more decision space to local decision makers, allowing them to be more responsive to local conditions and community health needs (Bossert 1998). However, decision space alone will not suffice unless complemented by appropriate accountability mechanisms (Mitchel and Bossert 2010) and the organizational capacity to implement decisions (Bossert and Mitchell 2011). Decision space and accountability requirements are exogenously given institutional boundary conditions within which local-level decision makers need to operate. The dimension on which they can exert some influence is the capacity of their organization. Organizations that succeed to increase their capacity have a higher chance to be more effective and efficient. We argue that a significant increase of a CHC’s capacity requires some

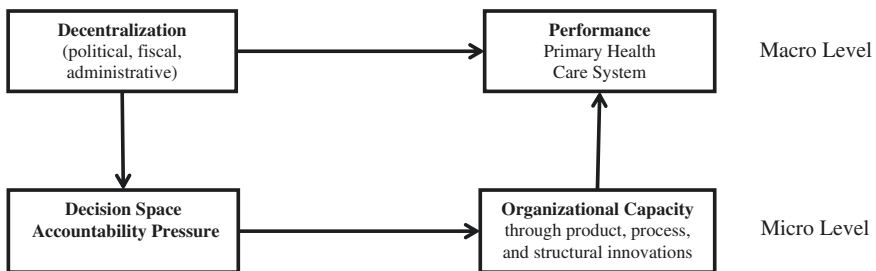


Fig. 1 Conceptual model

degree of product, process, and structural innovation. Hence, the core question becomes to what degree the changes in decision space and accountability has favoured or inhibited innovative expansion of organizational capacity.

### ***3.1 Decision Space***

Decision space refers to “the range of effective choice that is allowed by the central authorities (the principal) to be utilized by local authorities (the agents)” (Bossert 1998). For example, decision space can vary to the degree that a district can determine its own health strategic planning, budgeting, human resources, and service/organization delivery. Within this decision space, “local authorities may make innovative choices that are different from the choices they made before decentralization and different from directed change that the central authorities impose on localities which have not been decentralized” (Bossert 1998). Decentralization increases the decision space of lower-level administrators, though the degree of decision space that an administrator has can differ considerably across different sub-domains. In order to have an accurate picture of the decision space, it is important to disentangle the various decision-making domains (e.g. finances, human resource management etc.) and their specific indicators.

### ***3.2 Accountability Pressure***

Accountability refers to an agent’s obligation to explicate and substantiate his or her conduct to a principal or other stakeholders, who can raise queries and allocate sanctions (Black 2008). Accountability mechanisms apply to the administrative, political and fiscal domain, and ensure that decision makers are more responsive to local health needs. Decentralization tends to increase accountability of lower-level administrators, where the Central Government pushes local governments to achieve specific health targets effectively, in order to improve health performance at the national level (Bossert and Mitchell 2011). When assessing accountability pressures, one has to distinguish between two dimensions (Bossert and Mitchell 2011): “accountability for what” refers to the different decision-making domains and “accountability to whom” refers to the underlying hierarchical arrangement (Yilmaz et al. 2008, 2009). There are three categories that included “accountability to whom”. (1) Upward accountability implies that the decision maker has to report to upper-level government organizations, e.g. a local government being accountable to central government. (2) Downward accountability involves situations in which the decision maker is responsible to a lower-level entity, e.g. local government being accountable to the community. (3) Horizontal accountability refers to accountability to peer players, e.g. a local government being accountable to the local council.

### 3.3 *Organizational Capacity*

Organizational capacity relates to the question whether the resources and processes at the disposal of local administrators are sufficient to make and implement good decisions. Indicators of organizational capacity are organizational resources (e.g. adequacy of funds, infrastructure and staff), and processes (e.g. evaluation, monitoring and reporting to the national level), as well as human capital (e.g. individual training, education and experience). Unlike accountability and decision space—which are “externally” given—local decision makers have discretion to influence the capacity of their organizations. They are in a position to alter the structures, processes, products, and services of their organization in order to make it more effective and efficient (West 1990; Varkey et al. 2008; Omachonu and Einspruch 2010). Such innovations have the potential to increase organizational capacity and improve its health care functions (Omachonu and Einspruch 2010; Varkey et al. 2008). Hence, in line with earlier applications of the DSA (Bossert 1998), we consider product, process, and structural innovations as important correlates of organizational capacity.

## 4 Decentralization and Health System Innovation in Indonesia Institutional Analysis

In this section, we analyse to what degree decision space and accountability, the two most important institutional boundary conditions for health care innovations, differed between the two waves of decentralization.

