STRENGTHENING HEALTH MANAGEMENT AND LEADERSHIP AT THE DISTRICT LEVEL: WHAT CAN WE LEARN FROM HIGH PERFORMING DISTRICTS IN THE WEST JAVA PROVINCE OF INDONESIA?

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- Cimandala Health Centre – Bogor
- Cipayung Health Centre – Depok
- Sukmajaya Health Centre - Depok

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# ACRONYMS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>APBD</td>
<td>Regional government budget (Anggaran Pendapatan dan Belanja Daerah)</td>
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<td>APBN</td>
<td>State Budget (Anggaran Pendapatan dan Belanja Negara)</td>
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<td>AusAID</td>
<td>Australian Agency for International Development</td>
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<td>BKD</td>
<td>Regional civil service agency (Badan Ketenagaan Daerah)</td>
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<td>BKN</td>
<td>National civil service agency (Badan Kepegawaian Negara)</td>
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<td>BLN</td>
<td>Foreign aid (Bantuan Luar Negeri)</td>
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<td>BOK</td>
<td>Health operational fund</td>
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<td>BPS</td>
<td>Central bureau for statistics (Badan Pusat Statistik)</td>
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<td>CHDI</td>
<td>Community health development index</td>
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<tr>
<td>DHM</td>
<td>District health manager</td>
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<td>DAK</td>
<td>DAK : Special Allocation Fund (Dana Alokasi Khusus)</td>
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<td>DAU</td>
<td>General Allocation Grant (Dana Alokasi Umum)</td>
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<td>DHMT</td>
<td>District health management team</td>
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<td>DHO</td>
<td>District Health Office</td>
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<td>DHS</td>
<td>District Health Service</td>
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<td>DP</td>
<td>Development territories</td>
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<td>DPM</td>
<td>Department of Personnel Management</td>
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<td>EPIM</td>
<td>Epidemiology and immunisation sub-unit</td>
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<td>GDP</td>
<td>Gross domestic product</td>
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<td>GNI</td>
<td>Gross national income</td>
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<td>GoI</td>
<td>Government of Indonesia</td>
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<td>GP</td>
<td>General practitioner</td>
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<td>Human resources for health</td>
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<td>ISO</td>
<td>International Organization for Standardization</td>
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<td>MDG</td>
<td>Millennium development goal</td>
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<td>MHO</td>
<td>Municipal health office</td>
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<td>Ministry of Health</td>
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<td>MOU</td>
<td>Memorandum of Understanding</td>
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<td>Masters of Public Health</td>
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<td>MSS</td>
<td>Minimum service standards</td>
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<td>M&amp;L</td>
<td>Management and leadership</td>
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<td>NCD</td>
<td>Non-communicable disease</td>
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<td>NGO</td>
<td>Non-government organisation</td>
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<td>National health service</td>
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<td>NIHRD</td>
<td>National Institute of Health Research and Development</td>
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<td>OIC</td>
<td>Officer-in-charge</td>
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<td>PHC</td>
<td>Primary health care</td>
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<td>PHO</td>
<td>Provincial Health Office</td>
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<td>PLK</td>
<td>Health procurement and logistics (Perbekalan Kesehatan)</td>
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<td>PLN</td>
<td>Foreign loan (Pinjaman Luar Negeri)</td>
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<td>PODES</td>
<td>Survey of village potential (Potensi Desa)</td>
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<td>PSDK</td>
<td>Health promotion and human resources (Promosi Kesehatan Sumber Daya Kesehatan)</td>
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<td>P2P</td>
<td>Communicable disease control and environmental health and sanitation (Penanggulangan Penyakit dan Pnyehatan Lingkungan)</td>
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<td>Rp</td>
<td>Indonesian Rupiah</td>
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<td>RSD</td>
<td>Regional hospital</td>
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<td>SOP</td>
<td>Standard operating procedures</td>
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<td>UKS</td>
<td>School health unit</td>
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<td>UNSW</td>
<td>University of New South Wales</td>
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<td>UPF</td>
<td>Regional technical implementing units</td>
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<td>UPT</td>
<td>Technical implementing unit (Unit Pelaksana Teknis)</td>
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<td>UPTD</td>
<td>Technical implementing unit (Unit Pelaksana Teknis Daerah)</td>
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<td>WB</td>
<td>World Bank</td>
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<td>WHO</td>
<td>World Health Organization</td>
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**A note about the use of acronyms in this publication**

Acronyms are used in both the singular and the plural, e.g. NGO (singular) and NGOs (plural).

Acronyms are also used throughout the references and citations to shorten some organisations with long names.
EXECUTIVE SUMMARY

Indonesia is a middle income country and the largest economy in Southeast Asia. The country has made significant progress in health sector development in the last 50 years: life expectancy at birth has increased by 23 years from 48 years in 1970 to 71 years in 2009. Under-5 mortality has dropped from 170 per 1,000 live births in 1970 to 39 per 1,000 in 2009. The proportion of births attended by skilled health personnel has increased from 43% in 1990-1999 to 73% in 2000-2008.

Despite the progress, Indonesia faces considerable health and health system challenges. Maternal mortality ratio has decreased from 390 per 100,000 live births in 1990-1994 to 230 in 2005-2009, but it is still among the highest in Southeast Asia. The 2010 ratio of 228 deaths per 100,000 live births was more than double the millennium development goals (MDGs) target of 102 per 100,000 by 2015. Significant regional inequities in health also exist; infant mortality in Jakarta, for example, is 28 per 1,000 live births compared to 74 per 1,000 in West Sulawesi.

In recent decades the Government of Indonesia (GoI) has undertaken key reforms to improve the economy and the health sector. The decentralisation policy in 2001, in particular, has led to a major transformation from a centralised administrative system to a decentralised structure where local governments assume a greater role in provision of health services. More recently, the GoI has committed to implementing universal coverage of health insurance to remove financial barriers to accessing health care.

Other key government health sector priorities include achieving the MDGs, particularly reducing maternal mortality. The Ministry of Health Strategic Plan 2010-2014 sets targets for strengthening primary health care and improving maternal mortality. Similarly, the Government’s ‘Roadmap to Accelerate Achievement of the MDGs in Indonesia’ has an explicit commitment to reduce maternal mortality to achieve the MDGs.

The district health system in Indonesia, as in other countries, plays a pivotal role in the delivery of basic health services and achieving the MDGs.

Lead and manage the delivery of health services in the district and their performance may, in part, determine the performance of the local health system.

Following the decentralisation policy, DHMs in Indonesia have become more ‘independent’ from the central Ministry of Health (MoH) in planning and management of the local health system. Administratively these managers are accountable to the Head of District/City and are technically supported by the Provincial Health Office (PHO).

The National Institute of Health Research and Development (NIHRD) of the MoH has developed an index for assessing and ranking health districts by performance; and some districts consistently perform better than others.

This study examines the performance of district health managers in high and low performing districts in an attempt to understand whether, and the extent to which, they affect the performance of their district health services (DHS). The purpose is to identify M&L practices that may contribute to high DHS performance and contribute to evidence-informed policy making to strengthen health management and leadership at the district level. The performance of the DHMs was assumed to be reflected by their day-to-day M&L practices and behaviours.

An exploratory case study design focusing on two districts in the West Java Province – one relatively high-performing (Depok municipality) and the other fairly low performing (Bogor district) – was used. The ‘high’ and ‘low’ performing categorisation was based on the NIHRD ranking of districts. However, the districts were not selected based on performance only; other factors such as accessibility were taken into account.
A set of ten generic indicators was used to assess the differences in M&L practices of managers in the two districts. The indicators were assembled after reviewing published and grey literature from Indonesia and elsewhere. The leadership indicators were used to assess the leadership behaviour of only the head of the District Health Office (DHO) (the designated manager).

A mixed methods approach combining survey, semi-structured and in-depth interviews was used to gather data from provincial, DHO and health centre levels. A total of 20 participants were recruited in the two districts: ten at the DHO level, eight at health centre level, and two at the provincial level.

For better understanding of what drives DHS performance, data relating to organisation of the health system and key contextual information were gathered and analysed. The data were analysed using simple descriptive statistics for the survey and content analysis for the qualitative information. Managers at the DHO level were the primary focus of the study and the unit of analysis.

The study found no major differences between the two districts in terms of demographic characteristics of managers, management education and training, and management practices as per the ten indicators used. On leadership, however, there were important differences in two key indicators – ‘personal initiative to get things done’ and ‘fairness in handling staff disciplinary matters’.

**Differences in demographic characteristics of managers**

The managers in the two DHOs were mostly female (3 of 5 in Depok and 4 of 5 in Bogor); largely general practitioners (GPs)/dentists (2 GPs and 2 dentists in each district); over the age of 45 years; and very experienced (all had worked for at least 15 years in the health service with most of them working their way up from the sub-districts. The two DHO heads, both dentists and female, had worked in the health service for over 25 years.

Ageing of managers was an issue in both districts: eight of the ten managers would retire in the next 1-5 years in accordance with the current retirement age of 55 for civil servants in structural positions. This is a potential problem, as both districts would lose most of their experienced managers to retirement.

**Differences in management education and training**

All ten managers had undergone the short-term training in public sector administration and leadership provided by the government to civil servants in structural positions in Indonesia. Formal qualification in management was held by only four of the ten managers (one from Depok and three in Bogor). The head of Depok DHO was the only manager in that district with a Masters of Public Health (MPH) degree, compared to three managers in Bogor with a Masters degree in various fields of management (not MPH).

**Differences in management practices**

Generally, the managers from both districts were aware of their responsibilities, handled staff disciplinary matters effectively, placed orders for drugs and supplies on time, held technical meetings regularly and collaborated reasonably well with the non-government sector. There were two areas where differences existed: 1. the availability and use of manuals to guide role performance and 2. collaboration with the non-government sector. Depok, in both instances, had better scores than Bogor.

Routine staff performance appraisal, timely feedback on performance and regular supervisory visits obtained relatively low scores in both districts, suggesting that human resource management (HRM) may be weak in both districts. **On leadership, however, there were important differences in two key indicators** – ‘personal initiative to get things done’ and ‘fairness in handling staff disciplinary matters’.
Asante, A et al.

RECOMMENDATIONS

• Differences in leadership behaviour

Across most of the ten leadership indicators, there were only minor differences between the two districts (less than two points). However, on ‘personal initiative’ the difference was marked – more than two points in favour of Depok (the high-performing district).

The Depok DHO head, with support from the Municipal Government, had reportedly implemented several innovative health programs. This included free health service for people with dengue, thereby removing a crucial access barrier and helping to control the disease in the district. The Depok DHO head was said to have also initiated resource mobilisation from local sources to support high risk mothers in need of medical care.

These innovations were in addition to implementing measures to gain ISO (International Organization for Standardization) accreditation and UPTD (Unit Pelaksana Teknis Daerah) status for health centres. The ISO accreditation and UPTD status were also being sought in Bogor district.

• Differences in organisational and contextual factors

Differences in organisational factors relating to the health system were minor: funding and personnel were inadequate in both districts and DHMs had limited authority over finance and staff. However, marked differences existed in contextual factors such as population size, landmass, accessibility and fiscal capacity of districts, largely in favour of the Depok district.

In conclusion, the differences in performance of the DHS in Bogor and Depok appear to have little to do with the performance of management functions by managers in the DHO, but may be significantly linked to ‘personal initiative’ of the respective DHO heads. However, differences in contextual factors offer, by far, the most plausible explanation as to why Depok performs relatively better than Bogor in health delivery.

Key recommendations of the study are summarised below. These require contextual and feasibility discussion within each DHO and with the head of PHO, as well as the respective Heads of Districts, in order to agree on priorities and resourcing to take these forward within an agreed timeline.

Issue: Addressing ageing of the management workforce at the DHO level:

It is recommended that:

• District governments institute succession plans based on merit, where the person most meritorious to be appointed to replace the serving DHO head would start working closely with the incumbent before they retire, in a form of ‘apprenticeship’, in order to learn as much as possible from them.

• District governments re-engage, on time-limited contracts, the retired DHO heads deemed to have been successful, in order to mentor novice managers.

Issue: Limited training in health management and leadership:

It is recommended that:

• Provincial governments evaluate existing management and leadership training programs for DHMs to assess their relevance and efficacy.

• Training institutions adapt health management training to the realities of health management in the districts, including working with district heads (Bupati) and with the various interest groups operating in the health sphere.

Issue: Limited role in Human Resource Management

It is recommended that:

• Provincial health authorities review the role of the DHM with a view to strengthening their management responsibilities in relation to hiring, firing and the payment of allowances to district health staff.

• Provincial and district health authorities allow DHMs to use incentives strategically to encourage better work behaviour and improved performance.
INTRODUCTION

Health systems and health management and leadership

Health systems in developing countries continue to undergo major transformations. Primary health care (PHC) is again on the global health policy agenda and is generally regarded by the World Health Organization (WHO) as key to attaining the health MDGs. The capacity of the DHS to deliver effective PHC services has once again become open to scrutiny.

Organisational reform such as decentralisation is shifting considerable responsibilities from central ministries of health to districts and other peripheral health units [Bossert et al. 2004]. Other significant reforms – including the introduction of social health insurance schemes, implementation or removal of user fees, task shifting and integration of community health workers into the formal health workforce – are changing the way health care is delivered and redefining relationships between different health system actors and levels.

To be effective in this changing environment, health managers and those in leadership roles must have the right combination of competence, creativity and managerial skills to plan and direct health service delivery [Sternberg 2003].

Like all managers, irrespective of where they work and what they manage, health managers perform four generic functions – planning, organising, leading and controlling [Lussier 2006]. Planning involves establishing goals and determining the appropriate means of achieving them; organising encompasses arranging and coordinating resources to achieve a desired goal; leading entails motivating others to achieve organisational goals and controlling covers measuring performance and monitoring progress relative to objectives [Pillay 2008].

While the debate about health care in developing countries easily gets overshadowed by financial constraints, there is evidence that weak M&L capacity is a major obstacle to service delivery in many countries [WHO 2007].

A review [Asante & Hall 2010] of published and grey material on health M&L in six countries in Asia and the Pacific found that M&L capacity was weak as the majority of district health managers were clinicians with limited formal training in management.

