OVERCOMING PUBLIC SECTOR INEFFICIENCIES TOWARD UNIVERSAL HEALTH COVERAGE

THE CASE FOR NATIONAL HEALTH INSURANCE SYSTEMS IN ASIA AND THE PACIFIC

Eduardo Banzon and Mathilde Mailfert

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6 ADB Avenue, Mandaluyong City, 1550 Metro Manila, Philippines
Tel +63 2 632 4444; Fax +63 2 636 2444
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CONTENTS

FIGURES AND BOX

FIGURES

BOX

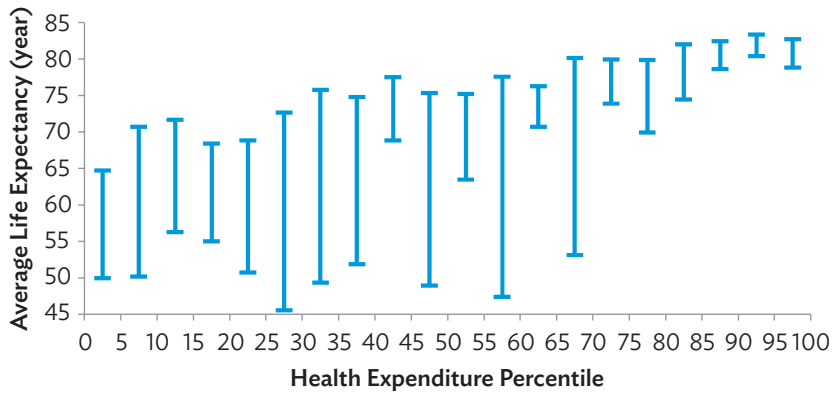
I. INTRODUCTION

Money matters. Apart from a few exceptions, the higher the total spending for health, the better the outcomes. Evidence of improved health status with increased health expenditure is widely documented. It includes studies showing significant positive relationship between life expectancy and total health expenditure, by disaggregating countries by income groups[1] and association of higher government health spending per capita with reduced child and adult mortality, both in high-income and low-income settings.[2]

Yet for the same level of expenditure, significant discrepancies between countries are apparent. A study by the World Economic Forum Industry Agenda Council on the future of the health sector revealed huge variations in health outcomes for countries with similar health spending per capita. To that end, it classified all countries into 20 groups based on their health expenditure. For each group, the highest and the lowest achievers in terms of life expectancy were identified. The results of this estimation are shown in Figure 1. Globally, for the same cost, global life expectancy could be increased by 4 years.[3]

There is room for countries to generate more value for money. Although numerous factors affect health outcomes and, therefore, limit comparisons (such as exposure to chronic disease risk factors, demographic and geographic factors, and their impact on economies of scale and scope), there is room for governments to obtain better outcomes for the money they allocate to health. For example, an Asian Development Bank (ADB)-led study of public service spending showed that Asian countries could have used an average of 93% of their budget to attain the same level of health outcomes in

Figure 1: Variations in Health Outcomes among Countries with Similar Health Spending per Capita



Source: World Economic Forum. 2016.

[1] Elisabeta Jaba, Christiana Brigitte Balan, and Ioan-Bogdan Robu. 2014. The Relationship between Life Expectancy at Birth and Health Expenditures Estimated by a Cross-Country and Time-Series Analysis. *Procedia Economics and Finance* 15 (14). Elsevier B.V.: pp. 108–114. doi:10.1016/S2212-5671(14)00454-7.

[2] John C. Anyanwu and Andrew E. O. Erhijakpor. 2007. Health Expenditures and Health Outcomes in Africa. 91. *African Development Bank/ Economic Research Working Series*. Vol. 91.

[3] World Economic Forum. 2016. Misaligned Stakeholders and Health System Underperformance. Industry Agenda Council on the Future of the Health Sector. White Paper. Geneva.