### 4.1 *Decision Space*

Building on previous applications of DSA to health care innovation (Mitchel and Bossert 2010; Bossert and Mitchell 2011; Bossert 1998), we distinguish five major decision space categories. Within each of these categories, we used, where possible, the indicators that also previous studies had applied. Where necessary, we adapted them to the specific context of CHCs in Indonesia (for a definition of each of these indicators, see Table 1): (1) Strategic planning; (2) Service organization (required programmes, hospital autonomy, insurance plans, procurement of goods); (3) Human resources (contracting, civil service); (4) Financial management (expenditures, sources of revenue); (5) Governance rules (structure and design of facility boards, district offices and community participation).

For each indicator and for both waves of decentralization, we determine whether the decision space is narrow, moderate or wide. The decision space with regard to a specific indicator is narrow if the organization or district has no

**Table 1** Description of decision Space domains

Decentralization types	Decision space domains	Description
<b>Fiscal</b>	Expenditures	Ability to determine budgetary allocations (including planning, budgeting, and execution)
	Revenues	Authority to use funds raised from all levels of the system (including intergovernmental transfers, own-source revenues, income from user fees and contracts, borrowing)
<b>Political</b>	Strategic planning	Ability to accommodate local community health needs into health policy and program at the local level that differs from policy and programs of the central government
<b>Administrative</b>	<i>Service organization</i>	
	Required programs	Ability to modify implementation of national programs
	Health Centre autonomy	Ability of health centers to be independently managed (including discretion over all health sector functions within health centers)
	Insurance plans	Ability to create, manage, and or replicate local insurance mechanisms (for example determine service coverage/minimum packages; introduce community based health insurance)
	Procurements of goods	Ability to procure goods and services
	<i>HRM</i>	
	Civil service	Ability to decide over compensation packages (for example, basic salaries, allowances); determine terms of employment (for example, including recruitment, appointment, transfer, promotion and termination)
	Contracting	Authority to define the range of permissible contracting options
	<i>Governance rules</i>	
	The health department	The ability to structure and design the function of the health department
The health centres	The ability to structure and design the function of health centers	

Source adapted from Bossert (1998), Mitchel and Bossert (2010), Bossert and Mitchell (2011)

discretion, because the decision-making authority rests entirely at the upper level. The decision space is wide if the local government faces (almost) no restrictions that would constrain the range of alternatives. The decision space is moderate if the local government or organization faces restrictions, but nevertheless also has some autonomy in taking decisions.

One indicator measured decision space with regard to strategic planning. Decision space was wide during the first wave, because the law permitted local

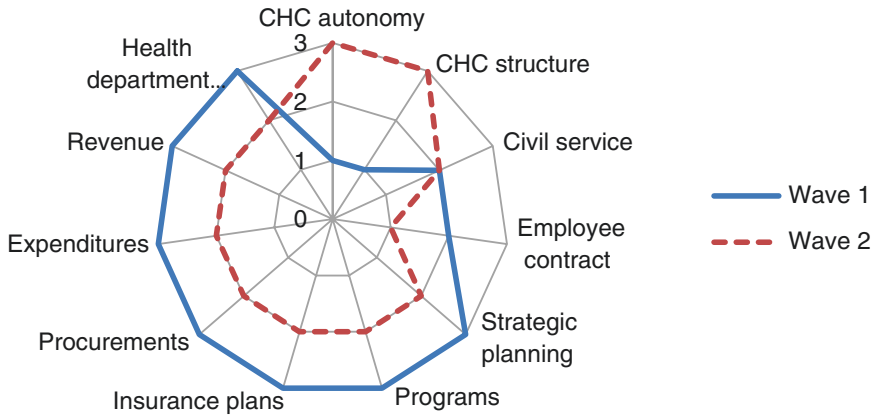
governments to formulate the strategic planning themselves and did not impose further constraints. During the second wave, a government regulation added restrictions. It mandated that the strategic planning in local government had to be in line with the strategic planning at the national level. Since local governments still had the discretion to determine their own strategic planning, we classify the decision space during the second wave as moderate.

In the domain of service organization, for three out of four indicators, decision space was wide during the first wave, but dropped to moderate during the second wave. Local governments faced no constraints with regard to programming and the insurance plans they wanted to implement; moreover, the central government's requirements concerning standardization of procurement were very loose. During the second wave, decision space on these three dimensions of the service organization decreased to moderate, because central government narrowed down the range of options from which local governments could choose. We observe the reverse pattern for one of the indicators, CHC autonomy, however. Here, decision space was narrow during the first wave, when CHCs had a uniform structure and functions, determined by the central government. Decision space on this dimension increased to wide during the second wave, when these restrictions were eliminated.