While the debate about health care in developing countries easily gets overshadowed by financial constraints, there is evidence that weak M&L capacity is a major obstacle to service delivery in many countries.

In Timor-Leste, for example, almost all the district managers had a nursing background and reportedly lacked managerial skills in key areas such as financial management and personnel administration.

Similarly, an evaluation of Australian aid to the health sector of Papua New Guinea, Solomon Islands and Vanuatu found considerable weakness in management capacity, with key functions such as supervision not performed effectively by managers at different levels [Foster et al. 2009].

Poor supervision was also reported in the three-country study undertaken by WHO in Ethiopia, Ghana and Tanzania [WHO 2009a]. A South African study of managers in public and private hospitals found a lack of management capacity within the public hospital sector [Pillay 2008].

There are growing concerns that unless M&L capacity and performance are significantly improved, attaining the health MDGs by 2015 will be difficult, even with significant injection of additional resources.

In the early 1980s, following the declaration of Alma Ata, several countries – supported by development agencies – created or revamped existing district health management teams (DHMTs) in order to implement the PHC agenda [Vaughan et al. 1984].

This was followed by another wave of health sector reforms in the 1990s which saw health care decision making and management responsibilities decentralised to sub-national levels, particularly the district levels, further reinforcing the need to strengthen management capacity at sub-national levels.

Development agencies supported a range of programs aimed at upgrading the technical skills of
health managers, especially in areas such as financial management and health information management [MSH 2010].

In some countries, the efforts to strengthen M&L capacity came as part of a broader public sector management capacity building with health as a component. The World Bank (WB), for example, supported public sector capacity interventions in Africa at a cost of about US$9 billion in lending and US$900 million in grant and administrative budgets between 1995 and 2004 [World Bank 2005].

Similar interventions with strong focus on public sector management were supported by the WB and other development agencies, including AusAID in the Asia-Pacific region in countries such as Bangladesh, Fiji, Solomon Islands and Papua New Guinea [Esteveadeordal et al. 2004; World Bank Independent Evaluation Group 2008].

Despite the efforts to improve health sector M&L in developing countries, the available evidence points to a generally weak M&L capacity and performance; a situation which is impacting negatively on service delivery and health outcomes.

**Rationale for this work in Indonesia**

Indonesia has made significant progress in health sector development in the last 50 years. Life expectancy at birth has increased by about 23 years from 48 years in 1970 to 71 years in 2009 [UNICEF 2010]. Under-5 mortality has dropped from 170 per 1,000 live births in 1970 to 39 per 1,000 in 2009 [UNICEF 2011]. The proportion of births attended by skilled health personnel has increased from about 43% in 1990-1999 to 73% in 2000-2008 [WHO 2009b].

Despite the progress, Indonesia faces considerable health and health system challenges. The country’s maternal mortality ratio has decreased from 390 per 100,000 live births in 1990-1994 to 230 in 2005-2009, but is still among the highest in Southeast Asia [Ananta 2003; UNICEF 2010]. The 2010 ratio of 228 deaths per 100,000 live births was more than double the MDG target of 102 per 100,000 by 2015.

Significant regional inequities in health also exist; infant mortality in Jakarta, for example, is 28 per 1,000 live births compared to 74 per 1,000 in West Sulawesi. About 97% of births are attended by a skilled health worker in Jakarta against 33% in Maluku Province. Nearly 70% of Indonesia’s wealthiest women give birth with a health professional in attendance, compared to only 10% of the poorest quintile in the Serang and Pandeglang districts in West Java [Statistics Indonesia (Badan Pusat Statistik-BPS) & Macro International 2008; World Bank 2010].

Indonesia also faces an additional challenge of rising non-communicable diseases (NCDs). With about 53% of men smoking tobacco on a daily basis, NCDs are likely to put additional strain on the health care system [Rokx et al. 2010].

In recent decades, the GoI has undertaken key reforms to improve the economy and the health sector. The decentralisation reform of 2001, in particular, has led to a major transformation from a centralised administrative system to a decentralised structure in which districts and municipalities assume a greater role in the provision of basic health care and referral services [Kruse et al. 2012].

District health managers, under the decentralisation policy, have greater control over the planning and day-to-day management of the local health services. Their performance may significantly determine the performance of the DHS and the achievement of national health policy objectives.

There is evidence that some districts, despite the challenges, perform better than others in terms of health outcomes and meeting service delivery targets. Such successes may relate, in part, to the calibre of managers in these districts, the work environment, the management support systems available and other district specific factors.

Exploring and understanding these factors underpinning the relative success of some districts may provide insights into M&L practices that contribute to high DHS performance.

**Study objectives and clarification of key concepts**

The primary objective of this investigation is to explore and analyse the extent to which district health managers affect district health service performance in order to identify M&L practices that contribute to high DHS performance.
The overall purpose is to contribute to the development of evidence-informed policy options to strengthen health M&L capacity and performance at the district level.

We defined management and leadership broadly because health managers, especially those at the district level, manage the health service in its entirety – the delegated functions in personnel, finance and information, among other things. The majority of managers also negotiate relationships between the health sector and other sectors as well as the numerous stakeholders operating in the health field.

Conceptually ‘management’ and ‘leadership’ are not treated separately in this analysis, although we acknowledge they are sometimes treated independently in the literature. We followed Mintzberg [2004] who sees little need for such distinction on the grounds that ‘managers have to lead and leaders have to manage’. According to Mintzberg, “management without leadership is sterile and leadership without management is disconnected and encourages hubris” [Mintzberg 2004, p.6]. Thus, effective leadership is one of the many competencies that a good manager must demonstrate.

The terms ‘manager’ and ‘management team’ are used to describe the person or group of persons who coordinate health activities at the district level, including managing resources and building partnerships with relevant stakeholders. That person(s) may be head of the DHS (e.g. district medical officer), program head or hospital/ facility manager. The resources they manage may include personnel, finance, information, buildings, equipment, supplies and transport.

Finally, the focus of this study is on health managers at the DHO level and the District Health Management Team (DHMT).
METHODS

Aims
This study examines the performance of district health managers in high and low performing districts in an attempt to understand whether, and the extent to which, these managers affect the performance of their district health services. The purpose is to identify M&L practices that may contribute to high DHS performance and can be shared across districts.

Questions and assumptions
Primary question: how far do district health managers affect the performance of their district health services through their management and leadership practices?
Contributory questions:

i. Are there differences in personal characteristics of managers in high and low performing districts?

ii. Are there differences in management and leadership practices of managers in high and low performing districts?

iii. To what extent do differences in personal characteristics and management and leadership practices (if any) explain the overall differences in DHS performance?

iv. What other factors may explain the differences in DHS performance?

The study hypothesised that the differences between individual DHS performances reflect, at least in part, the differences in performance of district health managers. The performance of managers was assumed to be reflected by their day-to-day M&L practices and behaviours.

Design
An exploratory case study design focusing on two districts in the West Java Province – one relatively high-performing (Depok municipality) and the other fairly low performing (Bogor district) – was used.

The indicators used include malnutrition among children under-5, stunting among children under-5, completed immunisation, ante-natal care visits, access to sanitation, births attended by skilled health professionals, and diarrhoea, malaria and tuberculosis cases (Table 1, page 10).

The two districts were not selected based on performance only; other factors such as accessibility were taken into account.
TABLE 1. SELECTED INDICATORS USED TO ASSESS AND RANK DISTRICT HEALTH SERVICE PERFORMANCE IN INDONESIA

<table>
<thead>
<tr>
<th>NO.</th>
<th>INDICATORS</th>
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<tr>
<td>1.</td>
<td>No. of population</td>
<td>15.</td>
<td>Ante natal care visits</td>
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<tr>
<td>3.</td>
<td>% of poor population</td>
<td>17.</td>
<td>Prevalence of malaria</td>
</tr>
<tr>
<td>4.</td>
<td>Life expectancy at birth</td>
<td>18.</td>
<td>Prevalence of tuberculosis</td>
</tr>
<tr>
<td>5.</td>
<td>No. of villages</td>
<td>19.</td>
<td>Prevalence of diarrhoea</td>
</tr>
<tr>
<td>6.</td>
<td>No. of midwives</td>
<td>20.</td>
<td>Prevalence of pneumonia</td>
</tr>
<tr>
<td>7.</td>
<td>Ratio of midwife to population</td>
<td>21.</td>
<td>Prevalence of hypertension</td>
</tr>
<tr>
<td>8.</td>
<td>No. of GPs</td>
<td>22.</td>
<td>Prevalence of mental disorders</td>
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<tr>
<td>10.</td>
<td>No. of health centres</td>
<td>24.</td>
<td>Prevalence of asthma</td>
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<tr>
<td>11.</td>
<td>Ratio of health centre to population</td>
<td>25.</td>
<td>Prevalence of smoking</td>
</tr>
<tr>
<td>13.</td>
<td>Deliveries attended by a skilled health personnel</td>
<td>27.</td>
<td>Access to sanitation</td>
</tr>
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Source: [National Institute of Health Research and Development (NIHRD) 2009]
Data collection
A mixed-methods approach involving surveys, in-depth and semi-structured interviews was used to gather data from provincial, DHO and health centre levels of the health system.

- **Provincial level**
  Two in-depth interviews were conducted with the head of the provincial health office and one other senior manager. Information gathered through these interviews covered support for and supervision of district managers; system of accountability; leadership behaviour and practices of managers; performance assessments and mechanisms for feedback; and functioning of management support systems such as procurement and supplies, health information and budgeting and planning systems.

- **DHO Level**
  This level was the main focus of the study. A survey using a researcher-administered questionnaire was conducted with DHO heads and other members of the DHMT in Depok and Bogor. A total of ten managers were surveyed from two districts, five from each district, and including district heads. Information gathered through the survey consisted of personal characteristics of members of the DHMT; management training and experience; the management working environment; management support systems; management and leadership behaviour and practices and other district specific factors that affect the performance of managers. In addition to the survey, in-depth interviews were held to elicit more information about some of the key issues that emerged from the survey.

- **Health centre level**
  Two health centres were selected from each district. The health centres were selected following consultations with the head of the DHO. In each health centre, two semi-structured interviews were conducted with the manager or officer-in-charge (OIC) and one other staff member involved in the management of the facility. Thus, four interviews were conducted in each district and a total of eight in the two districts.

  The interviews sought to elicit views on the general performance of the DHO head and members of the DHMT. This included views on leadership behaviour of head of the DHO, rate of supervision, accountability, supplies and finance.

  Overall, 20 interviews were conducted in the Bogor and Depok districts: 10 at DHO level, eight at health centre level and two at the provincial level (Figure 1, below). At each level, key operational and other documents, including annual reports and legislations, were collated for data triangulation and other purposes.

**FIGURE 1. NUMBER AND LOCATION OF INTERVIEWS**
Participation in the study

Participation in the study was voluntary. The research team explained the objectives of the study to the head of the Provincial Health Office and sought approval before going to the DHO. In each district the DHO head was contacted and through them other members of the health management teams who could participate in the study were identified. Each potential participant was contacted individually and those willing to participate in the study were scheduled for interview.

Indicators for assessing the performance of managers

While management and leadership performance is believed to affect the overall DHS performance, there is no agreement on indicators for assessing manager performance. A major contribution of this study is to develop and apply a set of indicators in a specific health context.

Ten management performance indicators and ten key leadership indicators were assembled following a review of the extant literature and health service performance indicators from Indonesia. The indicators cover some of the key activities that district health services managers undertake. They reflect the dual role of district health managers as responsible for implementation of health programs and also personnel administration (Figure 2, Box A, page 13).

Ten leadership indicators were also compiled after the literature review and used to assess the leadership performance of the designated manager (i.e. the DHO head) (Figure 2, Box C). Districts ranked as ‘high performing’ by the MoH were expected to measure well against these indicators and vice versa.

In addition to the M&L indicators, eight key indicators were developed to assess how the organisational structures of the district health system function (Box D). This is important as organisational factors are known to affect the performance of managers and the DHS as a whole. Finally, DHS performance and the performance of managers may be influenced by contextual factors; eight key contextual indicators (Box B) were used to gauge the extent of this influence.

Data analysis

The data were analysed using simple descriptive statistics for the survey and content analysis for the qualitative data. The performance of the managers at the DHO level was the unit of analysis. A scoring system was developed to assess and compare the performance of DHO managers in Bogor and Depok on the 10 generic management indicators. The scoring was based on both the survey data and the in-depth interviews with these managers.

Starting with the survey data, a score of 1 or 0 was assigned to a positive (yes) or negative (no) response by each of the five interviewees about whether or not an indicator is carried out by the district team. A further score of between 0 and 1 was assigned if the qualitative account of managers suggests the indicator is routinely and effectively carried out. Thus, if the qualitative data suggest an indicator is routinely carried out and was effective, a score of 1 was assigned; if mixed (i.e. suggest it is routinely carried out but not effective or vice versa), a score of 0.5 was assigned and if overall negative (i.e. indicator neither routinely carried out nor effective) a score of 0 was assigned. The account of the DHO managers was triangulated with information obtained from the provincial and health centre level. The total score of each indicator was summed up and aggregated to get the final district score.

The leadership indicators were scored using a similar approach. The responses on a Likert scale were scored from 0 (strongly disagree) to 4 (strongly agree). A maximum score of 16 (given there were four informants in each district) was derived for each indicator which was later scaled down to 10 to give a total of 100 for the ten indicators. The leadership behaviour was assessed only for the DHO head.
FIGURE 2: INDICATORS FOR ASSESSING MANAGERS’ ROLE IN DHS PERFORMANCE

A. Management performance indicators
1. Know responsibilities as manager
2. Have & use procedural manuals
3. Undertake routine staff appraisals
4. Provide timely feedback on staff appraisals
5. Handle staff disciplinary matters effectively
6. Request drugs & supplies on time
7. Undertake regular staff supervisory visits
8. Have technical meetings regularly
9. Use health data for decision making
10. Collaborate effectively with non-government sectors

B. Key contextual indicators
1. District population
2. Area (land size)
3. Fiscal capacity of district
4. Remoteness of district
5. Level of poverty (below US$1/day)
6. Education (literacy rate)
7. Presence of non-government organisations
8. Size of private (for profit) providers

C. Leadership behaviour indicators
1. Listens to staff
2. Understands the needs of staff
3. Treats staff as individuals
4. Sets good work example worth emulating
5. Has personal initiative to get things done
6. Fair and consistent in handling staff matters
7. Acknowledges jobs well done
8. Unbiased in dealing with staff disciplinary issues
9. Shows concern for staff career advancement
10. Generally respected by staff

D. Key organisational indicators
1. Adequate & timely disbursement of funding
2. Adequate number of health workers
3. Established & functional system of procurement & supply
4. Functional health management information system
5. Access to transport
6. Established system of incentives
7. Degree of authority over staff
8. Degree of authority over finance
STUDY LOCATION

Overview
This chapter provides relevant background data about the Bogor District and Depok Municipality. Overall it appears that the Bogor district compares quite poorly with Depok on several health and related indicators. A table comparing selected health and related indicators in the two districts is provided on page 23.