2010,[4] which highlights how inefficiencies in the public sector can lower the broader health system's performance. Further corroborating those findings, a stochastic frontier analysis by the International Monetary Fund (IMF) showed that, globally, health system inefficiencies were responsible for an average loss of health-adjusted life expectancy (HALE)[5] of more than 2 years.[6] In comparison, increasing health spending by 50% would extend life expectancy only by about 1 year, on average. Therefore, performance losses due to inefficiencies are substantial and significant.

In a context of rising health expenditure and as countries move toward universal health coverage (UHC), reducing inefficiencies is a priority. Between 1995 and 2013, total health expenditure grew from 5.4% to 6.4% of gross domestic product in low- and middle-income countries (LMICs), a 18.5% increase.[7] Per capita health spending is expected to grow in the next two decades at a rate ranging from 1.8% for low-income countries to 5.3% per year for lower middle-income countries up to 2040.[8] Therefore, it is essential to ensure that this greater spending effectively translates into enhanced access to quality care.

Reducing public sector inefficiencies can have an impact on the performance of the whole health system. Inefficiencies can be technical, productive, or allocative.[9] This paper looks at technical efficiency, where maximum possible output is obtained from a given quantity of inputs, or a given output is achieved with minimum inputs.[10] Importantly, it will distinguish between efficiency of the public sector (making better use of public resources), and efficiency of health systems (efficiency as an intermediate objective of health financing policies, i.e., making better use of available resources of the health system as a whole). Similarly, for the sake of clarity, it includes under *public sector,* both governments and all publicly controlled or publicly funded agencies, facilities, and other entities that deliver public health goods and services. Although it recognizes that the private sector (including private firms and nonprofit organizations) also plays a role in the delivery of services in LMICs and can present inefficiencies, they will not be the focus of this paper.

Until recently literature on inefficiencies had evolved either from a public economics or a health economics approach. Public economics literature looked at institutional performance, but did not consider the specificities and the proper functions of the health system.[11] This literature also tends to focus on measurement tools rather than practical options. In parallel, health economics literature has

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[4] Rouselle F. Lavado and Gabriel Angelo Domingo. 2015. Public Service Spending: Efficiency and Distributional Impact-Lessons from Asia. *ADB Economics Working Paper Series*. https://www.adb.org/sites/default/files/publication/161539/ewp-435.pdf.

[5] HALE represents the number of years expected to be lived in good health. A significant amount of health sector resources is spent to reduce the severity of diseases and improve the quality of people's live. To capture this element, HALE takes into account disease prevalence, incidence, and duration and data on a person's years in different states of health. (Coady, Francese, and Shang. 2014. The Efficiency Imperative. *Finance and Development*. December.

[6] IMF. 2014. *Fiscal Monitor. Public Expenditure Reform, Making Difficult Choices." World Economic and Financial Surveys*. Washington, DC.

[7] Mihajilo Jakovljevic and Thomas E. Getzen. 2016. Growth of Global Health Spending Share in Low and Middle Income Countries. *Frontiers in Pharmacology* 7 (FEB): pp. 1–4. doi:10.3389/fphar.2016.00021.

[8] Global Burden of Disease Health Financing Collaborator Network. 2017. *Future and Potential Spending on Health 2015–40: Development Assistance for Health, and Government, Prepaid Private, and Out-of-Pocket Health Spending in 184 Countries. The Lancet*, pp. 2005–2030. doi:10.1016/S0140-6736(17)30873-5.

[9] Stephen Palmer and David J. Torgerson. *Definitions of efficiency. BMJ* 1999; 318:1136.

[10] A. Mills. 1995. *Improving the Efficiency of the Public Sector Health Services in Developing Countries: Bureaucratic versus Market Approaches.* 17. London.