Two indicators measure decision space with regard to human resources. First, civil service represents the ability of local governments to determine compensation packages, like salaries and allowances, terms of employment, recruitment, appointment, transfer, promotion and termination of employment contracts. Second, contracting represents the range of permissible contracting options. For civil service, decision space was narrow during the first wave, because the local government had to implement the compensation package regulations of the central government. During the second wave, the decision space grew to moderate when local governments were granted the right to introduce performance related incentives. We observe a reverse pattern for the second indicator, contracting of employees, however. Decision space was moderate during the first wave, but it decreased to narrow during the second phase in 2005 when the central government completely banned contracting employees, in order to limit the growing number of civil servants.

With regard to fiscal management, local governments' decision space declined from wide to moderate on both indicators, revenues and expenditures. During the first phase, local governments faced no restrictions concerning the amount of local taxes and their allocation. On the contrary, during the second phase, the central government imposed rigid regulations concerning the type of taxes that could be levied, and it also defined a minimum amount that had to be allocated to the health sector.

Finally, two indicators measure decision space with regard to governance rules. Decision space to design the structure of the health department was wide in the first wave while moderate in the second wave, because the central government standardized the number and size of local government organizations. We observe the opposite pattern with regard to the decision space to design the structure of the



**Fig. 2** Changes in decision space from the first to the second wave of decentralization

CHC, which was narrow during the first wave, but wide during the second wave when previous restrictions concerning the structure and function of local CHCs were removed.

Figure 2 summarizes the patterns for all eleven indicators. We use numerical weight in the analysis to trace the change of decision space from the first to the second wave of decentralization. The highest score is “3” for wide decision space, score “2” for moderate decision space, and score “1” for narrow decision space. Overall, we observe that from the first to the second wave, decision space declined in eight of the eleven domains. In all but one of the cases, the change involved the introduction of some restrictions in a situation in which local decision makers had very little constraints (wide decision space). In two domains, decision space increased, and considerably so autonomy and structure of the CHC augmented from “narrow” to “wide”. In sum, the second wave of decentralization resulted in a reduction of decision space compared to the first wave.

## 4.2 Accountability Pressure

Previous studies suggest a link between innovation and the type and degree of accountability pressures that decision makers face (Fleuren et al. 2004; Lansisalmi et al. 2006; Varkey et al. 2008). For the Indonesian context, we distinguish between high, medium and low accountability pressures based on three types of underlying hierarchical arrangements.

First, most local governments still depend on the upper level of government for a major part of their funding. Given this dependence and central government’s opportunities to reinforce and sanction (Fleuren et al. 2004), we consider arrangements containing upward accountability as involving the highest level of accountability pressure.

Second, due to political decentralization, local decisions makers also have political motives. Local government officials have an interest in maintaining their electorate



(Lansisalimi et al. 2006), and for CHC leaders to stay in function, their CHCs need to meet high performance demands from their local communities (Varkey et al. 2008). Hence, downward accountability requirements—from local government to the community—can still create quite some pressure. We classify the presence of downward accountability requirement as medium accountability pressure, because for the involved decision makers, the potential consequences of non-compliance (e.g. in terms of direct sanctions) are less immediate than compared to upward accountability.

Finally, horizontal accountability involves interaction between the mayor and the local council. It usually applies in contexts where regulations have to be drafted (Fleuren et al. 2004). Compared to upward and downward accountability requirements, we consider horizontal accountability arrangements as exerting the least accountability pressure.

Note that a specific decision domain can be subject to multiple accountability arrangements at the same time. In many cases, a decision maker is accountable to both higher and lower levels. We assume that in such cases, accountability pressures add up, since it implies an increase in the number of stakeholders to which the decision maker has to report. Therefore, for the purposes of our analysis, we attach numerical weights to the three types of accountability arrangements, with the highest score “3” for upward accountability, an intermediate score “2” for downward accountability, and the lowest score “1” for horizontal accountability. Consequently, the maximum score for accountability pressure in a decision-making domain is “6”, representing a situation in which a decision maker is upwardly, downwardly, and horizontally accountable. The lowest score is “1”, representing a situation in which the decision maker is only horizontally accountable. In what follows, we assess (changes in) accountability pressures in the eleven decision-making domains as they were discussed in the previous section.