Bogor District
Geography and population
The Bogor district or regency (Kabupaten Bogor) is one of the 26 districts and municipalities in the West Java province. The district covers an area of about 2,371 square kilometres and is bordered to the north by the Depok and Bekasi municipalities and the Tangerang and Bekasi districts; to the south by Sukabumi district; east by Cianjur and Karawang districts; and west by the Banten province (Figure 3, below). Administratively the Bogor district is divided into 40 sub-districts, 411 villages and 17 urban villages (kelurahan). For development purposes, the district is further divided into three main development territories (DPs): West DP consisting of 13 sub-districts, Middle DP comprising 20 sub-districts and East DP made up of 7 sub-districts.

The Bogor district has an estimated population of 4.3 million, about 51.4% of which is male and 48.6% female. The population is estimated to be growing at the rate of around 3.4% – one of the highest in Indonesia [Population, Civil Registration and Family

FIGURE 3. MAP OF WEST JAVA PROVINCE SHOWING DISTRICTS AND MUNICIPALITIES

Source: http://en.wikipedia.org/wiki/West_Java
The Bogor DHO, under the decentralised system, is responsible for implementation of health policy and programs in the district.

Planning Office 2008). The distribution of the population across sub-districts varies significantly, with sub-districts such as Cibinong having about 250,695 inhabitants while others like Cariu have less than 50,000 people. In general, the sub-districts in the north of the district bordering the municipalities of Bekasi and Depok, those in industrial areas and those which have easy access routes have larger populations. The overall population density of the Bogor district is estimated at about 1,831 people per square kilometre.

The Bogor District Health Office
The Bogor DHO, under the decentralised system, is responsible for implementation of health policy and programs in the district. Administratively, the DHO and the district health service as a whole, like other government departments, is under the local government headed by the Bupati (the Bupati in Indonesia is similar to District Mayor in some countries). However, technical oversight rests with the provincial health office. DHOs are more responsible for PHC service delivery in health centres and sub-centres than for district hospitals.

The total number of personnel working in the Bogor DHO in 2008 was 205. The positions of these personnel may be structural or functional. Structural positions are more hierarchical and carry administrative authority while functional positions are more technical. They were made up of 31 medical and dental personnel (15.1%); 42 nurses and midwives (20.5%); 58 other professionals (28.9%) consisted of pharmacists, nutritionists, sanitarians and public health specialists; and 79 non-health personnel (36.1%) including drivers, cleaners and others.

In terms of organisation, the Bogor DHO has four technical implementing units (Unit Pelaksana Teknis/ UPT): the Health Center unit (Puskesmas); District Health Laboratory (Labkesda); Leuwiliang Preparatory Regional Hospital (RSD); and Occupational Health Services unit (Yankesja).

Health facilities
In 2008, there were 101 health centres in the Bogor district. These consisted of 18 units of UPT (Unit Pelaksana Teknis or Technical Implementing Unit) health centres with beds (for in-patient care); 22 units of UPT health centres without beds (without in-patient care) and 61 units of Functional Service Unit (UPF) health centres. Other primary health service facilities (health centre network) include 86 units of auxiliary health centres; 42 units of mobile health centres and 30 units of emergency ambulance.

In terms of density, there was one health centre to about 42,983 people in 2008 compared to the 2008 national average of about 1/27,200 population (or 3.7 health centres per 100,000 population). The number of auxiliary health centres per population in 2008 was 2/100,000.

In addition to the network of health centres, Bogor had 14 hospitals in 2008 which comprised two district hospitals (RSD Cibinong and RSD Ciawi); one district pulmonary hospital; one hospital owned by the Indonesian Air Force (Atang Sanjaya Hospital); four private ‘special’ hospitals (Citra Insani Maternal and Child Hospital, AiBee Aesthetic Centre Plastic Surgery Hospital, Tunas Jaya Maternity Hospital and Trimitra Maternal and Child Hospital) and four private general hospitals (Bina Husada, Family Medical Centre, MH Thamrin and Mary Cileungsi Hijau Hospitals). There is ongoing construction of two District Government Hospitals – in Leuwiliang and Jonggol.

1 Within the Indonesian Public Service, structural positions are those positions that fall within a strict hierarchy whether at the central or regional level (e.g. Head of District Health Office or head of Sub-District Health Centre). They carry administrative authority and are more bureaucratic. The Secretary General of Health at the MoH is the highest structural position within the Ministry. Functional positions, on the other hand, are more technical positions such as trainer of health personnel (e.g. Centre for Health Manpower Development) or health researcher at the National Institute for Health Research and Development or a clinician without a structural position. It is not uncommon for a person to hold both a structural and functional position at the same time (see United Nations 2005).
FIGURE 4. ORGANISATIONAL STRUCTURE OF THE BOGOR DISTRICT HEALTH OFFICE

Head of Bogor District Health Office

Group of Functional Position

Group of Supporting Management Position

Secretary

Program and Reporting Sub-unit

General Affairs and Staffing Sub-unit

Financial Sub-unit

Promotion and Health Resources Unit

Health Services Unit

Community Health Unit

Communicable Disease Control and Environmental Health

Basic Services Sub-unit

Pharmacy Sub-unit

PLK Sub-unit

MCH/FP Sub-unit

Nutrition Sub-unit

Elderly Sub-unit

EPIM Sub-unit

Environmental Health Sub-unit

P2P Sub-unit

UPT Health Centre

UPT District Laboratory

UPT Leuwiliang District Hospital

UPT Occupational Health & Safety

Source: [Bogor DHO 2008]

Note:

UPT = Unit Pelaksana Teknis (Technical implementing unit).

PSDK = Promosi Kesehatan Sumber Daya Kesehatan (Health promotion and human resources).

P2P = Penanggulangan Penyakit dan Pnyehatan Lingkungan (Communicable disease control & environmental health & sanitation).

EPIM = Epidemiology and immunisation sub-unit.

PLK = Perbekalan Kesehatan (Health procurement and logistics).
**Human resources for health**

The number of public sector health and non-health personnel in the Bogor district in 2008 was 4,936. They consisted of 3,648 health personnel (73.9%) and 1,288 non-health personnel (26.1%). Of the total 4,936 personnel, 36.6% (1,804) worked at health centres level; 59.6% (2,941) at the hospital level and 3.8% (191) at DHO level [Bogor DHO 2008]. About 16% (291) of the 1,804 personnel working at the health centre level in 2008 were medical personnel (general practitioners, specialists, dentists, and dental specialists); 63.3% (1,141) were nurses and midwives and 14% (248) were in various professions including pharmacists, medical technicians, sanitarians and public health specialists. Only 7% (124) were classified as non-health personnel (Figure 5, below).

At the hospital level, the number of health personnel working in all hospitals in the Bogor district, both public and private, in 2008 was 2,941 [Bogor DHO 2008]. This consisted of 16% (463) medical personnel (general practitioners, specialists, dentists, and dental specialists); 34% (1,002) nurses and midwives; 13% (386) other professionals (pharmacists, nutritionists, medical technicians, sanitarians, public health specialists) and 37% (1,090) non-health personnel such as drivers and cleaners. A key difference in personnel composition between health centres and hospitals in Bogor is the relatively large number of nurses and midwives at the health centre level (63% against 34% at hospital level) compared to the large number of non-health personnel at the hospital level (37% as opposed to 7% at the health centre level).

Overall, based on 2008 figures, every health centre in Bogor district is served by about 18 health personnel of various professions. This is below the expected national average of 23 personnel per health centre. Specific for doctors providing primary health care, there are 6-7 per every 100,000 population or one doctor for every 14,300-16,700 population.

**FIGURE 5. DISTRIBUTION OF HEALTH CENTRE PERSONNEL BY CADRE IN BOGOR DISTRICT, 2008**

![Pie chart showing distribution of health centre personnel by cadre](source: Adapted from (Bogor DHO 2008))
Sources of health financing

Public funding for health activities in the Bogor districts comes from a range of sources including the national budget (Anggaran Pembangunan dan Belanja Negara - APBN), provincial and district budget (Anggaran Pembangunan dan Belanja Daerah - APBD), foreign aid (Bantuan Luar Negeri - BLN), foreign loan (Pinjaman Luar Negeri - PLN), private and community sources. In 2008, the total health budget for the district amounted to about Rp 206.7 billion (approximately US$22.9 million). In per capita terms, this was about Rp 48,000 or US$5. It is worth noting that in Indonesia around 50% of health expenditure is out-of-pocket. Table 2 (below) presents health funding by source for Bogor district in 2009.

Funding from district sources (APBD 2) was by far the largest source of health funding in the Bogor district in 2008, accounting for over 80% of total district health budget. However, it is worth noting that generally districts in Indonesia derive about 90% of their overall funding from the central government through grants and other allocations.

**TABLE 2. PUBLIC FUNDING FOR HEALTH BY SOURCE - BOGOR DISTRICT, 2008**

<table>
<thead>
<tr>
<th>SOURCE</th>
<th>AMOUNT (IN BILLION RP*)</th>
</tr>
</thead>
<tbody>
<tr>
<td>National budget (APBN)</td>
<td>14,085</td>
</tr>
<tr>
<td>Provincial budget (APBD 1**)</td>
<td>905</td>
</tr>
<tr>
<td>District budget (APBD 2)</td>
<td>186,177</td>
</tr>
<tr>
<td>Foreign aid (BLN)</td>
<td>5,490</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>206,657</strong></td>
</tr>
<tr>
<td><strong>Health budget per capita</strong></td>
<td><strong>Rp 48,000</strong></td>
</tr>
</tbody>
</table>

Source: [Bogor DHO 2008]

*Rp = Indonesia Rupiah

**Note: Both provincial and district budgets are called APBD; we have used numbers 1 and 2 to distinguish between the two APBDs.
Depok Municipality

Geography and population
The Depok municipality (city) lies about 30 km from Jakarta, the capital of Indonesia. It is a relatively small district covering an area of just about 200 square kilometres. It is bordered to the north by DKI Jakarta and the Tangerang district; to the south and west by the Bogor district and to the east by Bekasi district (Figure 3, page 14). Until 1999, when it became a municipality, Depok was part of the Bogor district. The close proximity to Jakarta has made Depok one of the most important and fastest growing cities in the West Java province. Over a relatively short period, it has grown and continues to grow into an important hub for commerce, education and services. Administratively the Depok municipality is divided into six sub-districts, 63 villages and more than 800 other smaller administrative units [Rahjeng and Kusumawardhani 2010].

Depok has a population of about 1.5 million of which 52% are male and 48% are female [BPS 2009]. The district’s population has witnessed a rapid growth in the past few years. Prior to becoming a municipal district in 1999, the population was less than one million. Thus, it has increased by more than 50% (500,000 people) in 10 years between 1999 and 2009. The rapid increase was partly due to the district’s high population growth rate (over 3.5%) and a very high rate of internal migration. About a quarter of the population is under the age of 15. The population density of 7,674 per square kilometre is one of the highest in Indonesia. It is expected to increase further as migration into the area continues in line with increasing economic activities. The population is heterogeneous with a mix of ethnicity and cultures; about 90% of the 26 main ethnic groups in Indonesia can be found in Depok [Rahjeng and Kusumawardhani 2010].

The Municipal Health Office
The Local Government Decree No. 9/1999 stipulates how the Depok Municipal Health Office (MHO) should be organised and function. In 2008 there were 68 health personnel working at the MHO in both functional and structural roles. They included 16 doctors/dentists, 27 nurses and midwives, and 25 other professionals including pharmacists, nutritionists, sanitarians and public health specialists [MHO 2008]. In addition, there were a number of non-health personnel such as drivers and cleaners.

The MHO, similar to the Bogor DHO, is more responsible for PHC services than secondary care at the municipal hospital. It has four basic units made up of health resources and health development unit, communicable disease control and environmental health unit, community health unit and health supplies and food and drugs unit (Figure 6, page 20). There are also several regional technical implementing units (UPFs). While the organisational structure of Depok MHO is similar to that of Bogor district, Depok municipality has fewer established positions, reflecting its relatively smaller population.

Health facilities
In 2009, there were 30 health centres (puskesmas) providing primary health care services across the six sub-districts in the Depok municipality. Thus, one health centre was, on the average, serving about 51,000 people – far below the national ratio of one health centre per 30,000 population. In addition to the health centres there were 12 general hospitals (Rumah sakit umum), 4 maternal and child hospitals (Rumah sakit ibu & anak), 137 clinics (Balai pengobatan – BP), 19 maternity homes (Rumah bersalin – RB), 19 licensed maternity homes (Rumah bersalin berizin) and 20 private health laboratories (Laboratorium kesehatan swasta) [BPS 2009]. The majority of the health facilities in the municipality are public and run by the local government but there are also private health networks, including maternal and child hospitals, that provide obstetric and neonatal emergency services.
Asante, A et al.  

What can we learn from high performing districts in the West Java Province of Indonesia?

FIGURE 6. ORGANISATIONAL STRUCTURE OF DEPOK MUNICIPALITY HEALTH OFFICE

Source: Depok Municipal Health Office 2008
Human resources for health

Data from the MHO suggest that in 2008 there were a total of 377 health personnel working in health centres and networks and the municipal health office (excluding health workers in the municipal hospital). The largest proportion of personnel (49% or 186) were nurses and midwives. About 32% (120) were doctors or dentists and the rest (19%) were made up of other health professionals including pharmacists and nutritionists. The health worker (doctors, nurses and midwives) to population ratio was 1:5,703, but the doctor to population ratio stood at 1:12,500. Figure 7 (below) shows the distribution of health centre personnel by cadre in 2008. Overall, health centres and their networks, including auxiliary health centres and maternity huts, absorb around 82% of health personnel in the municipality and the rest work at the municipal health office (see Municipal Health Office, page 19).