[11] Horst Hanusch. 1983. *Inefficiencies in the Public Sector: Aspects of Demand and Supply. In Anatomy of Government Deficiencies,* 1–2. Berlin: Springer; Raffaela Giordano, Sergi Lanau, Pietro Tommasino, and Petia Topalova. 2015. Does Public Sector Inefficiency Constrain Firm Productivity : Evidence from Italian Provinces. *IMF Working Paper. WP/15/168;* and David Fourie and Wayne Poggenpoel. 2016. *Public Sector Inefficiencies : Are We Addressing the Root Causes ? South African Journal of Accounting Research*, no. July. Taylor & Francis: pp. 1–12. doi:10.1080/10291954.2016.1160197.

looked at the delivery of health-care services (in terms of health workers or medical products efficiency), or the cost effectiveness of certain interventions (allocative efficiency). In particular, the World Health Organization (WHO) focused on sectorial inefficiencies in different areas of the health system in 2010 (Box).

Box: Systemic Inefficiencies in the Health System

The 2010 World Health Report had already identified leading sources of inefficiencies at all levels of the health system. Findings can be summarized in six key areas of inefficiencies that relate to both the provision of services and the generation of resources:

(i) medicines: unnecessary spending, poor quality control, irrational use;
(ii) health-care products and services: poor procurement practices lead to poorly used technologies;
(iii) health workers: ineffective recruiting, inappropriate training, poor supervision and maldistribution within countries;
(iv) health-care services: longer length of stay and inappropriate admission practices; inappropriate size of facility and range of services;
(v) health system leakages: wastages, corruption, and fraud; and
(vi) health interventions: inefficient mix of interventions and inappropriate level of strategies.

Most of these areas are highly impacted by public sector features.

Source: World Health Organization. 2010.

Each approach (health economics and public economics) brings relevant contributions to the matter and could, when combined, better help countries on their journey toward UHC. Recent health financing studies have focused on inefficiencies at the organizational levels.[12] In particular, Cashin et al. identified sources of misalignment between public financial management (PFM) and health financing systems,[13] and showed how PFM main functions (budget formulation, execution, and financial monitoring and reporting) can potentially affect each health financing function (revenue raising, pooling, and purchasing). This analysis is useful to understand how financial flows management can be improved and strengthened for health systems.

It is possible to improve health systems' functions by reducing inefficiencies in the public sector. A commonly highlighted pitfall of the public sector is that, while private firms seek to maximize the owner's interest (financial profit), public firms must deal with numerous stakeholders to maximize social profit. By so doing, they necessarily entail inefficiencies. But they are not unavoidable. Countries that have moved closer to UHC have shown us that it is possible to reduce inefficiencies and improve health sector performance.

[12] Organisation for Economic Co-operation and Development (OECD). 2017. *Tackling Wasteful Spending on Health.* Paris, France; and Cheryl Cashin, Susan Sparkes, and Danielle Bloom. 2017. Earmarking for Health. From Theory to Practice. http://apps.who.int/iris/bitstream/10665/255004/1/9789241512206-eng.pdf.

[13] Cheryl Cashin, Danielle Bloom, Susan Sparkes, Hélène Barroy, Joseph Kutzin, and Sheila O'Dougherty. 2017. Aligning Public Financial Management and Health Financing. Sustaining Progress towards Universal Health Coverage. 17.4. *Health Financing Working Paper*. Geneva.

Discussions have been initiated on how to better perform each function and sub-function of the health system. However, efforts have to date focused on specific health system functions. Studies arising on governance,[14] resource generation,[15] service delivery,[16,17] and financing[18] have widely documented countries efforts to improve health systems' functions.

Various systems and arrangements are valid to achieve UHC. Each country presents its own health system and financing arrangements as well as challenges. Solutions to inefficiencies should be tailored to fit a particular national context. However, learning from other countries' practical solutions to inefficiency challenges can be insightful.

How do countries in Asia and the Pacific overcome public sector efficiencies and improve health sector performance? This paper draws on public economics approaches to identify sources of inefficiencies in the public sector, and demonstrates how they impact health system functions. Subsequently, it showcases how countries across Asia and the Pacific tackle public sector inefficiencies, and draws common traits between those solutions. Finally, it presents the so-called national health insurance (NHI) systems and their features as a viable model for efficiency gains and ultimately better-performing health system functions.