First, with regard to strategic planning, accountability pressure during the first wave was restricted to the local council scrutinizing the local executive body; it was based on horizontal accountability only, resulting in the lowest score (“1”) on our accountability pressure scale. Accountability pressures increased drastically during the second wave, when both upward and downward pressures flanked horizontal accountability requirements. First, a law on public information now obliged local government to publish their strategic planning on the official website. Furthermore, since the introduction of direct elections, local communities now paid special attention to what degree elected officials indeed had kept the promises they made during their election campaigns (downward accountability). Second, a new law now required central and local government to share authority on strategic planning. This significantly increased the central government’s influence on and control over the strategic planning process of local governments. With all three types of accountability arrangements in place, the accountability pressure during the second wave cumulates to the highest score on our scale (“6”).

Second, we observe an increase in accountability pressure also in the domain of service organization. This is due to the fact that all indicators in this domain, upward accountability in the form of tighter standardization and regulations guiding implementation, was added during the second wave. Required programmes

increased (from “4” to “6”) because the second wave added downward accountability—citizens being able to exert pressure on local governments to realize the programmes promised during their electoral campaigns—to the upward and horizontal accountability established during the first wave. During the second wave, accountability pressure on CHCs grew (from “3” to “5”), resulting in lower CHC autonomy: CHCs receive funding from the MoH and implement central government programmes. Furthermore, accountability pressures concerning the procurement of goods increased (from “4” to “6”), since during the second wave, the procurement procedure requires local governments to publicly announce each step on their website, thereby adding downward accountability requirements to the upward and horizontal accountability pressure in place since the first wave. Accountability concerning insurance plans also increased (from “1” to “4”). While the first wave involved only horizontal arrangement, the second wave added both horizontal and upward arrangement, since central government obliged local government to provide health insurance for the poor.

Third, both indicators in the field of human resources reflect increasing accountability pressures. During the second wave, local governments lost the authorization to contract health staff, which is now restricted by the central government. The same holds for the right to manage the civil service. In both cases, accountability pressure rose from only horizontal accountability (score “1”), to both horizontal and upward accountability (“4”).

Fourth, in the domain of financial management, we observe an increase in accountability pressure with regard to the approval of the budget planning, expenditures and revenue. During the first wave, it involved upward and horizontal accountability arrangements (score “4”), while in the second wave it involved upward, downward, and horizontal accountability (score “6”). Local governments are currently required to announce their budget of expenditures and revenue to the community by uploading this information on the official website of the local government, enabling the local community to scrutinize the financial management.

Finally, accountability pressure also increased in the domain of governance rules, with control over the structure of CHCs and the structure of the Health Departments switching back from horizontal accountability in the first wave (score “1”), to upward accountability towards the central government in the second wave (score “3”).

All in all, we see a notable increase in accountability pressure from the first to the second wave of decentralization in nine of the eleven indicators (see Fig. 3). From the second wave, the highest pressure rests on strategic planning, required programmes, expenditure, and CHC autonomy. Only in one case, insurance plans, did the accountability pressures decline to the minimal level (horizontal accountability).

### ***4.3 Institutional Analysis: Summary Conclusions***

The Decision Space Analysis has allowed us to decompose the institutional frameworks governing the health sector during the two waves of decentralization into



**Fig. 3** Changes in accountability pressure from the first to the second wave of decentralization

its two major operational dimensions: the degree of discretion (or decision space), and the degree of accountability that local level decision makers face. Our analysis yields three main insights.

First, the two institutional frameworks of decentralization differ significantly from each other. In fact, we observe a double movement, taking place from the first to the second wave. It consists of an overall reduction of decision space, combined with an overall increase in accountability pressure.

Second, there is one notable exception to the reduction of decision space, and this is related to the autonomy and structure of the CHCs; here, the trend is reversed: maximum discretion is transferred to local decision makers.

Third, our analysis reveals that compared to the indicators for political and administrative decentralization, the two indicators measuring fiscal decentralization (expenditures and revenues) show a relatively smaller degree of change, both with regard to accountability pressures and decision space. This is particularly noteworthy given the strong and almost exclusive focus on fiscal decentralization that has dominated research up until now. The major adjustments took place in the domains of political and administrative decentralization, and they may also be among the more prominent opportunity structures for improving the capacity of health care organizations through product, process and structural innovation. This is what we turn to in the next section.

## 5 Decentralization and Health System Innovation in Indonesia: Case Analysis

The previous section demonstrated that the institutional conditions for improving organizational capacity through health care innovation changed from the first to the second wave of decentralization. During the first wave, local-level decision

makers had little room and incentive to execute innovations, and while district level players had the discretion, a weak accountability system apparently kept them from investing and instigating innovation. Conditions for local-level players changed during the second wave, with accountability pressures mounting and discretion decreasing in some domains, but increasing in others—most notably with regard to autonomy and structure of the CHC.