Overall, health centres and their networks, including auxiliary health centres and maternity huts, absorb around 82% of health personnel in the municipality and the rest work at the municipal health office.

FIGURE 7. DISTRIBUTION OF HEALTH PERSONNEL BY CADRE IN SUB-DISTRICTS IN DEPOK MUNICIPALITY, 2008

Source: Depok Municipality Health Profile, 2008
Sources of health financing

As in the Bogor district, funding for health activities in Depok municipality is derived from various sources including the national budget (APBN), provincial and district budget (APBD), foreign aid (BLN), foreign loans (PLN), and private and community sources. In 2009, the total health budget of the municipality was about Rp 58.4 billion (nearly US$6.5 million). Table 3 (below) provides the breakdown of health funding by source for 2009.

On average, over 80% of the total health funding comes from the municipal government budget. This was approximately 5.5% of the total budget of the municipality (APBD) which was about Rp 1.1 trillion (around US$123 million). Compared to the Bogor district, the Depok municipality allocates slightly less resources for health budget per capita (in 2009, the per capita allocation was about Rp 43,000 in Depok and Rp 48,000 in Bogor). However, the overall funding for health in both districts seems to reflect the differences in population; Depok has about a third of the total population of Bogor district and its health budget is also nearly a third of the total health budget of Bogor.

Comparison of Bogor and Depok on health-related indicators

Despite allocating relatively more funding for health per capita, the Bogor district compares quite poorly with Depok on several health and related indicators. For example, for health personnel there was one GP per 7,714 population in 2008 in the Bogor district compared to one GP per 3,689 in Depok municipality for the same year. Midwife per population ratio was only slightly lower in Bogor 1: 4,735 than in Depok 1:4,510. Table 4 (page 23) presents a comparison of the two districts on selected health related indicators.

**TABLE 3: PUBLIC FUNDING FOR HEALTH BY SOURCE – DEPOK MUNICIPALITY, 2009**

<table>
<thead>
<tr>
<th>SOURCE</th>
<th>AMOUNT (IN BILLION RP*)</th>
</tr>
</thead>
<tbody>
<tr>
<td>National budget (APBN)</td>
<td>4,952</td>
</tr>
<tr>
<td>Provincial budget (APBD 1)</td>
<td>2,590</td>
</tr>
<tr>
<td>District budget (APBD 2)</td>
<td>57,377</td>
</tr>
<tr>
<td>Donors (GAVI, Global Fund, etc.)</td>
<td>224</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>65,143</strong></td>
</tr>
<tr>
<td>Health budget per capita</td>
<td><strong>Rp 43,000</strong></td>
</tr>
</tbody>
</table>

*Source: Profil Kesehatan Kota Depok, 2008

*Rp = Indonesian Rupiah
### TABLE 4. SELECTED HEALTH RELATED INDICATORS IN Bogor AND DEPOK DISTRICTS, 2008

<table>
<thead>
<tr>
<th>INDICATOR</th>
<th>BOGOR</th>
<th>DEPOK</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Human development index(^a)</td>
<td>205</td>
<td>5</td>
</tr>
<tr>
<td>2. Public health development index(^b)</td>
<td>280</td>
<td>88</td>
</tr>
<tr>
<td>3. Population</td>
<td>4,219,324</td>
<td>1,503,677</td>
</tr>
<tr>
<td>4. No. of households</td>
<td>968,142</td>
<td>391,412</td>
</tr>
<tr>
<td>5. % of poor population(^c)</td>
<td>13.1</td>
<td>2.4</td>
</tr>
<tr>
<td>6. Life expectancy at birth</td>
<td>67,63</td>
<td>72,72</td>
</tr>
<tr>
<td>7. No. of villages</td>
<td>428</td>
<td>63</td>
</tr>
<tr>
<td>8. No. of midwives</td>
<td>891</td>
<td>274</td>
</tr>
<tr>
<td>9. Midwives per population</td>
<td>1:4,735</td>
<td>1:4,510</td>
</tr>
<tr>
<td>10. No. of general practitioners (GPs)</td>
<td>547</td>
<td>335</td>
</tr>
<tr>
<td>11. GP per population</td>
<td>1:7,714</td>
<td>1:3,689</td>
</tr>
<tr>
<td>12. No. of health centres</td>
<td>101</td>
<td>27</td>
</tr>
<tr>
<td>13. Health centres per population</td>
<td>1:41,775</td>
<td>1:45,772</td>
</tr>
<tr>
<td>14. Under-nutrition among children below 5 years of age (%)</td>
<td>15.9</td>
<td>12.3</td>
</tr>
<tr>
<td>15. Stunting among children below 5 years of age (%)</td>
<td>31.7</td>
<td>28.7</td>
</tr>
<tr>
<td>16. Prevalence of malaria</td>
<td>0.28</td>
<td>0.16</td>
</tr>
<tr>
<td>17. Prevalence of tuberculosis (%)</td>
<td>0.85</td>
<td>0.44</td>
</tr>
<tr>
<td>18. Prevalence of diarrhoea (%)</td>
<td>8.31</td>
<td>4.48</td>
</tr>
<tr>
<td>19. Prevalence of pneumonia (%)</td>
<td>1.66</td>
<td>0.91</td>
</tr>
<tr>
<td>20. Prevalence of hypertension (%)</td>
<td>30.7</td>
<td>20.1</td>
</tr>
<tr>
<td>21. Prevalence of mental disorder (%)</td>
<td>14.5</td>
<td>17.9</td>
</tr>
<tr>
<td>22. Prevalence of dental problem (%)</td>
<td>19.8</td>
<td>24.1</td>
</tr>
<tr>
<td>23. Prevalence of asthma (%)</td>
<td>4.0</td>
<td>2.9</td>
</tr>
<tr>
<td>24. Smoking rate among adult population (%)</td>
<td>32.1</td>
<td>25.0</td>
</tr>
<tr>
<td>25. Access to clean water (%)</td>
<td>22.2</td>
<td>24.9</td>
</tr>
<tr>
<td>26. Access to sanitation (%)</td>
<td>47.2</td>
<td>87.1</td>
</tr>
<tr>
<td>27. Deliveries attended by a skilled health personnel (%)</td>
<td>48.4</td>
<td>92.5</td>
</tr>
<tr>
<td>28. Completed immunisation (%)</td>
<td>29.4</td>
<td>22.2</td>
</tr>
<tr>
<td>29. First ante natal care visit (%)</td>
<td>45.5</td>
<td>50.0</td>
</tr>
</tbody>
</table>


\(^a\)Based on 440 Regencies/Municipalities in 33 Provinces (2008)

\(^b\)Based on 440 Regencies/Municipalities in 33 Provinces (2008)

\(^c\)Based on proportion of population who are living below the national poverty line.
RESULTS

Overview
The results of the study are presented under five broad headings:
1. Characteristics of managers covering basic demographics and career history, including number of years worked in the health service and appointment to current management position, management education and training, and management work experience.
2. Performance of management roles and functions.
3. Leadership behaviour and practices of managers.
4. Functioning of organisational structures of the health system.
5. Contextual factors.

1. Characteristics of managers
Insights from DHO Level

Basic demographics:
The ten district managers interviewed (5 from Bogor DHO and 5 from Depok DHO) were largely female (7 out of 10) with ages ranging from 47 to 54 years. Their primary professional qualifications were in the areas of medicine, dentistry, nursing and pharmacy; 8 out 10 were qualified as GPs or dentists (four from each district); only one from each district had a nursing or pharmacy background (Table 5, page 25).

Career history, appointment to current position and retirement:
All the managers had worked in the health service for over 15 years. The majority of them started from lower level in the sub-district, largely working in health centres for many years before being appointed to their current positions at the DHO. One respondent recounted working at the health centre for 18 years before being promoted to head a sub-unit for two years and then to the current position as unit head at the DHO.

“What previously I held the position as head of health centre, and then promoted to head of Family and Reproductive Health sub-unit. I held the head of sub-unit position for about 2 years and was head of health centre for 18 years.”

The process of appointing a DHO head (i.e. the designated district health manager) differs from the appointment of other members of the district management team. For the head of the DHO the prerogative to appoint rests with the Provincial Governor. Both DHO heads interviewed confirmed that they were appointed to their current positions by the Governor of the West Java Province.

The respondents described the appointment process as beginning with the head of district/municipality (Bupati/Walkota) making a proposition to the Governor regarding suitable candidates for the post. The Bupati does this in consultation with the Advisory Board on Position and Rank (Baperjakat) in the district. The Governor then consults the Advisory Board on Position and Rank at the provincial level (Baperjakat for Provincial Agencies) through the Provincial Secretary who is the highest civil servant in the province (at Echelon I). Based on the advice received, the Governor selects a candidate for the position.

The head of the DHO position is an Echelon II senior level structural position which, according to Indonesia civil service regulations, must be occupied by a person with the prescribed qualifications and experience.

Appointment of other core members of the district management team is handled within the district by the Bupati. It starts with the head of the DHO nominating suitable person(s) to the Bupati through the secretary of the local government. The Bupati makes the appointment by first consulting the Baperjakat which assesses the nominated person’s suitability for the position, taking into account the position hierarchy, the nominee’s work experience, education and training and work achievements.

The majority of the respondents noted that more recently the Regional Civil Service Agency (BKD) has been conducting a “fit and proper test” to assess the suitability of persons nominated for structural DHO positions. The Bupati derive their power to appoint DHO staff from Government Decree No. 38/2007 that deals with the division of governmental functions between central and regional governments. Under this regulation, the Bupati, within their areas of jurisdiction and in accordance with the needs and financial capacity of the district, can appoint Echelon III (e.g. head of units) and Echelon IV (heads of sub-units) staff.
### TABLE 5. CHARACTERISTICS OF MANAGERS

<table>
<thead>
<tr>
<th>ITEM</th>
<th>BOGOR (N=5)</th>
<th>DEPOK (N=5)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>46-50</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>51-55</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Female</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td><strong>Education background</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Medicine</strong></td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td><strong>Dentistry</strong></td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td><strong>Environmental health</strong></td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td><strong>Pharmacy</strong></td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td><strong>Formal management qualification</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MPH</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Masters in other management fields</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>No management qualification</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td><strong>Last time attended a management training</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than a year ago</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>About 3-4 years ago</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>About 5 or more years ago</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td><strong>Years worked in any management position</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>1-10 years</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>10-15 years</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>More than 15 years</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td><strong>Years worked in management position in study district</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-5 years</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>5-10 years</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>10-15 years</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>More than 15 years</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>
Based on the ages of the respondents, about half will retire from their current structural positions (if not from the health service) in 1-5 years in compliance with the official Indonesian civil service retirement age of 55 years for structural staff. Some of the respondents have contemplated opting for a functional appointment within the health service which will allow them to work until 60 years or more, depending on rank. Others have thought about going into private practice or taking an appointment in a different sector.

“... I just think that with my age and years worked I have had enough of the current position. I’ll be retiring in about 4 years from now. But if there is a chance for me to continue my studies and if that could be useful for my retirement, I would probably consider that... just to make my retirement period a useful one.”

Management education and training:
More than half of the DHO managers in both districts had no formal qualification in management. In the Depok municipality only one of the five managers interviewed had a management related qualification (MPH). In the Bogor district, on the other hand, three of the managers had a master’s degree in management.

All participants, however, had received training in health administration and leadership for a structural career hierarchy, provided largely by the Regional Staffing Board (BKD) in conjunction with the Advisory Board on Position and Rank (Baperjakat).

The courses undertaken included Pendidikan dan Pelatihan Administrasi Umum (Diklat Adum) (Education and Training on General Administration), Diklat Adum Lanjutan (Advanced Education and Training on General Administration), and Sekolah Pimpinan Administrasi Menengah (SPAMEN) (Mid-level School for Administrative Leaders). Four of the managers in Bogor and two of the managers in Depok had attended these training programs less than a year ago from the time of the interview. However, two of the five Depok managers had not attended any management training in the past five years.

In general, the respondents believed that the training they had received has helped improve their managerial skills, but some of them acknowledged that given the wide variety of work they perform, the training has not been enough as they are still deficient in several management and administration areas. Some mentioned the need for frequent training courses to up-grade their skills.

Management experience:
The majority of the DHO managers (8 out of 10) had worked in various positions involving managerial functions prior to being appointed to the DHO. Only one had previously worked as a functional doctor in a health centre which carried no management responsibilities. Three had worked in a management position in the study district for 1-5 years and another three for more than 15 years.

Most of these managers had managed health centres and worked as heads of sub-units at the DHO. The two DHO heads had previously worked as Secretaries of the DHO and also headed several units and sub-units within the DHO. Three managers were relatively new to their position at the DHO, having been in it for less than a year.

In general, although formal qualification in management was not common among the managers, they had extensive experience working in the sub-districts as heads of health centres, program managers and unit heads. Their understanding of the mechanics of health service delivery and health problems in the districts was not in doubt.

The majority of the managers indicated they spend all of their time on management issues and do not practice as clinicians (at least during working hours), demonstrating that dual role performance (i.e. working as a manager and clinician) was not a major issue for the managers in this study. This appears to be the result of the classification of health personnel positions in Indonesia into structural and functional positions. Normally a staff member in a structural position does not perform functional roles at the DHO level, as one informant elaborated:

“... we have to choose structural position or functional position. If we choose structural position, it means that we cannot have functional roles and there are no functional benefits.”

However, this is not always the case; depending on the situation one person can hold both a structural and functional position at the same time. This is particularly common with heads of health centres
who also function as doctors and perform clinical roles. It also does not mean individual managers at the DHO level with clinical backgrounds and experience cannot, or do not, engage in private practice. Several managers in both districts indicated they engage in private practice after official working hours.