II. HEALTH SYSTEMS FUNCTIONS, UNIVERSAL HEALTH COVERAGE, AND THE ROLE OF THE PUBLIC SECTOR

To understand how inefficiencies in the public sector can impact health system performance, the main functions and goals of a health system are discussed by using the WHO framework for assessing health system performance. The first notable attempt to describe health systems functions was the Murray and Frenk framework,[19] but this paper uses the Kutzin framework as described in the WHO Bulletin in 2013.[20] This version has the advantage of incorporating both health system functions and goals, and will help us in understanding the role and implications of difference underperformed functions for the broader health system. Importantly, this links health system goals to UHC, which is the overarching goal of the discussion.

In this framework, health systems must perform four basic functions: stewardship, financing, resource generation and service delivery (Figure 2). The intermediate objectives and goals of the health system are dependent on how the institutions and organizations, that are ascribed to these health systems' functions, perform their roles. Stewardship has an indirect impact as it influences both resource generation and health financing and service delivery, which in turn impact service use, efficiency, quality,

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[14] Ilona Kickbusch and David Gleicher. 2012. *Governance for Health in the 21st Century.* Copenhagen, Denmark; and OECD. 2017. *Tackling Wasteful Spending in Health.* Paris, France.

[15] Orvill Adams, Mario R Dal Poz, Bakhuti Shengelia, Sylvester Y Kwankam, Andrei Issakov, Barbara Stilwell, Pascal Zurn, and Alexandre Goubarev. 2003. *Human, Physical, and Intellectual Resource Generation: Proposals for Monitoring. Health Systems Performance Assessment: Debates, Methods and Empiricism*. Vol. 2.

[16] Justine Hsu. 2010. *The Relative Efficiency of Public and Private Service Delivery.* Geneva, Switzerland: WHO, 1–9. http://www.who.int/healthsystems/topics/financing/healthreport/P-P_HSUNo39.pdf.

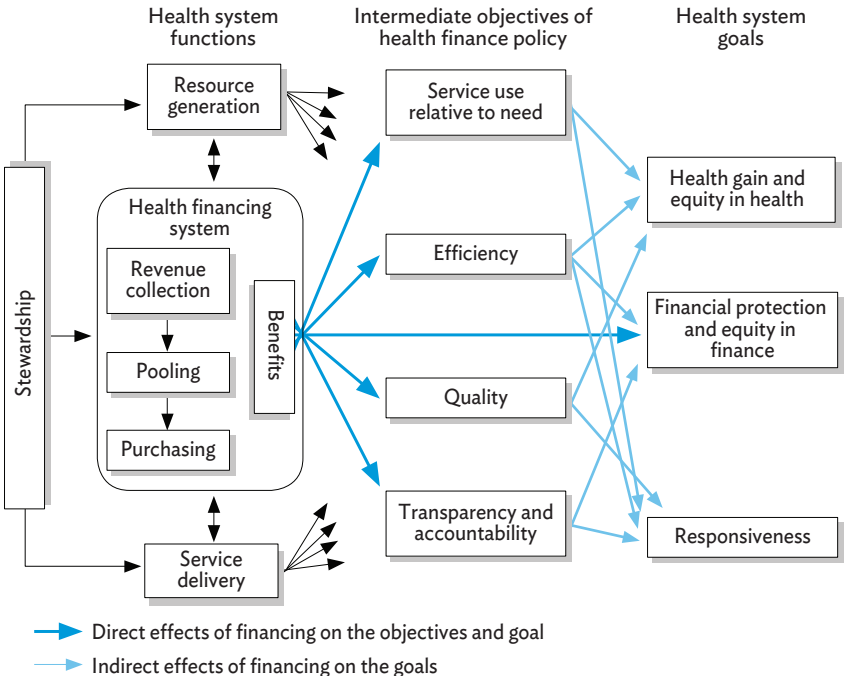
[17] Peter Berman, Sarah Pallas, Amy L Smith, Leslie Curry, and Elizabeth H Bradley. 2011. Improving the Delivery of Health Services : A Guide to Choosing Strategies. *Health, Nutrition and Population Discussion Papers*.