Given these changes in the institutional contexts, two questions arose. First, how was it possible that some districts and CHCs succeeded in realizing exemplary innovations, despite the problematic institutional context? Second, are there some general patterns that these successful innovation cases share?

In this section, we attempt to give some tentative answers to these questions by examining some well-documented cases of health care innovation in Indonesia. The purpose of our case analytic approach is to gain deeper and a more detailed insight into the social, political and economic context and processes behind the innovations. More specifically, we are interested in the kind of innovations that were realized, their antecedents, how they relate to the changes in decision space and accountability pressures, and their outcomes in terms of enhancing organizational health care capacity and performance.

With the exception of one well-known district level case (Jembrana), there is relatively little documentation on health care innovations in Indonesia during the first wave of decentralization. There is some reason to assume that this lack of information reflects the paucity of actual innovation attempts during this period. The situation, however, changes during the second wave. We assume that this reflects increased decision space to design the programmes and define the budget, as it was granted to CHCS at the start of the second wave decentralization (2004).

For our case analysis, we draw on two studies investigating innovation at CHC-level (Anggraeny 2013; Rachmawati and Suprpto 2010), and an official blog that describes innovation at the CHC of Mojoagung. The report by the Ministry of Administrative Reform the Republic of Indonesia provides too little detail for our purposes.

We will present six short vignettes on innovations that significantly improved organizational health care capacity. Three of them cover the district level (for a summary overview, see Table 2), and three cover the CHC level (see Table 3). With the exception of the Jembrana case at district level, all of the cases emerged during the second phase of decentralization (i.e. after 2004). For each case, we first sketch the type of innovation that was realized, and how it affected organizational capacity. We then explore its potential antecedents.

## ***5.1 District Level Innovations***

### **5.1.1 Universal Health Insurance Coverage (Jembrana)**

Health care innovations during the first wave of decentralization were very rare. This makes the Jembrana case particularly interesting. This case is quite well-known at national level (Korupsi 2008; Trisnantoro et al. 2012). Organizations

**Table 2** District level health care innovation cases—summary overview

		Case 1: Jembrana	Case 2: Surakarta, Jakarta, Bandung, Kulon, Progo, Manado	Case 3: Pemalang
Background	Period	Initiated 2001, implemented 2003, still ongoing		Initiated in 2004, terminated in 2005
	Trigger	Initiated by the mayor	Central government policy on national social security; Fiscal transfer to partly finance the insurance	National health vision to decrease the infant and maternal mortality rates
	Enabling conditions	Commitment from the mayor and efficiency	Availability of successful template (Jembrana) for replication; mayor's commitment and creativity to design the method and finance the uncovered insurance by fiscal transfer	Mayor's commitment
	Methods	Bureaucracy reform; downsizing; cooperation with private hospitals and clinics	Minimum health budget at least 5 % for each local government	Continuation of foreign aid project
Innovation	Product	Universal coverage system	Health insurance for targeted people	Midwife voucher
	Process	Different process for financing primary health care	Reimbursement or direct subsidy	Reimbursement
	Structure	New local government institution function to provide the health insurance	New institution to manage health insurance	–
Outcomes	Capacity	Increase the quality of health facilities; Increase the accessibility of health care for all	Increase the accessibility of health care for all	Increase the number of midwives
	Performance	–	–	Increase the accessibility of midwife service

**Table 3** Community health centre innovation cases—summary overview

Background		Case 4: Jagir	Case 5: Mojoagung	Case 6: East Java
Period		Initiated by head of CHC	Initiation of the CHC's manager	Triggered by national health vision related to MDGs
Trigger		Concern to the condition of old technology application	Skill to recognize the health problems and potential contribution from external actors	Commitment of the mayor
Enabling conditions		Finance reallocation to medical devices	Partnership with the Pertamina "national oil enterprise"; partnership with university and community	Involve public participation as health care volunteer; increase the number of health staff and distribute them more evenly
Methods				24 h prenatal and maternal care
Product		Health service for the aging people, specialists, and teenagers	Cataract surgery and care post-surgery	–
Process		The use of new technology for diagnoses	–	–
Structure		New clinics	–	Increase number of PODES
Capacity		The increase of health care quality and quantity of health staffs	–	Increasing number of midwives and trained traditional midwives
Performance		The increase of health care process quality	Solve the problem of poor patients with cataract; solve the problem of worm diseases	More accessible natal care
Outcomes				

at the central government level, ministries, NGOs, high-level officials from other districts, and researchers visited Jembrana to learn from the practice. Jembrana acquired national fame because it was the first district to abolish the out-of-pocket system in favour of a universal coverage health insurance [*Jaminan Kesehatan Jembrana* (JKJ)]. This product innovation was initiated in 2001, implemented in 2003, and is currently still active. Additional innovations accompanied this programme, for example a process innovation which consisted of a new system for financing primary health care.