Insights from Provincial Level

Appointment of DHO Heads:
Data from the provincial level suggest that appointment of DHO heads does not necessarily follow the laid down principle of consultation between district heads and provinces. A provincial level informant was critical of the process of appointing DHO heads as illustrated below:

“The reality is that these days promotion of head of district or municipal health office rarely involves the provincial level because it is more influenced by politics. I respect the establishment of decentralisation... it means the district or municipality has the authority to select and appoint staff... But what has been expected is that there will be a connection of understanding between the decision maker (Bupati) and the province; they could at least ask the province what it thinks about the candidate. This is what they never do.”

According to these informants, the powers of the Bupati in appointing DHO heads has created a situation where districts have become discrete entities with little connections with other districts and with no unity between districts and province. It has also led to heads of DHO being unable to implement national health policies as they should.

“What I expect is a system of unity between the district/municipality and province combined with the overall health vision of Indonesia. We are worried that with the discretion of each district/municipality to choose their own candidate for DHO head according to their own vision, grouping districts/municipalities with similar spirit, vision, skills and most importantly willingness to build the health sector becomes difficult to do at the provincial level. Also, due to the current situation, some heads of DHO are very much afraid of their Bupati and don’t have the courage to take their national health policy forward.”

Summary

There were no major differences in terms of personal characteristics of managers in Bogor district and Depok municipality. All the managers have worked quite extensively in the health sector and were less than 10 years away from retirement. The majority of them were medically qualified – mostly GPs and dentists – and have worked as clinicians in the sub-district level before being appointed to their current positions at the DHO.

The Bupati has a strong influence in the appointment of the head of DHO, often bypassing the Provincial Health Director who, according to current legislation, ought to be consulted (Government Decree No. 41/2007).

Over half of the managers surveyed in the two districts did not have any formal qualification in management. However, they all had attended some training in management, administration and leadership before and after taking up their current structural position at the DHO. The managers in the Bogor district attended their management training fairly recently (within the last 1-5 years), compared to their counterparts in Depok.

2. Performance of management roles and functions

Overview

As indicated in the methods section, district health managers often perform a dual role as program managers overseeing the technical implementation of health programs and as administrative managers undertaking mundane personnel administration activities. There were indicators in this study reflecting both roles. A maximum score of 10 was assigned to each indicator (see data analysis on page 12).

Insights from DHO Level

Knowledge of responsibilities and use of procedural manuals:
All respondents said they were fully aware of their responsibilities as managers (Table 6, page 28) and that they had written job descriptions, provided with their appointment letters, which included duties and a detailed description of responsibilities and authorities. They also confirmed that there are standard operating procedures and guidelines for all
programs adjusted as required for local conditions. However, there were indications from the interview data in both districts, particularly Bogor, that the manuals are mainly technical manuals guiding program implementation and not for administrative purposes. Overall, there appeared to be a strong culture of reference to formal, written guidelines. All respondents from Bogor DHO and Depok MHO stated that they must always adhere to the rules and regulations or steps that are described in their manuals and technical guidelines.

Furthermore, the MoH and the Provincial Health Offices conduct refresher courses for program managers about operating procedures and guidelines. The data indicates that there is significant formality in terms of written authorities and directives, with a number of respondents saying that successful program implementation and outcomes relied on knowledge and compliance with written authorities and guidelines.

“The availability of implementation guidelines or manuals and technical guidance strongly supports the work. The success of program implementation is determined by good understanding of the program implementers on any guidelines for the program implementation and technical guidance.”

**Staff performance assessment, feedback and handling of disciplinary matters:**

Data from both Bogor and Depok DHO suggest that some form of staff performance assessment is carried out. Performance assessment was more understood by respondents as performance evaluation, with some saying it is carried out annually, while others indicated it is linked to activities and conducted on a quarterly basis (every 3 months).

The data suggest that the evaluation process is hierarchically arranged; thus, the head of the DHO is evaluated by the head of the district (Bupati) through the district secretary and he/she evaluates the other managers (unit heads) at the DHO, who in turn evaluate their subordinates.

Data from both districts indicate that mechanisms for staff promotion and performance assessment are established: staff promotion happens every four years for structural staff and two years for functional staff based upon satisfactory annual performance evaluation. A standard civil servant performance evaluation form known as Assessment of Working

### TABLE 6. PERFORMANCE OF MANAGEMENT ROLES/FUNCTIONS

<table>
<thead>
<tr>
<th>INDICATORS</th>
<th>BOGOR score</th>
<th>DEPOK score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Know responsibilities as manager</td>
<td>10.0</td>
<td>10.0</td>
</tr>
<tr>
<td>2. Have and use procedural manuals</td>
<td>5.0</td>
<td>9.0</td>
</tr>
<tr>
<td>3. Undertake routine staff assessment</td>
<td>7.5</td>
<td>7.5</td>
</tr>
<tr>
<td>4. Provide timely feedback on staff assessment</td>
<td>7.7</td>
<td>7.5</td>
</tr>
<tr>
<td>5. Handle staff disciplinary matters effectively</td>
<td>10.0</td>
<td>10.0</td>
</tr>
<tr>
<td>6. Request drugs &amp; supplies on time</td>
<td>9.4</td>
<td>10.0</td>
</tr>
<tr>
<td>7. Undertake regular staff supervisory visits</td>
<td>7.5</td>
<td>7.0</td>
</tr>
<tr>
<td>8. Have regular technical meetings</td>
<td>10.0</td>
<td>10.0</td>
</tr>
<tr>
<td>9. Use health data for decision making</td>
<td>9.1</td>
<td>8.0</td>
</tr>
<tr>
<td>10. Collaborate with non-government sectors</td>
<td>6.5</td>
<td>8.0</td>
</tr>
<tr>
<td><strong>Total score</strong></td>
<td><strong>82.7</strong></td>
<td><strong>87.0</strong></td>
</tr>
</tbody>
</table>
Asante, A et al.

What can we learn from high performing districts in the West Java Province of Indonesia?

Performance (Daftar Penilaian Pelaksanaan Pekerjaan or DP3) is used for the annual assessment.

The DP3 is a detailed written assessment form used to obtain performance related information from all civil servants. Key items in the DP3 include loyalty, job performance, responsibility, compliance, honesty, cooperation, initiative, and leadership. Employees are rated from very good (91-100), good (76-90), fair (61-75), medium (51-60) to poor (below 51).

The data further reveal that results of the DP3-based performance assessment are officially used for staff promotions and not necessarily for performance improvement. Most of the respondents from both Bogor and Depok stated that they get a copy of the signed DP3 form after the assessment and do not receive any other written feedback on their performance. The majority were not sure whether the DP3-based assessment assists them in any way to improve their performance. One respondent (who did not think the DP3 was helpful) elaborated:

“It is not helpful because it is just normative; sometimes I don’t understand how... It should be filled out differently for each person, right? But it is not... To me, it is better not to use the DP3. I mean if we are assessing performance, it must be different between staff; some are diligent; some are not but still good in other areas. For example, I often perform tasks that are not listed in my Tupoksi (job description) but are very important, DP3 won’t consider that.”

In general, the data indicates that managers at the DHO who are structural staff are promoted every four years, while functional staff (such as doctors in health centres and medical researchers at the local health research and development board) may be promoted every two years depending on performance.

Availability of drugs and other supplies:

Information from respondents in all districts clearly suggests there is an established system at the district level for requesting drugs and materials and that the overall drugs availability in the districts has been good.

“Every month, the health centres submit report on drugs utilisation and report on the drugs needed. And then we fulfil their request based on the need. There are specific forms and they just have to fill in those forms.”

There were acknowledgements (particularly in Bogor) that sometimes frontline facilities experience drug stock-outs as a result of the planning cycle and bottlenecks in the procurement process, which several respondents admittedly did not understand.

“When I was working at the health centre... we ran out of drugs, I was screaming out loud. It was because the tender process should be re-run or something, I don’t understand the drugs procurement system.”

The overall amount of drugs needed by each district for a given year is determined by an annual drug requirement plan. Part of the occasional stock-outs, according to respondents, is at times related to the yearly planning. When, during the year, there are unanticipated disease outbreaks that might shift the drug needs of the district, the DHO might have to request new supply from the province or the central MoH. The majority of the respondents from both DHOs stated that there is an adequate budget for drugs.

Regular supervision, technical meetings and use of data:

Respondents from Bogor and Depok DHOs indicated that supervision of health centres was an integral part of the DHS monitoring and evaluation process. All ten stated they undertake regular and scheduled supervision of sub-district facilities. They are assigned specific facilities or target areas to supervise and the supervisory visits are scheduled in advance. In
addition to the scheduled supervisions, managers at the DHO sometimes conduct emergency supervision should the situation on the ground demand that.

“Yes, we have what is called ‘bina wilayah’ (area specific supervision) and Bimtek (technical guidance). Bina wilayah is conducted once every 2 months while the Bimtek is not scheduled, I mean, it is conducted based on cases.”

Some respondents mentioned supervision of health centres was done several times in a month while others said it was done annually. However, all of them agreed that supervision was largely program-based; thus, it was used to monitor program implementation as well as provide technical assistance to program implementers.

The data shows that supervision teams from the DHO often conduct direct observations of program implementation in health centres and, where there are weaknesses, provide technical support to staff. Some respondents linked supervision to ‘facilitation’ which highlights the technical support provided through the process to program staff in the sub-districts.

The DHO officials described supervision as a two-way process involving managers at the DHO providing supervision to sub-district staff and also receiving supervision from provincial health officials. They explained that supervision by the provincial teams is program based and is carried out several times during the year.

Respondents from Depok indicated that they receive provincial supervisory visits about 1-2 times in a year for each program, while those from Bogor stated that such visits by provincial managers occur about 4-6 times in a year depending on the program. For community health related programs, they indicated that supervision occurs much more frequently – usually one visit per month to the DHO and health centres and their network of facilities. The frequent provincial visits to Bogor may be due to the vastness of the district and the relative poor health indicators compared to Depok.

Respondents mentioned that during visits by the provincial teams, they conduct joint field visits (with program managers at the DHO) to observe directly how program activities are being implemented. They also take the opportunity to discuss issues such as health workforce numbers and distribution, technical guidelines, and seek advice on how best to meet program targets.

Evidence from the survey suggests that regular technical meetings are held at both DHOs on a weekly, fortnightly or monthly basis and, more often if particular problems needed to be addressed. At the Bogor DHO, technical meetings among the district health team were held every Tuesday but they can be daily if required, as this respondents noted: “if there is an urgent matter such as annual budgeting, we can meet daily”.

While respondents in both districts stated that health data was largely available, it was unclear whether managers use it for decision making, especially in Depok. The available data in the two districts include health personnel data, notably number of personnel, their locations, educational qualifications and job titles; epidemiological data including data on mortality rates at hospitals; and health services utilisation data such as visits to hospitals and health centres.

Respondents from Bogor were certain about their use of health data for decision making. “Yes – it is not only used for [general] decision making but also for planning as well as for evaluation of the activities.”

At the Depok DHO, by contrast, most of the respondents talked about how the data can be used rather than how it was used. One respondent was clear that the data is not routinely used by the DHO to support decision making:

“No... it is used only if it is needed, for example when the provincial level needs the data or perhaps used in relation with other program.”

Collaboration with the non-government sector:
The non-government sector in the Bogor and Depok districts, as evident from the survey, is characterised by a small number of charitable non-government providers (owning less than 10% of total facilities) and substantial private for-profit clinics and hospitals (made up of over 25% of total facilities). In Depok, the private for-profit sector is believed to be in the region of 50%.

The relationship between the DHOs and non-government providers (both charitable and profit-oriented) in the two districts was said to be useful.
However, the data show that collaboration with the non-government sector in Depok is generally more effective than in Bogor.

Respondents in Depok spoke about the existence of formal agreements (Memorandums of Understanding - MOUs) with several private clinics and hospitals that have allowed them to become service providers within the National Social Health Insurance (Jamkesmas) and Local Insurance for the Poor (Jamkesda) schemes.

“I think it [the relationship] is good enough. For example, if a clinic needs an operational license, it should be obtained from the DHO. One requirement for this is that the clinic should support two integrated health posts (posyandu) and one school health unit (UKS). There is also agreement to serve the poor people through Jamkesda or Jamkesmas.”

Respondents from Bogor also mentioned that the DHO has guided non-government health facilities to implement various health interventions but, in general, they were not sure whether they have a warm and effective relationship with these non-government providers.

Insights from Provincial and Health Centre Level

Job descriptions, performance appraisal, feedback and supervision:

The PHO acknowledged that there were job descriptions for the heads of the District Health Offices and Standard Operating Procedures (SOP) to guide job performance. However, participants from the PHO reported that there was no specific role for the PHO to engage in assessing the job performance of DHO managers because of decentralisation. According to them, they could only monitor the performance of the DHO managers through program monitoring.

“We do it [assessment of performance of DHO managers] through program monitoring and evaluation. Each program has its own target... they [DHO managers] report to us [the PHO] the progress of the program and we check it against the set target. For example, if the target was 20, but their achievement was 10 we will provide our feedback on the reported progress and let them [the managers] know where their weaknesses are and what further steps they need to take to overcome them. The Governor has to sign the feedback.”

There appeared to be instances where the DHOs have provided reports that do not reflect the actual situation on the ground, with the head of the PHO having to point out the inaccuracies to the DHO head.

“I receive many kinds of data... there was an experience when I received very good data but when I compared it with the real situation on the ground, it did not match. In such cases I would inform the head of the DHO about our analysis and assessment at the provincial level and about the district’s score at the province level. This is something that he did not see but I saw at a province level.”

Both of these quotes illustrate the limited direct role that the PHO can play in the affairs of the DHO. In practice, DHO heads and staff are responsible and accountable directly to local authorities. The PHO has reportedly instituted some ‘system of unity between the district/ municipality and province...’ through monitoring of performance of programs and this appears to be the only real avenue for them to monitor what goes on in the districts.

At the facility level, respondents confirmed they received frequent supervisory visits from program managers at the DHO. Communicable disease control and maternal and child health were among the areas where supervision in the health centres reportedly occur frequently.

Not all respondents from the facilities spoke favourably about the nature of the supervision the health centres receive. Some reported the visits are not scheduled and they do not achieve much in terms of supporting the activities of the health centres.
“The way program meetings are organised does not make them effective: usually there are 5 health centres gathered by the head of UPT [implementing unit], and then there are area supervisors from each unit in the DHO. Since the audience is large sometimes the message is really not focused. In my opinion, the meetings should be a bit more directed [more targeted] if it could have real impact.”