[18] Pablo Gottret and George Schieber. 2006. Health Financing Revisited. A Practitioner's Guide. doi:10.1596/978-0-8213-6585-4.

[19] Christopher J L Murray and Julio Frenk. 2000. A Framework for Assessing the Performance of Health Systems. *Theme Papers. Bulletin of the World Health Organization* 78(6): 728.

[20] Joseph Kutzin. 2013. Health Financing for Universal Coverage and Health System Performance : Concepts and Implications for Policy. *Bull World Health Organ* 91 (November 2012): pp. 602–611. doi:http://dx.doi.org/10.2471/BLT.12.113985.

Figure 2: Health System Goals and Health Financing Objectives



Source: Kutzin. 2013.

and transparency and accountability. Meeting those objectives contributes to the overall goals of health gain and equity in health; financial protection and equity in finance, and responsiveness.

Stewardship is a function specifically carried out by governments as they seek to attain health system goals and, more broadly, UHC. This function includes regulation, but also goes beyond, to ensure a level playing field for all actors in the system—purchasers, providers, and patients. There are six sub-functions under stewardship that need to be highlighted as well: (i) overall system design (i.e., policy decision-making at the broadest level making use of strategic design); (ii) performance assessment (of institutions in revenue collection, purchasing, provision and resource development to ensure a level playing field); (iii) priority setting (stewardship in setting priorities and building consensus); (iv) intersectoral advocacy (advancing health goals through the promotion of policies in other social systems such as education, etc.), (v) regulation (through accreditation, certification, and rate setting); and (vi) and consumer protection (protecting patients/consumers from information and power asymmetries to maintain a level playing field).

Resource generation pertains to the production of resources required to produce health services, including knowledge, staff, facilities, and technology. The process of generating resources encompasses the coordination of different units producing inputs, including but not limited to institutions that provide and finance health services. Such units count firms producing technologies and medical goods, universities and educational institutions, research centers, or construction firms. Therefore, a number of institutional features, such as strategic design, structural arrangements, and implementation management, will have an impact on the production of resources.

Financing is the process by which revenues are collected, accumulated in fund pools, and allocated to provider activities (purchasing). UHC reforms have historically involved health financing policies, though the UHC goal is not limited to this field. Importantly, while private forms of carrying financing functions exist, most LMICs rely on public mechanisms when it comes to financing their health systems.

(i) **Revenue collection refers to the mobilization of financial resources through health financing mechanisms.** Revenues usually come from three main sources: taxes (direct or indirect), household or individual premiums, and private payments. Both collection methods and the amount of collected revenues have an impact on maximizing revenues for health.
(ii) **Pooling pertains to the accumulation of revenues on behalf of a population, so that all contributors share financial risk.** At a country level, the larger the pool, the more efficient it is in terms of risk pooling.
(iii) **Purchasing is the process through which the collected revenues pooled in a fund are allocated to institutional or individual providers to deliver a set of interventions.** Purchasing options range from general government budget allocation to health providers (for example, line item budgeting) to strategic purchasing. Increasingly, countries implementing UHC reforms wish to develop their strategic purchasing features.

Service delivery refers to the production and distribution of institutions, people and resources intended to improve health.[21] This includes both personal health-care services (preventive, diagnostic, therapeutic, or rehabilitative) and nonpersonal services, such as health education and promotion or basic sanitation. Both public and private stakeholders deliver services in LMICs. When moving toward UHC, articulating services and harnessing the private sector are crucial to ensure that public and private sector networks can deliver a comprehensive set of services accessible to all.