The creation of a new local government organization, *Badan Penyelenggara JKJ* or Bapel, to administer health insurance was a major structural innovation. It has a key role in the implementation of JKJ. It applies tight standardization procedures and strict verification of claims, in order to assure that the funds for medication reach those citizens who are indeed entitled to them. Each month Bapel processes thousands of individual insurance claims. It handles registration and re-registration of thousands of members, and it manages the payment of claims and the contracts between the local government and other health institutions, such as CHCs, public and private clinics, and hospitals.

Together, the product, process and structural innovations have resulted in a significant improvement of CHC capacity and have improved accessibility of other health facilities like public and private hospitals and private clinics participating in JKJ (World Bank 2006). These measures increased health access for the poor and resulted in higher levels of patient satisfaction. Furthermore, the capacity of PHCS facilities has improved: CHC buildings were enlarged and laboratories and in-patient facilities were created.

Next we ask, how were these innovations implemented, and what conditions made this possible? Implementing the JKJ conveyed many challenges. One of the major obstacles certainly was the relative lack of funds, particularly if compared to other districts in the Island of Bali. Therefore, Mayor Winasa, a medical professional, university professor and dentist, used two main strategies to implement health system reforms.

First, he downsized and restructured local governments, reducing the number of district organizations from 24 to 17. This yielded an annual savings of Rp. 2–3 billion (US\$ 200–300,000). The mayor used these savings to finance the health reform (World Bank 2006).

Second, he initiated an administrative reform by stipulating regulations on local civil servants disciplines and incentives, procurement system that enables retrenchment in government spending, and the use of information technology to enhance the transparency and connections between parts of the system in local government that also prevent the corruption practices in using the JKJ fund (Korupsi 2008; Trisnantoro et al. 2012; World Bank 2006).

The increase of decision space in the wake of the first wave of decentralization provided the necessary discretion for the interventions. With wide authority to determine the strategic planning, Jembrana used the opportunity to formulate its own strategic plans, which differed from those in the national health system. In the domain of service organization, Jembrana freely defined its new insurance plan,

literally reinvented its health facilities, and restructured its buildings. It also loosened the rigid standards that regulated procurement procedures of in-patient facilities. Furthermore, new human resource policies were introduced. Civil servants were now rewarded according to their performance, and Jembrana also invested in the recruitment of well-trained health professionals to staff the new Bapel organization and other health organizations. Finally, Jembrana also modified some of its governance rules, in particular with regard to the new local health insurance managed by Bapel. These rules facilitated both contract agreement with health care providers, and the verification of health care claims, thereby preventing fraud by health care providers.

All these changes were possible because the first wave of decentralization abolished many of the rigid standards of central government. However, this increase in decision space also applied to all other districts in Indonesia, of which the vast majority did not embark on any innovation trajectory to expand their organizational capacities.

What made Jembrana special? In addition to the mayor's initiative and creativity in shaping new programmes and freeing the necessary funds, networking was a major enabling condition behind the success of Jembrana's initiative (Korupsi 2008; World Bank 2006). The mayor successfully activated and managed collaborative networks with professionals and local councils, like the director of the district hospital, the managers of CHCs, and the managers of Bapel. He successfully lobbied the local council to approve his programmes, and also succeeded in motivating the civil servants to implement the reform.

Though the JKJ faced severe challenges, it proved to be sustainable. However, it was only during the second wave of decentralization that other districts started to emulate Jembrana's model, and now, universal health insurance coverage has become part of the national health system.

### **5.1.2 Health Insurance (Several Districts)**

With the second wave of decentralization, while the decision space partially declined, the accountability pressures went up across the board. Based on the law on the National Social Security System, enacted in 2004, the MoH launched a programme for health insurance for the poor in 2007. According to the decree, every district has the authority to design and implement health insurance for the communities in its area and can build on fiscal transfers from central government for this purpose—but every district was obliged to implement this policy. This change may be one of the reasons why we observe an increase in health care innovations also in other districts, several of which started to adapt Jembrana's health insurance model for their purposes. For example, Surakarta-Central Java and Jakarta introduced health insurance for the poor, and Badung-Bali introduced a 24-h CHC service. In 2011, the Province of Bali introduced health insurance for the wider community (Based on Governor Decree delivered in 2008). Other local governments developed innovative health insurance not only for the poor but for all



citizens, such as the city of Makassar (Dwicaksono et al. 2012), Manado (Ministry of Administrative Reform the Republic of Indonesia 2014), and the district of Kulonprogo (Ministry of Administrative Reform the Republic of Indonesia 2014).