Summary

There were no major differences between the two districts in the performance of management roles and functions by managers. Uncertainties about staff appraisals and feedback were noted among managers in both districts. Staff supervision appears to be undertaken routinely by managers in Bogor DHO, but there was conflicting information from Depok about the frequency of supervisory visits. Supervision was generally understood by managers as provision of technical support to staff.

The data also indicated that the PHO is involved in staff supervision in the district/municipalities. This occurred only about once or twice a year, given the large number of districts/municipalities in West Java and the scale of other activities that the head of PHO undertakes. Supportive supervision, in the sense of staff professional development, did not appear to be under the control of managers of DHOs; several agencies outside the health sector were involved in managing the professional development of health workers.

3. Leadership behaviour of managers

Overview

The leadership behaviour of managers at the DHOs was assessed through interviews at the health centre and provincial levels. The health centre level interviews included questions which allowed interviewees to choose a response that best represented their opinion in relation to ten statements about the head of the DHO (in a short Likert-scale format). Ten interviews were conducted at both health centre and provincial levels.

Insights from Health Centre Level

Listens to staff, understands their needs and treats them as individuals:

From the interview data there was consensus amongst informants in both districts that the head of the two DHOs listen to staff (Table 7, page 33). The informants from health centres in Bogor, in particular, felt that the lines of communication between sub-district facilities and the DHO were effective and that they have direct access to the DHO head, especially in times of emergencies:

“Usually we call them [DHO managers] directly if there is any problem, they accept our calls at any time... if there is an outbreak, for example, I would directly call the head of the DHO and always get response immediately – they listen to us.”

In Depok, however, opinions differed in terms of communication with the DHO; some informants felt communication with the DHO had not always been smooth, suggesting they (health centre staff) were not always listened to.

With regard to understanding staff needs and treating staff as individuals the responses were mixed: several informants from the two districts were undecided, i.e. unable to agree or disagree with the statement that DHO heads understood their needs as health workers. In a further probing, some informants from Depok indicated coordination of programs between the DHO and health centres were sometimes ineffective. Three of the four Depok respondents were indifferent to the statement with only one agreeing. In Bogor, it was the other way round: three informants agreed that the DHO head treats staff as individuals but one disagreed.

Sets good example and has personal initiative to get things done:

There was agreement amongst informants that the two heads of DHO set a good example worth emulating by subordinates: the scores for both districts were more than 8 out of 10 (slightly higher in Depok). An informant from Bogor commented that the DHO head sometimes works late into the evening which, in her view, shows commitment to work and a good example for others to emulate: “As far as I know, she works very hard, sometimes leaving the office at 8 pm”.

As leaders of their respective DHS, the performance of both DHO heads appeared to be highly regarded by staff in the districts. The head of Depok DHO, in particular, was regarded as somebody with a high degree of personal initiative to get things done.
Asante, A et al.

What can we learn from high performing districts in the West Java Province of Indonesia?

(scoring 9.5 out of 10 compared to 7.0 for Bogor – see Table 7). Some interviewees indicated the DHO has implemented several innovative health programs in the district, including seeking ISO accreditation and obtaining UPTD (Unit Pelaksana Teknis Daerah) status for some health centres. UPTD status allows health centres to become independent in terms of managing their activities, including having their own budget directly from the Local Government.

In addition, the Depok DHO had reportedly implemented free medical care for people suffering from dengue, thereby removing a crucial access barrier and helping to control the disease in the district. The DHO head also reportedly initiated resource mobilisation from local sources to support high risk mothers who are in need of medical care. Many of the interviewees believed the personal initiative of the DHO head has played a key role in getting the Depok municipal government to support these programs.

The Bogor DHO head had also implemented some innovative programs, including ISO accreditation and measures to obtain UPTD status for health centres. However, her score on ‘personal initiative’ was about 2.5 points below the head of Depok DHO.

**Fair and consistent in handling staff matters and acknowledges job well done:** Similar to the above, most interviewees from the health centre level in both Bogor and Depok agreed that personnel matters were handled fairly and consistently by the two heads of DHO. There was one indifferent response from each district about the way personnel matters were handled by the DHO head.

According to the data, both managers also acknowledge and show appreciation to staff when they perform their duties exceptionally well. Again interviewees from Depok rated their DHO head relatively higher than those from Bogor (Table 7).

### TABLE 7. LEADERSHIP BEHAVIOUR OF DHO HEADS FROM HEALTH CENTRE STAFF’S PERSPECTIVE

<table>
<thead>
<tr>
<th>INDICATORS</th>
<th>BOGOR Score</th>
<th>DEPOK Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Listens to staff</td>
<td>10.0</td>
<td>10.0</td>
</tr>
<tr>
<td>2. Understands the needs of staff</td>
<td>6.9</td>
<td>6.5</td>
</tr>
<tr>
<td>3. Treats staff as individuals</td>
<td>6.3</td>
<td>5.6</td>
</tr>
<tr>
<td>4. Sets good work examples worth emulating</td>
<td>8.1</td>
<td>8.8</td>
</tr>
<tr>
<td>5. Has personal initiative to get things done</td>
<td>7.0</td>
<td>9.5</td>
</tr>
<tr>
<td>6. Fair and consistent in handling staff matters</td>
<td>6.9</td>
<td>7.5</td>
</tr>
<tr>
<td>7. Acknowledges jobs well done</td>
<td>7.5</td>
<td>8.1</td>
</tr>
<tr>
<td>8. Unbiased in dealing with staff disciplinary issues</td>
<td>7.5</td>
<td>10.0</td>
</tr>
<tr>
<td>9. Shows concern for staff career advancement</td>
<td>7.5</td>
<td>7.5</td>
</tr>
<tr>
<td>10. Generally respected by staff</td>
<td>8.8</td>
<td>9.4</td>
</tr>
<tr>
<td>Total score</td>
<td><strong>76.5</strong></td>
<td><strong>82.9</strong></td>
</tr>
</tbody>
</table>
Unbiased in dealing with disciplinary issues and shows concern for staff career advancement:
There was agreement in the data from both districts that the DHO heads took disciplinary action, if needed, and did so without showing favours to particular staff.

“For example if there is a staff member who has been warned many times, I would report the staff to the DHO. The DHO head would immediately take action... This means disciplinary issues are managed equally... I have done that before, there was a staff who refused my instructions, I reported to the DHO and the DHO head took action.”

All respondents from the two health centres in Depok strongly agreed that their DHO has a demonstrated record of fairness in dealing with staff disciplinary issues (scoring 10 out of 10). However, in Bogor some respondents were unsure about this (scoring 7.5 out of 10).

The DHO heads reportedly showed concern for staff career advancement, although the scores for both districts (7.5 out of 10) were not as high as scores for other indicators. Some respondents from both districts could not agree that the managers show sufficient concern for career advancement.

Generally respected by staff:
Finally, there was a consensus from the interview data that the two heads of DHO in Bogor and Depok enjoy considerable respect of the health staff in these districts, particularly the one in Depok with a score of 9.4 out of 10 (Table 7). From the data it appears the respect for the DHO heads was a reflection of both their hard work and the respect for authority ingrained in the Indonesian culture.

The high score across all the indicators illustrates the hard work of the managers. However, one cannot also rule out the respect for authority in Indonesia which could make junior staff “obedient” to their superiors. A comment by one interviewee points to the latter:

“We never had demonstrations or anything... we accept the policies issued by him [head of DHO]. Whenever there’s a problem, we discuss so we never reject the policies of the DHO.”

Overall, there was some reluctance by health centre staff in both districts to say things that may be perceived as unpalatable about managers at the DHO. Some of the staff had also not been in their positions in the districts long enough to have views about managers at the DHO.

Insights from PHO Level
Some other dimensions of leadership behaviour needed by DHO heads were identified by interviewees at the provincial level. The ability to ‘sell’ or ‘market’ the health programs and activities being offered by health centres; the willingness to build the health sector and be agents of change, and collaborate effectively with sectors outside of the health sector were regarded as crucial leadership skills needed by DHO managers.

Apart from collaboration with other sectors, which was partially explored under management practices, the rest were not systematically explored. However, they are worth noting given the strong perception at the PHO that these skills are very important and could be acquired through training and experience on-the-job. As one PHO official described it “these skills are necessary because the health sector cannot stand alone”.

Summary
The scores for leadership behaviour of the DHO heads as assessed against the 10 indicators (Table 7) were not vastly different (total score of 76.5 for Bogor against 82.9 for Depok). In general, the respondents from the two districts held similar views about their DHO heads and how they lead the health service.

Those from Bogor were slightly more positive than Depok on ‘understanding the needs of staff’ and ‘treating staff as individuals’. However, overall these two indicators received poor scores compared to others.

The gap between the two DHO heads on ‘personal initiative to get things done’ and ‘unbiased in handling disciplinary matters’ were the highest among the 10 indicators (2.5 points each in favour of Depok).

As noted above, there was some reluctance on the part of most of the health centre respondents to say things about the DHO heads that may be perceived as critical by others. There were also some indications that the traditional respect for authority in Indonesia may have influenced responses by these (health
centre) respondents. This does not suggest, however, that the two DHO heads may not be genuinely respected because of their hard work.

4. Organisational structure of the health systems

Insights from DHO Level

Adequate and timely disbursement of funds:

Respondents from both districts generally felt that funding for the DHS was inadequate, but opinions differed on timeliness of disbursement of funds (Table 8, below). The majority of the respondents from Depok mentioned that disbursement of funds to the district was often delayed.

“...the first APBD [district/municipal budget] was just approved around April/May. For the APBD for current amendment... we have no idea when it will be disbursed... maybe not until late October.”

Some respondents attributed the delays to the budget cycle, but others raised issues such as politics at the regional level and weakness of the DHO Finance Unit. There was a general acknowledgement, however, that things are changing and the process is getting better:

“Actually the problem is the decision making in the local parliament; if it is done quickly, then the regional government will also quickly disburse the funds. For example, currently there is an additional budget but there is regional election. Thus, the decision making is delayed... so political factors also contribute.”

“But this year, the system has changed - there are funds disbursed from the BKD, about 200 millions rupiah for each district office which is received on time.”

The data from Bogor suggest while funding has been inadequate, disbursement of funds has largely been on time. Most respondents indicated that the finance and budgeting system of the district runs quite well with no major delays and efforts have been made in recent years to improve the budgeting process further.

“But now we are beginning to be strict with the budgeting process... thus we have tried to have the budget disbursement on time. The problem is the funds that come from the national budget (APBN) because the APBN is disbursed in October or November and it should be expended by December.”

<table>
<thead>
<tr>
<th>INDICATORS</th>
<th>BOGOR Score</th>
<th>DEPOK Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Adequate &amp; timely disbursement of funds</td>
<td>7.0</td>
<td>5.0</td>
</tr>
<tr>
<td>2. Adequate number of health workers</td>
<td>5.0</td>
<td>7.0</td>
</tr>
<tr>
<td>3. Established &amp; functional system of procurement &amp; supply</td>
<td>10.0</td>
<td>10.0</td>
</tr>
<tr>
<td>4. Functional health management information system</td>
<td>7.0</td>
<td>7.0</td>
</tr>
<tr>
<td>5. Access to transport</td>
<td>7.0</td>
<td>6.0</td>
</tr>
<tr>
<td>6. Established system of incentives</td>
<td>7.0</td>
<td>7.0</td>
</tr>
<tr>
<td>7. Authority over staff</td>
<td>5.0</td>
<td>7.0</td>
</tr>
<tr>
<td>8. Authority over finance</td>
<td>10.0</td>
<td>10.0</td>
</tr>
<tr>
<td>Total score</td>
<td>58.0</td>
<td>59.0</td>
</tr>
</tbody>
</table>
In general, the budgeting process of the health sector in Indonesia appears complicated, with long planning cycles and a number of points at which delays can occur. There was no suggestion that the adequate (or inadequate) budget allocations and timely (or untimely) disbursement of funds had any impact on performance in the district. Also, the delays appear to be specific to certain types of budgets, particularly the district/municipal budget (APBD) which is very much subject to local politics.

For both districts, according to the data, there was no flexibility for managers to re-allocate funds once the budget decisions had been made and there were no reported delays with regard to payment of salaries.

**Adequate number of health workers:**
Respondents from both districts indicated that the level of health personnel, especially in the health centres, was inadequate and not in line with current workloads. A number of respondents stated that there was a lack of GP and specialist doctors, and as a result, having the right personnel for a particular task was problematic.

“We still lack of doctors, dentists, and other health personnel such as data analysts, health promotion staff, nutritionists and environmental health personnel. Our laboratory assistant has a double role and some nurses deal with laboratory matters. The finance administration role is sometimes held by a midwife with no background in finance.”

“There is a new regulation issued by the Minister of Health stating that drugs at health centre level should be managed by a pharmacist, but we have only 2 pharmacists whilst there are 32 health centres.”

Additional demand on health workers in the health centres, as a result of the need to provide services previously not provided, was emphasised by respondents. Overall, the health personnel situation appeared quite a bit better in Depok than in Bogor (with a score of 7 as opposed to 5).

Some of the Depok respondents noted that there is enough staff for routine operations but no extra staff to provide other services that are not part of routine services e.g. methadone treatment and aged care services. Provision of these services, according to the respondents, is increasing the workload of staff and affecting the ability of health centres to provide outreach programs as they used to.

At the Bogor DHO, efforts to address the issue of staff inadequacy include improving health worker efficiency by ensuring staff take on additional roles. There was no indication from the data whether staff receive any training for the additional role they take on.

**Established and functional system of procurement and supply:**
The data from both districts clearly suggest an established and relatively well-functioning system of drug procurement and supply. Request for drugs and equipment in the health system appears to follow a laid-down procedure involving the use of a standardised format. Managers at the DHO estimate the drugs and equipment needs of the district based on report of stocks, utilisation and estimation of drugs and medical equipment needed for a period of one year from district hospital and health centres and their networks.

Respondents indicated that, in general, drug availability was good although occasional stock-outs might occur, especially during disease outbreaks, due to the yearly drug planning cycle and minor shortfalls in the procurement process. However, there seemed to be a number of options if supply was interrupted, including requesting support from the provincial or central level.