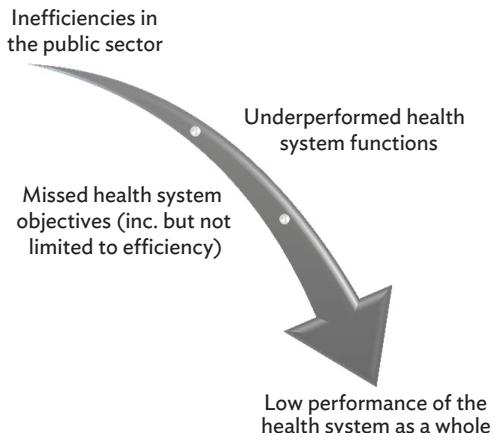
As health system performance depends on how good organizations and institutions perform their functions of financing, resource generation, health service provision, and stewardship, so does UHC. Kutzin (2013) points out that UHC embodies the ultimate goal of financial protection as well as intermediate objectives; namely, equity and quality. Ultimately, UHC has an even broader connection to the health system goals, and embodies all of them, including health gain and equity in health (such as demonstrated by the recent adoption of a coverage indicator by the Sustainable Development Goal Target 3.8), as well as responsiveness.

The public sector, as defined, plays a role in all functions of the health system through financing policies and mechanisms; the provision of services by public facilities; the generation of resources to be used by the entire system, private sector included (such as the health workforce); and the stewardship function mostly through the government and its administration. Therefore, public sector inefficiencies impact functions of health system and health system objectives (Figure 3).

While the analysis focuses on the public sector, performing health systems functions is not solely the responsibility of the government; the private sector (including private firms and nongovernment organizations) as well as citizens participation play an important role.

[21] European Observatory on Health Systems and Policies Series. 2012. *Health Systems, Health, Wealth and Societal Well-Being. Assessing the Case for Investing in Health Systems.* Edited by Joseph Figeras and Martin McKee. Berkshire, England: Open University Press.

Figure 3: The Inefficiency Chain



Source: Authors.

III. UNMASKING THE SOURCES OF PUBLIC SECTOR INEFFICIENCIES IN THE HEALTH SYSTEM

Public sector economics and public-sector management fields offer numerous tools to investigate the inherent inefficiencies of the public sector. In particular, there is a general agreement that inefficiencies can stem from an agency relationship. According to Lane, they are the consequence of a double principal–agent problem: Governments act as principal for agents in public service delivery and the population acts as principal for political agents under various forms of rulership.[22] Yet, in the absence of a reward system, public employees are not provided with a strong incentive to maximize their performance, and political goals are considered as the incentive instead of the agency or social good objectives.

A. Sources of Inefficiencies in the Public Sector

Stiglitz and Rosengard have proposed a framework for unmasking sources of inefficiencies in the public sector. According to them, and in contrast to the private sector, public sector inefficiencies manifest themselves through organizational and individual differences, bureaucracy procedures and risk aversion.[23] This framework can be applied in both high-, middle-, and low-income settings.

1. Organizational Differences

(i) **Organizational incentives.** Due to limited competition and an absence of profit motive, the public sector does not have to compete for prices and has limited incentive for technical efficiency. However, it benefits from a steady flow of resources through budget allocations. Public firms and administrations are under a soft budget constraint, which means that they will certainly survive despite financial losses, and their managers can expect aid from the state

[22] Jan-Erik Lane. 2013. The Principal-Agent Approach To Politics: Policy Implementation and Public Policy-Making. *Open Journal of Political Science* 3 (2): 85–89. doi:10.4236/ojps.2013.32012.