### **5.1.3 Midwife Coupon Service (Pemalang)**

In 2004, the district of Pemalang introduced a midwife coupon service. Here, midwives—who can be civil servants or operate as individual entrepreneurs—are paid based on how many coupons they collect. The service started as a pilot project that was initiated by central government with funds from a World Bank loan. Its aim was to encourage women from poor households to visit midwives during pregnancy and for the delivery. The programme was successful since it increased the number and, in result, the availability of midwives, thereby considerably improving organizational capacity. However, for unclear reasons, the programme was terminated by central government, in the midst of its implementation. Nevertheless, Pemalang continued this programme, using its local government budget, but ended it in 2005, because it overlapped with the Health Insurance for Poor programme.

The Pemalang case is interesting because it reflects an innovation that started as an initiative from central government, rather than growing out of the district itself. However, as in the Jembrana case, its continuation is mainly due to the mayor's commitment and success in reallocating local funds for this project.

## ***5.2 Community Health Centre Innovations***

### **5.2.1 New Technology and New Services (Jagir)**

Process innovation at the CHC of Jagir (Surabaya city, East Java), took the form of implementing new technologies for diagnosis, like computer ultrasonography (USG), a complete and state-of-the-art dental unit, and a photometer (Anggraeny 2013). The initiative for scaling up medical technology came from the head of the CHC, who was concerned about the out-dated material in the centre. In order to be able to purchase better and more modern equipments, he decided to reallocate funds for this purpose.

CHC of Jagir also introduced a variety of product innovations in the form of new services: (1) Specialist practices, e.g. for dermatology and venereal diseases, gynaecology, or degenerative diseases, hypertension, diabetes mellitus, and cancer, (2) extension of opening hours, (3) teenage counselling by professional psychologists, (4) a “neighbourhoods programme” in which neighbourhood communities receive coaching related to disease prevention and handling health problems in their community, and (5) in-patient care.

Finally, structural innovations consisted of the creation of new clinics providing special care for the elderly. The clinics also contain a unit for health services and are active in the field of health promotion.

### 5.2.2 Partnership and Collaboration (Mojoagung)

In 2012, the CHC of Mojoagung received the MoH award for Best Performing Health Institution for its activities in the field of health promotion and disease prevention. This CHC had implemented two kinds of product innovations (<http://puskesmasmojoagung.wordpress.com>). First, it offered cataract surgery and free after-surgery treatment. This initiative represented an annual social responsibility activity, and was funded in the context of a partnership programme with PERTAMINA State's Oil Enterprise. Second, a programme to fight endemic worm disease was introduced.

As in the Jagir case, the initiative for this innovation came from the head of the CHC, who was puzzled by the high incidence of worm disease in the community. He took a soil sample and brought it to the nearby university laboratory. The results showed that the soil was contaminated with cow waste. To solve this problem, he initiated a programme to install biogas energy based on cow waste that use the cow waste as the material to produce electricity. The use of the biogas installation prevented the soil contamination that caused worm disease. This project was realized in the context of a partnership programme with Airlangga University in Surabaya. It also could build on strong participation by the local community, whose members collectively were willing to buy installation material and to learn how to maintain it. In turn, the university agreed to set up the biogas installation for free.

### 5.2.3 Obstetric and Neonatal Emergency Service Innovation, PONED (Several CHCs East Java)

In 2004, the MoH initiated a programme providing basic obstetric and neonatal emergency services (PONED). A study (Rachmawati and Suprpto 2010) of three districts in the Province of East Java (Jombang, Ngawi, and Sampang) provides detailed insights into its implementation, outcomes and success factors.

The purpose of this programme was to reduce infant and maternal mortality rates. The main tool to achieve this objective was a structural innovation, consisting of the creation of new health posts (PONED) in villages. PONEDs were separate administrative entities, and its health staff did not overlap with CHC staff. As a result, this innovation could only be implemented in regions where CHCs already had sufficient health staff. This was flanked by investments from the government, who offered health staff for delivery and infant care, and to train medics, midwives, traditional midwives and nurses, all of whom had to be on standby for 24 h, 7 days a week. This product innovation significantly increased organizational capacity, allowing delivering 24-h prenatal and maternal care.

Active community participation during all phases (planning, construction, and running of PONED) was an integral element of the programme. Two measures in particular were important for its success. First, through empowering village midwives, effective cooperation and interaction between the community and PONED

became possible. Second, professional marketing teams increased community awareness through information campaigns about Poned, encouraging community members to make use of its services.