“For the drugs, yes it is sufficient! For equipments, because we have many health centres we have been unable to provide everything needed but what is provided meets the minimum standard required for health centres.”

“Our planning is for one year, but sometimes the trend of disease prevalence/incidence may differ. It could happen that we run out of stock, but we could ask the province, the province asks central... our planning is bottom up, from the health centre and then we perform the procurement.”

**Functional health management information system:**
Respondents commented on a series of questions about the health management information systems. There was agreement that the information system contained good information about the types of staff, location and activities at a facility level.
Respondents also regarded the availability of epidemiological data and data on health services as important and supportive of good management within the DHO.

Some criticisms were made about information not being available electronically but a series of comments showed that where information was available, DHO officials make use of it for planning and other purposes.

“Yes, we make decision based on the data. For example, if there is a problem in an area, we review morbidity data in the area.”

“If it is not utilised, even the very good data is not useful. No matter how poor is the data, if we can utilise it, it will be useful.”

It was noted that in Depok data on the ten most preventable diseases by age group was available. Morbidity and mortality data at the hospital level, as well as patient visits to hospitals and health centres, were also available. Similarly, the Bogor district had health information booklets (e.g. Buku Saku, Dinas Kesehatan Kabupaten Bogor 2010) which contained key health data including vital statistics.

There were complaints in both districts about lack of personnel with sufficient training in health information management to provide inputs into developing strong district health information management systems.

Access to transport:
Respondents from Bogor were more satisfied that the need for access to transport was met within their district, with Depok respondents saying that there were still some problems within sub-districts. However, there was not a sufficient difference to argue that access to transport was a distinguishing feature to account for difference in performances between districts.

There seemed to be agreement that there was a sufficient supply of ambulances, mobile health centres and service vehicles; although there were suggestions from both areas that there should be more operational vehicles (that is vehicles that could be used by staff for travel and other activities) attached to units of activity.

There were complaints in both districts about lack of personnel with sufficient training in health information management to provide inputs into developing strong district health information management systems.

Established system of incentives:
There were clear indications from the data that managers in both DHOs receive some form of financial incentives. The two main payments mentioned by respondents were position allowance and welfare incentive.

The position allowance appears to be paid to all structural staff while the welfare incentive is paid to managers based on their work ethics. A comment from one respondent in Depok suggests that people who absent themselves from work without permission receive a reduced payment of this incentive. It was unclear whether the incentives were paid by the central or local government, although a comment from a respondent in Bogor suggests that it is the local government which pays for the incentives.

The amount paid as position incentive seems to differ across districts. A comment by a respondent in Bogor suggests payment depends on one’s Echelon, with Echelon III managers in Bogor reportedly receiving Rp2.5 million. Bogor managers also receive a medical allowance of Rp350,000 before tax. A couple of respondents (one in each DHO) did not think the position allowance can be described as an incentive given that it is a standard payment for all structural staff.

Authority over staff and finance:
As noted above, at the DHO level there is very little authority to recruit staff. The decentralisation policy does not allow DHO heads to hire new staff; they can, however, make a proposal to the head of the district for additional staff. Once such a proposal is made, it is out of the hands of the DHO whether a new staff will be hired or not.
Because of the regulation [civil service regulation] recruitment is not in our hands, even the head of DHO has no authority to recruit. The authority to recruit new staff is at the central MoH level; if they give us [districts] instruction then we [district government] can proceed to recruit someone.”

Respondents also noted that there is currently a zero growth policy applicable to civil servants, which means that recruitment of new staff can only take place if that new staff is to replace a staff who exited the workforce either through retirement or death.

“There is currently a regulation which forbids us to add more staff. What can be added are only midwives and doctors but for health sectors we need more than just a midwife and doctor.”

For an additional staff to work in the district health office there has to be a guarantee that funding will be available from the district/municipal level to pay for staff costs. In essence, the need for additional staff has to be balanced with funding availability.

In both Bogor and Depok districts, once staff are engaged, managers appear to have some level of authority with regard to discipline. The head of DHO has the authority to undertake disciplinary measures against subordinates who do not perform their duties as expected of them. A disciplinary measure, based on Government Decree No. 53/2010, may be gentle, medium or severe punishment.

It was evident from the data that respondents had some impact over budget decisions and finance in the planning process, although once budgets are decided there is no capacity to affect decisions such as reallocations within the budget.

Insights from Provincial and Health Centre Level

Interviews from Provincial Health Officers and from those operating at the health centre level supported the findings above, emphasising that standard operating procedures and guidelines determine much of what can be done in terms of budgeting, procurement and supplies, health information management and authorities over staffing and finance.

The functioning of the procurement and supply system appeared satisfactory to all respondents while the health information management system, although far from perfect, was functioning reasonably well according to respondents.

Summary

Key organisational structures of the health systems in the two districts were not different from each other in terms of how they function. The budgeting and financing system, for example, was generally considered inadequate in terms of the amount of funds the DHS received. The disbursement of funds to Bogor DHS was described as timely, while in Depok there were complaints about delays.

The level of health personnel in both districts, especially at the health centre level, was also thought to be inadequate. The functioning of the procurement and supply system appeared satisfactory to all respondents while the health information management system, although far from perfect, was functioning reasonably well according to respondents.

5. Contextual factors

Narratives

There was a marked difference between Depok and Bogor districts in terms of context. Depok as a municipality is largely a suburb of Jakarta, located just some 25 kilometres away from the city centre (Table 9, page 39). It has a smaller population of around 1.5 million which is spread across a 200 square kilometre stretch of land. The proportion of the population living in poverty is relatively low at about 2.4 percent and literacy rate is 100 percent. Depok also has more private hospitals and limited presence of non-government health providers. The district’s fiscal outlook as illustrated by the Ministry of Finance’s fiscal capacity index of 1.2508 was among the best in the West Java province.
Bogor district, by contrast, has nearly three times the population of Depok (4.3 million) and more than 10 times the landmass. The district’s location cannot be described as remote since the district capital is only 55 km away from Jakarta. However, as emerged from interviews at the facility level, several of the sub-districts are quite remote and not easily accessible:

“Bogor district has a wide coverage area including 40 sub-districts and 101 health centres... Parung Panjang area, for example, is close to Jakarta but very remote [in terms of service delivery]. Maybe there is not enough human resource to cover the whole district.”

Poverty appears more widespread in Bogor than in Depok; the fiscal capacity index of the district (0.2588) is about 5 times lower than that of Depok and the proportion of population living below the national poverty line (13.1%) is over 5 times higher. Additionally, there is a substantial presence of non-government (charity) health providers in the district – an indication of high unmet health needs.

### TABLE 9. CONTEXTUAL FACTORS INFLUENCING DHS PERFORMANCE

<table>
<thead>
<tr>
<th>INDICATORS</th>
<th>BOGOR</th>
<th>DEPOK</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. District population</td>
<td>4,300,000</td>
<td>1,500,000</td>
</tr>
<tr>
<td>2. Area (land size in sq km)</td>
<td>2,371</td>
<td>200</td>
</tr>
<tr>
<td>3. Fiscal capacity of district</td>
<td>0.2588</td>
<td>1.2508</td>
</tr>
<tr>
<td>4. Remoteness of district (distance in km*)</td>
<td>55</td>
<td>25</td>
</tr>
<tr>
<td>5. Proportion of poor population 2008 (below national poverty line %)</td>
<td>13.1</td>
<td>2.4</td>
</tr>
<tr>
<td>6. Education (literacy rate %)</td>
<td>97.6</td>
<td>100</td>
</tr>
<tr>
<td>7. Size of non-government support for health</td>
<td>Substantial</td>
<td>Limited</td>
</tr>
<tr>
<td>8. Size of private for-profit sector (private hospitals)</td>
<td>10</td>
<td>15</td>
</tr>
</tbody>
</table>

*Distance between district capital and central Jakarta
DISCUSSION

Demographic characteristics of managers
While there were no major differences in demographic characteristics of managers, in both districts, ageing of managers was an issue and a potential problem in the future as the districts would lose most of their experienced managers to retirement.

The possibility of appointing younger managers appears remote given the current civil service regulations on filling vacancies for structural positions. The district health manager position is a structural position which by law must be occupied by a senior staff member (Echelon II for DHO head and III for divisional/unit heads). This makes it difficult to appoint a younger person who has not served for many years in the health system.

There was evidence from the PHO level that the process of appointing DHO heads lacks transparency. Although the prerogative to appoint rests with the Provincial Governor, the civil service legislation on appointment of heads of local government offices, including DHO heads, requires that the head of the relevant provincial office (in this case the PHO) be consulted for inputs, especially regarding the technical suitability of the person to be appointed. This appears to have been largely overlooked.

Management education and training
There were similarities and differences in terms of management education and training. All the managers had undergone short-term management training in health administration and leadership provided to mid-level civil servants by the Regional Civil Service Agency (BKD). However, formal qualifications in management were held by less than half of the managers. In Depok (the high performing district), only one manager had an MPH degree but three managers in Bogor had a master’s degree in management.

The fact that only one manager in the high performing district had a formal qualification in management, as opposed to three in the low performing district, does not undermine the importance of management education and training, but rather highlights the numerous factors that influence the performance of health managers and health systems.

Management education and training, as important as they are, will not yield the desired dividends unless the general health system context is favourable [Díaz-Monsalve 2004].

Training must also be relevant to the work context of managers to have impact on their performance. Management programs which pay insufficient attention to key areas such as human resources management, financial management and health information management may be of little relevance to DHMs in Indonesia.

Rojas [2002] and Pervilhac & Seidel [1996] demonstrated that isolated management training courses may have little or no impact on performance - this may have been the case with some of the managers at the DHO level in this study. It is a challenge to training providers in the districts and elsewhere in the country to adapt training to the needs and work realities of DHMs. This issue is taken up in the recommendations.

Management practices
Health management
Management practices in the two districts were similar except in the areas of availability and use of manuals to guide role performance and collaboration with the non-government sector. Technical manuals to guide program implementation were widely used but these only support health worker performance management and not personnel administration. It is important to distinguish between the two (i.e. health worker performance management and personnel administration).

Performance management involves the measuring, monitoring and enhancing of staff performance using a range of HRM tools such as job descriptions, supervision, performance appraisals, continuous education, rewards and career development [Dieleman et al. 2006; Martinez 2001].

Personnel administration, on the other hand, involves recruitment and selection, staff deployment, payment of salary and other mundane administrative activities relating to the health worker [Buchan 2000].

DHMs often perform a dual role in both areas but the managers in Bogor and Depok play a significant role in performance management and only a limited role...
in personnel administration (see staff performance assessment and feedback for further discussion).

**Human resource management**

**Recruitment of staff**

Managers at both DHOs had no authority to recruit new staff – they can only make a proposal for new staff to the head of the district and, depending on the type of staff requested, such proposals may or may not be accepted or may need central government approval. Generally, the recruitment of new health staff is done through the civil service recruitment mechanism at the central level (this is carried out by the State Ministry of Administrative and Bureaucratic Reform) and is regulated by Law Number 43 Year 1999.

A key issue with staff recruitment across the civil service is that the central government still hires and pays permanent civil servants and tightly controls salaries. Heywood & Harahap [2009b] observed that this allows the central government to control the overall direction of the civil service and, at the same time, provides a disincentive for the districts to reform the sector. However, expanding the decision space of district managers with regard to staff recruitment, re-deployment and payment may lead to effective use of staff and ultimately improve health worker productivity.

The limited role of the managers in Bogor and Depok, especially in hiring and firing of staff, is by no means unique to the two districts or indeed Indonesia. Reviewing several countries in East and Southeast Asia, Fritzen [2007] noted that control over hiring and firing of workers was limited in a number of countries, even those with fairly advanced stages of decentralisation such as the Philippines. In Tanzania and Ghana, the Ministry of Finance has a significant control over health worker salary [Asante et al. 2006; Munga et al. 2009] and in Papua New Guinea the Department of Personnel Management (DPM) plays a major role in managing the performance of health and other public sector workers [Hasfeldt et al. 2005].

While the narrow decision space for local authorities to recruit may seem at odds with the tenets of devolved HRM, greater flexibility may lead to health workforce ‘fragmentation’ across districts with serious implications for equity and efficiency. In Uganda, flexibility over recruitment led to wealthier districts being able to attract better quality staff than poorer ones [USAID 2008].

The influence of local politics on the recruitment process is another source of concern. In three Tanzanian districts where political patronage was rife, the quality of the workforce was reportedly compromised by employment of unqualified workers because of undue influence on the recruitment process by district officials (Munga et al. 2009).

**Staff performance assessment and feedback**

The inconsistencies in HRM were more apparent in staff performance appraisal and supervision. The managers from both DHOs played only a minor role in appraising the performance of health workers.

Their role, as evident in the data, is limited to conducting the performance assessment interview with subordinates using the DP3 assessment form. The information gathered through the DP3 is used mainly for promotion, which is decided by agencies outside the health sector. Advisory Board on Position and Rank (Baperjakat), the BKD (Badan Ketenagaan Daerah), the Ministry of Finance, and the Ministry of State Employees Utilization and Bureaucracy Reformation (MenPAN-RB) all play a significant role. Again, this is not unique to Indonesia; health workers in many countries are a component of the civil service, and hence, the management of their performance goes beyond the MoH.

The different role played by various agencies in health worker performance management raises an important question about the practicality of a fully devolved HRM, not only in Indonesia or the two study districts but in other places as well. Earlier studies...
have shown that decentralisation of HR functions in many countries still remains weak and, in some cases, central control mechanisms have been strengthened [Heywood & Harahap 2009b; Kolehmainen-Aitken 2004].

Another critical issue regarding performance management in the Bogor and Depok districts was the lack of feedback to staff on their performance. Based on the interview data, the only feedback in writing received by staff on their performance was a copy of the completed and signed DP3 form.

Feedback to individual employees on work performance is an important aspect of the performance management process and can help personnel improve their effectiveness [Rowe et al. 2005]. This appears to be weak in the two DHS with the current DP3-based assessment.

It was apparent that many interviewees (from both districts) neither appreciate the DP3-based appraisal nor find it particularly helpful. To them, it is one of those standard ‘things’ you do every year as a government employee which does not relate to the real issues faced as a health worker. However, as pointed out by an independent country reviewer of this report, DP3 is an administrative necessity; one needs a high DP3 score to move up to a higher rank. Thus, without high DP3 scores there will be no promotion and this perhaps explains why, according to the reviewer ‘no assessor will give low DP3 scores unless he/she intends to punish the staff being assessed’.