[23] Joseph E. Stiglitz and Jay K. Rosengard. 2015. *Economics of the Public Sector*. Fourth Edition. New York: W. W. Norton & Company, Inc.

if such losses are incurred. In Organisation for Economic Co-operation and Development (OECD) countries, soft budget constraint and greater borrowing autonomy from subnational governments incur greater health expenditure.[24]

(ii) **Personnel restrictions.** Driven by a concern of independence and equity, restrictions are in place in the public sector to ensure that public employees are qualified and rewarded fairly. This important concern to limit abuse, however, brings rigidity in the management of human resources. In the long run, this can lead to situations where public organizations lack capacity and skills. In the health sector, personal restrictions have an impact both at the administrative and at the delivery levels.

(iii) **Procurement restrictions.** The willingness to limit abuse is also reflected in the adoption of strict procurement rules. In addition, as public sector goods and services present specific features and regulations that differ greatly from the private sector, only a few companies will be able to bid for their production, which leads to limited competition and higher prices. As Hamlin and Corbârzan note, there is a need to find a balance between government regulations and entrepreneurial flexibility to preserve efficiency in procurement.[25] In the health-care sector, procurement restrictions can be particularly prevailing in the case of drugs treating rare medical conditions, which represent small volumes for individual facilities or expensive treatments. In these cases, inefficiency gaps in procurement are the greatest. Yet, they can also occur in the supply of financial coverage in the case of public organizations contracting out health financing functions.

(iv) **Budgetary restrictions.** Allocations in the public sector are usually made on an annual basis and do not reflect potential changes and long-term needs such as modernization or sustainable development. The lack of long-term vision and the resulting underfunding lead to inefficiencies in daily operations and limits opportunities for innovation and transformation. This is not only relevant for public administration, but also facilities. While LMICs are moving toward more multiyear budgeting patterns, there is still room to ensure that the budgeting process is linked to policy making and planning.[26]

2. Individual Differences

At the individual level, there are less incentives for civil servants to behave in an efficient manner. Because of these inefficiencies at the organizational level, individuals are less responsive to the needs of citizens. Bureaucratic behaviors are associated with a maximization of prestige and power in place of increased efficiency. This leads bureaucrats to work toward increasing the size of their administration or firms, therefore triggering higher costs. However, competition between bureaucracies can sometimes balance this out. Similarly, political competition is associated with improved outputs at the bureaucracy level. This is also valid at the political level; a high level of competition between politicians leads them to delegate tasks to more productive bureaucrats.[27]

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[24] Thomas Stratmann, Ernesto Crivelli, and Adam Leive. 2010. Subnational Health Spending and Soft Budget Constraints in OECD Countries. *IMF Working Paper*.

[25] Roger E. Hamlin and Bianca Cobârzan. 2006. How to Prevent Corruption without Affecting Efficiency? An Overview of Safeguard Measures for Contracting out Public Services. *Transylvanian Review of Administrative Sciences*, no. 16: 25–39.

[26] Michael Spackman. 2002. Multi-year Perspective in Budgeting and Public investment Planning. National Economic Research Associates. Draft background paper for discussion at session III.1 of the OECD Global Forum on Sustainable Development: Conference on Financing Environmental Dimension of Sustainable Development. OECD, Paris, 24–26 April 2002.

[27] Daniel Rogger. 2014. *The Causes and Consequences of Political Interference in Bureaucratic Decision Making: Evidence from Nigeria*. Job Market Paper.

Another concern is linked to the agency problem. While human resource management practices (both through monetary and nonmonetary incentives) can trigger staff performance,[28] they are more limited in the public sector than in the private sector due to personnel restrictions discussed earlier.

3. Bureaucratic Procedures and Risk Aversion

Another feature of bureaucracy is risk aversion. Because the system values procedural compliance over outcomes, the responsibility of bureaucrats is cleared, provided that they follow procedures and use the appropriate processes resulting to red tape, which is referred as the excessive use of administrative formalities.[29] In this process, a group decision is made, while individuals lose the prospect for success and, therefore, responsibility for the failure of the decision. Indeed, it had already been shown that red tape perception had an impact on the motivation of public service managers.[30]