### ***5.3 Case Analysis: Summary Conclusions***

The case vignettes presented above are neither exhaustive nor representative for health care innovation in Indonesia. Nevertheless, these examples shed some more light on how the changes in decision space and accountability pressures might have affected a health organization's inclination to initiate capacity-enhancing innovations. We see two noteworthy patterns.

First, it seems that the surprising lack of innovation during the first phase is due to a very unfortunate combination of circumstances. Despite the fact that decision space increased in most domains, compared to the centralization era, it remained restricted in two crucial areas: CHCs had very limited autonomy to determine both their own structure and their own functions. In combination with very low accountability pressures, this institutional structure impeded serious innovation attempts: the system relied on horizontal accountability only. With the mayor depending on the local council, community interests became less salient in shaping local health policies. The Jembrana case is a noteworthy exception and a case in point: its success is largely due to the mayor's strong commitment, professional background and personal networks, which allowed him to overcome these obstacles. During the second wave, when accountability pressures increased but CHCs also were granted more autonomy, capacity-enhancing innovations started to proliferate at the CHC level as well, and they indeed showed quite some variation. The case material suggests that the institutional arrangements during the second wave of decentralization created favourable conditions for capacity-enhancing innovations at the level of CHCs. With the CHC in many domains now also being accountable to the local community, it has a stronger incentive to use its autonomy to adapt to the local health needs. Each CHC may face a variety of health problems, which also require different solutions. This also holds for national level programmes like Poned, since it is built on participative structures that allow local governments effectively adjusting to local conditions.

Second, the mobilization of additional resources has been a major enabling condition for most local governments. Adequate funding, or lack thereof, though important, is only one element in this context. During the first wave of decentralization, about half of all local governments spent more than 60 % of their budget to pay for the salary of civil servants. During the second wave, the central government alleviated the problem through fiscal transfers, and the requirement to allocate at least 5 % of local government budgets to the health sector. Nevertheless, in several of the cases, re-allocation of internal funds towards the new initiatives was a major precondition for launching innovations. This usually required some massive internal restructuring, a process that not every CHC management may be

willing or able to launch. Enlisting the support of external stakeholders (e.g. in the form of sharing expertise or providing subsidies) also proved to be crucial, as the Mojoagung case shows. In those cases where CHCs managed to secure outside support, their leaders either could draw on extensive personal networks, or had the social skills to cultivate them.

## 6 Conclusion

There are many factors affecting organizational innovations in the health sector (Fleuren et al. 2004). Our study, which focused on some of the institutional conditions that may facilitate or impede such innovations, allows for some general tentative observations.

First, the DSA proved to be particularly useful to map the changes in the institutional contexts, because it allowed disentangling key decision and accountability domains. Our institutional analysis showed that arrangements during the first and the second wave of decentralization differ considerably, and that there is also quite some variation in decision space and accountability across different domains during each phase. Whereas during the first phase, decision space was wide across most domains, autonomy of CHCs remained very low, creating a major stumbling block for capacity-enhancing innovations. Since the second wave of decentralization, the institutional framework has increased accountability pressures in combination with more decision autonomy with regard to CHC structure and function, but somewhat lower decision space in the remaining domains. This combination seems to be favourable for capacity-enhancing innovations at CHC-level.

Second, our case analysis revealed that successful innovation initiatives were often built on the presence and cultivation of cooperative social networks, both with external and internal stakeholders. In the upper echelons, personal connections facilitated lobbying key decision makers in the system. Lower down in the hierarchy, social networks of CHC management, health staff and community members contributed to build the trust and commitment that was necessary for carrying out the sometimes major restructurings required to implement an innovation. Since these networking capacities most likely differ considerably across CHCs, they may be one of the possible conditions explaining variation in their innovation potential.

Future research may benefit from our study in at least two ways. First, we found that increased organizational efficiency is one key ingredient of successful capacity-enhancing innovation. However, efficiency itself may be part of daily decision space use in providing health service, particularly for health care service providers like CHCs. Hence, an in-depth study on decision-making processes at CHC level may be a fruitful endeavour.

Second, our case studies showed the crucial role of mobilizing external stakeholders to contribute to health care provision. However, little is known about how management and employees of CHCs manage to activate sustainable collaborative networks that serve in improving organizational capacity.

To conclude, in the year 2015, Indonesia has 548 local governments (Ministry of Home Affairs' Decree, 39/2015), and approximately 9815 CHCs. The degree to which they will be able to deliver effective health care in the future will strongly depend on their ability to successfully adapt to local circumstances. Finding innovative methods to improve their organizational capacity will remain a crucial element to achieve this objective.

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