Supervision of staff
Another key performance management issue in both districts which required serious attention is staff supervision. Three things were particularly noteworthy:

1. Staff supervision in both districts focused largely on providing technical support to program implementers.
2. Staff supervisory visits appeared ad hoc; as supervision was largely program-based the frequency depended on the needs of particular programs and this could occur anywhere between several times in a month to once a year.
3. Provincial Health Office teams had scheduled supervision of programs in districts and sometimes joined district teams on supervisory visits.

A comprehensive and clear policy on supervision for DHOs may be a good starting point in both districts. The technical nature of supervision in both districts deserves attention. Given the shortage of skilled health personnel and the increasing use of low level cadre (e.g. nursing assistants) in sub-districts, it was essential that supervision and technical support become regular.

However, for supervision to achieve the desired goal of improving health worker performance, it has to be more than just providing technical support. Staff needs for management support, logistics, and education and training should also be met. Supervision must be supportive or facilitative in the sense of emphasising mentoring, joint problem-solving and two-way communication between the supervisor and the supervisee [MSH 2006].

In a facilitative supervision environment, the supervisor acts as a mentor and a teacher on-the-job rather than as a detective or an inspector eager to find faults and criticise. Although managers at the DHO level spoke about supervision being facilitative and being performed somewhat satisfactorily, the general sense from the health centres was not one of satisfaction with the current system. Some described it as ad hoc and a fault-finding exercise, for which little or no feedback was usually provided by supervisors.

A comprehensive and clear policy on supervision for DHOs may be a good starting point in both districts. Such a policy may cover key functions of supervision such as setting objectives, providing training and education, monitoring and evaluating performance, providing feedback and analysing opportunities for improvements. This is likely to change the current ad hoc nature of supervision in both districts, making it more systematised.
The results did not show any major differences in personal characteristics of managers in the two districts and, on M&L practices, there were only minor differences with Depok performing slightly better across the indicators than Bogor.

**Leadership behaviour**

Depok performed slightly better than Bogor across six of the 10 leadership indicators, but the differences were minor except for two indicators – ‘personal initiative to get things done’ and ‘unbiased in dealing with staff disciplinary issues’, where the difference was relatively glaring.

In addition to gaining ISO accreditation and UPTD status for several health centres, Depok had implemented free medical care for people suffering from dengue and initiated resource mobilisation from local sources to support high risk mothers in need of medical care. Bogor had also sought to obtain ISO accreditation and UPTD status for health centres but nothing else more concrete. While the achievements of Depok may be the result of the vision of the municipal government, the personal initiative of the DHO head, as evident in the data, appears to have played a key role in getting these programs implemented.

Bogor, however, may be lagging behind Depok for reasons other than lack of some innate leadership qualities in the DHO head. It is worth noting that the DHO head, as at the time of the interviews, had been in office for a relatively shorter time (about 4 years) and was still a novice compared to the Depok DHO head who had been there for about 10 years. Building an effective relationship with the local government takes time and that could be one of advantages the Depok DHO head has over her counterpart in Bogor.

**Managers’ contribution to overall DHS performance**

The minor differences between the two districts in itself was not surprising but it raises several questions about managers’ contribution to DHS performance and how this can be best assessed. For example, does the minor difference between the districts suggest that DHS performance has little to do with M&L practices of managers? Are there differences which were not identified through the indicators used in this study? Was the focus on other DHMT members, rather than only the designated managers (the DHO heads) the issue? The following section considers these questions.

It may be argued that because of the common legislative framework (Government Decree No. 41/2007) underpinning the work of heads of local government offices, including the DHO, there would be similarities in M&L practices. To a degree, this is true as the legislation states the functions of these officials, which include policy development and implementation as well as development of guidelines for implementation.

A review of the written job descriptions of DHO managers from the two districts confirmed that the managers have similar duties and responsibilities. Their main task as DHO heads is to coordinate the implementation of health development at all levels in the district, including coordination of health planning; organisation of health service delivery; monitoring of program implementation and assessment of service performance. Other DHMT members have similar roles and responsibilities relating specifically to their units/divisions. This may explain why there were no major differences in M&L practices.

It is worth adding, however, that the legislation (Government Decree No. 41/2007) also allows district heads (Bupati) to add to the scope of work of DHO heads based on the needs of the district. Since districts needs differ, one may be right to expect that the scope of work also differs to some extent. The lack of differences in M&L practices could mean that district heads are not adding to the scope of work of DHO heads.

Another critical issue is whether it is possible to capture and assess what district health managers do using the pre-selected indicators. Mintzberg [2004] observes that the practice of management is characterised by its ambiguity, and the notion that managers are strategists, planners and thinkers is
perhaps a myth. There are significant ‘informal’ or ‘unofficial’ aspects of managerial work which may be hard to capture using pre-selected indicators. Dalton [1959] described this as the ‘lubricant of organisational operation and preservative of managerial sanity’ and argued that the successful manager is the one who can negotiate these informal systems.

Perhaps district health managers in Bogor and Depok impact on the performances of their districts through ‘informal’ means not easily identifiable using indicators. The bureaucracy at the district level following decentralisation in Indonesia could encourage managers to resort to ‘informal’ practices including using personal connections to keep health delivery in the district on track and improve the overall performance of the DHS.

A research method such as participant observation, or additional key informant interviews with staff from different levels, may provide valuable insights into how managers affect the performance of their DHS. A quantitative approach whereby the effect of other factors on DHS performance can be controlled using multivariate analyses, or one in which the number of sampled districts is larger, could also provide concrete results.

The focus on DHMT rather than the designated manager (head of DHO) may have obscured some of the differences in M&L practices in the two districts. There is a horizontal division of managerial work into individual managers’ roles, the work of management teams and the work of the organisation’s management as a whole [Hales 1986]. Although the designated manager works as part of the DHMT, the differences in their managerial competencies and practices may have become more apparent if the focus has been on them rather than on the team.

**Effects of organisational structure and context**

The differences in the performance of the Bogor and Depok DHS appear to be more easily understood by looking at the differences in context and organisational structure of the health system, rather than M&L practices of managers. Factors such as different population size, landmass, socioeconomic disparities, including disparities in poverty and fiscal capacity of districts, and different access to health personnel and facilities offer a more plausible explanation.

Bogor has nearly three times the population of Depok (4.3 million to 1.5 million) and in health care delivery population size does matter. Generally, the more people to reach the more difficult the task of delivering health care effectively and the more resources are required – human, financial and material. Zhao & Malyon [2010] found a positive relationship between population size and total health expenditure, and attributed this to the increase in demand for health services associated with larger populations. Thus, the large number of people to reach with health care in Bogor compared to Depok may have contributed to the low performance of the former. This by no means suggests that health care cannot be delivered efficiently in large populations. World-wide there are many countries with relatively large populations and better health status than others with low populations.

In addition to dealing with the challenge of population size, the Bogor DHS has to cover a relatively vast landmass – more than 11 times the size of Depok (2,371 square kilometres to 200 square kilometres). Although the location of the district cannot be described as remote in terms of distance from Jakarta, it has over 420 villages (compared to only 63 villages in Depok), some of which are very remote in terms of geographical access. Thus, the DHO in Bogor compared to Depok is in a much more difficult situation with regard to health service coverage and this may affect the overall performance of the DHS.

The differences in socioeconomic conditions between the two districts may shed some light on
the variations in DHS performance. As mentioned elsewhere, Depok is a city with a relatively well-developed infrastructure and easy access to health facilities including hospitals in Jakarta. Poverty in the district is minimal – only 2.4% of the population live below the national poverty line compared to over 13% in Bogor. The index of fiscal capacity (Ministry of Finance measure of potential wealth or richness of a district) of Depok (1.2508) is nearly five times higher than that of Bogor (0.2588). Less than half (47.2%) of households in Bogor have access to proper sanitation compared to 87% of households in Depok [MoH - NIHRD 2008].

The relationship between socioeconomic status and health in developing countries has been well-documented [Gwatkin et al. 2000]. There is evidence that poor people suffer worse health; they have higher than average child and maternal mortality, higher levels of disease, and limited access to health services and social protection [OECD 2003].

In Zimbabwe, Woelk & Chikuse [2000] found that stunting, underweight and diarrhoea episodes varied by socioeconomic status and noted that being in the lowest socioeconomic group increases the risk of being underweight by about three times for children. Bogor’s low socioeconomic status may have played a significant role in the relatively low performance of the DHS.

Finally, the differences relating to the organisation structure of the health systems in the two districts, particularly differences in health workforce numbers and facilities, deserve closer scrutiny. Although there are conflicting figures regarding actual workforce numbers, Bogor by all accounts has a smaller health worker density. Only about 48% of households in Bogor have access to a midwife compared to 93% of households in Depok [MoH - NIHRD 2008]. Figures from the Indonesian Bureau of Statistics 2008, suggest that one GP in Bogor serves about 7,741 people as opposed to one per 3,689 people in Depok.

Concerns were expressed by some study participants in Bogor that with the potential roll out the national social health insurance scheme (Jamkesmas), there will be additional pressure to expand services, particularly to remote areas, with implications for logistics, human resources and staff workload. Similar disparities exist in access to health facilities; one health facility in Bogor serves about 15,750 people in contrast to 6,757 people in Depok. Given the effects on health delivery and outcomes of inadequate human resources and health facilities, it is not difficult to understand why the Bogor DHS is low performing compared to Depok.

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2Facility here refers to health centres and networks as well as hospitals, clinics and other facilities both public and private.
CONCLUSION, LIMITATIONS AND POLICY IMPLICATIONS

This study was designed to examine the performance of district health managers in high and low performing districts in an attempt to understand whether, and the extent to which, these managers affect the performance of their district health services. The purpose was to identify M&L practices that may contribute to high DHS performance. We assumed that the performance of district health managers is reflected by their day-to-day M&L practices and hypothesised that the differences between individual DHS performances reflect, at least in part, the differences in the performance of district health managers.

The results, as discussed earlier, provide insufficient evidence to support the assumption that the differences in performance of DHS are related to the differences in the performance of district health managers.

No major differences were found among DHO managers in the two study districts (Bogor and Depok) in day-to-day M&L practices and leadership behaviour, although overall Depok scored slightly higher than Bogor on the indicators used.

There were substantial differences in favour of Depok (the high performing district) on two key indicators of leadership: ‘personal initiative to get things done’ and ‘fairness in handling staff disciplinary matters’. However, the extent to which these differences explain the differences in the performance of the districts could not be established due to study limitations discussed below.

In general, contextual factors and differences in aspects of the organisational structure of the health systems appear to provide a more plausible explanation for the differences in the performance between Bogor and Depok DHS. Factors such as different population size and landmass, different socioeconomic conditions including poverty and fiscal capacity of districts, and differential access to health workers and facilities provide better understanding as to why the two district health services performed differently.

Study limitations

There are several limitations of the study that need to be acknowledged and discussed. Firstly, the selection of districts did not yield optimal results in terms of ideal cases of high and low performing districts. Although the selection was largely based on the NIHDD-MoH ranking of districts, other factors such as geographical accessibility were considered. Thus, while there were clear differences in the performance of Bogor and Depok DHS, the two did not represent the model cases of high and low performing districts in West Java.

This investigation was an exploratory study to test the methods and assess their applicability in a future study. Any follow up study in the future would pay serious attention to the sampling procedure and ensure the best possible cases are selected.

Another limitation relating to method is the inability to determine the extent managers affect the overall performance of their DHS through their M&L practices. As performance of DHS is influenced by a wide range of factors, determining the contribution of managers would require a statistical approach that will allow controlling, as much as possible, for confounding factors so that the effects of M&L practices of managers can be made explicit. The current methodology would be expanded in any follow up study to incorporate such statistical analysis. A representative sample of districts would also be useful to ensure generalisability of findings.

Finally, the exclusion of local government officials from the study, particularly the head of the district (Bupati/ Mayor) and other local agencies such as the Advisory Board on Position and Rank (Baperjakat), was a major limitation.

District/municipality heads and their staff, following decentralisation, have considerable sway over the local health system. They not only hold the key to the appointment of the DHO head and other managers...

There were substantial differences in favour of Depok (the high performing district) on two key indicators of leadership: ‘personal initiative to get things done’ and ‘fairness in handling staff disciplinary matters’.
but also control the bulk of the resources flowing to the DHS. Their perceptions of health and health service delivery affect the way they allocate local resources to health which ultimately determine the performance of the DHS and its managers. Any future study will include the district head and other local government officials.

**Policy implications**

While this study could not establish the extent to which district health managers affect the performance of their DHS due to methodological limitations, it provides good insights into the state of health management and leadership in Bogor and Depok, and highlights some of the issues that potentially could affect health management in both districts.

These include the ageing of the management workforce at the DHO level, weak governance structures, limited training in health management and limited involvement of managers in HRM. None of these are new but they have not been examined from the perspective of the district health manager, as in this study.
REFERENCES


Fritzen, SA 2007, ‘Strategic management of the health workforce in developing countries: What have we learned?’, *Human Resources for Health*, vol. 5, no. 4.


Heywood, P & Harahap, N 2009a, ‘Health facilities at the district level in Indonesia’, *Australia and New Zealand Health Policy*, vol. 6, no. 13.

—— 2009b, ‘Human resources for health at the district level in Indonesia: the smoke and mirrors of decentralization’, *Human Resources for Health*, vol. 7, no. 1, p. 6.

—— 2009c, ‘Public funding of health at the district level in Indonesia after decentralization - sources, flows and contradictions’, *Health Research Policy and Systems*, vol. 7, no. 1, p. 5.


MoH & WHO 2003, Indonesia’s reproductive health profile, Ministry of Health, Indonesia and World Health Organization, Jakarta.


MSH 2006, Supportive supervision to improve integrated primary health care, Management Sciences for Health, Cambridge, MA.


OECD 2003, Poverty and health in developing countries: Key actions, Organisation for Economic Co-operation and Development.


— 2009a, Who are the managers? Case studies from three african countries, World Health Organization, Geneva.


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