B. Manifestation of Inefficiencies at the Health System Level

The abovementioned inefficiencies have repercussions in the health system. While not all its inefficiencies should be attributed to the public sector, each function of the health system (might it be fulfilled by public or private stakeholders) can potentially be underperformed because of public sector inefficiencies:

(i) **The financing function can be underperformed in terms of revenue collection and, therefore, limited capacity to expand resources for health.** Organizational sources of inefficiencies may result in sub-optimal collection of resources—insufficient lobbying for health budget, under-collection from eligible health insurance members, etc. stemming from principal–agent issues. Bureaucracy and the multiple levels of governance create various platforms for fund fragmentation, therefore discounting the advantages of both risk and financial pooling. The risk-averse behavior of governments lead to apprehension with transitioning to strategic purchasing; most systems are already established, and having to move to a radical form of purchasing will require reforms and champions who are willing to take risks.

(ii) **Delivery capacity of both public and private providers can be influenced by purchasing methods and regulatory requirements.** Provision of public services is also highly dependent on health professionals. In turn, their performance is highly driven by incentives and adequate human resources management practices, which are often not in place.

(iii) **Generation of inputs can be hampered by highly restrictive procurement measures leading to wastage, corruption, and fraud.** Allocation of medical supplies for proper provision may not be in place, leading to inconsistent patterns of resource allocation. Lack of retention mechanisms, for example, can trigger inequitable supply of health workers in a country.

(iv) **Stewardship is particularly affected by public sector inefficiencies.** This function is ensured by the government and other agencies that design and regulate the health sector. Weak leadership, and duplication or fragmentation of responsibilities, can lead to underperformance that is reflected at other levels of the health system.

Appendix 1 presents the detailed analysis of how the performance of health systems is affected by public sector inefficiencies.

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[28] Teresa Curristine, Zsuzsanna Lonti, and Isabelle Joumard. 2007. Improving Public Sector Efficiency: Challenges and Opportunities. *OECD Journal on Budgeting* 7 (1): 1–42. doi:10.1787/budget-v7-art6-en.

[29] OECD. 2006. Cutting Red Tape. National Strategies for Administrative Simplification. Paris. doi:10.1002/bse.3280020501.

[30] Patrick G. Scott, and Sanjay K. Pandey. 2005. Red Tape and Public Service Motivation. *Review of Public Personnel Administration* 25 (2).

IV. HOW COUNTRIES IN ASIA AND THE PACIFIC OVERCOME PUBLIC SECTOR INEFFICIENCIES

Countries across the world seek bold solutions to overcome public sector efficiencies to improve functions of health systems. In Asia and the Pacific, some cases are insightful. The following review does not intend to be comprehensive, but draws on specific ADB experience in countries.

A. Lessons Learned from Asia and the Pacific

We use the Stiglitz and Rosengard framework to highlight those efforts. For each identified source, we look at success strategies adopted by Asian countries to overcome inefficiencies.

1. Organizational Inefficiencies

a. Organizational Disincentives

In Asia and the Pacific, some countries wishing to overcome inefficiencies due to lack of organizational incentives have provided an enhanced institutional framework for their health sectors. In some cases, more institutional autonomy has sometimes been given to organizations that fulfill purchasing functions, thereby introducing a purchaser/provider split. This ranges from implementing a dedicated unit inside the Ministry of Health (MOH) to de-linking it from the MOH. The purchaser has, therefore, ownership of its purchasing decisions and can be held accountable for it, which guarantees greater incentives for organizational efficiency. Thailand is often mentioned as a leading example for reaching UHC in Asia. In 2002 the National Health Security Act indeed mandated the National Health Security Office (NHSO) to serve as the main purchaser of health-care services for a majority of the population. The NHSO, therefore, directly contracts health providers on their behalf.

Beyond this organizational split, in many cases, the lack of profit motive has been countered by offering financial autonomy to the purchasing structure. Some of these single purchasers are provided with a special account, while others are potentially granted off-budget funds, which allows for savings to be kept at the end of the year. In the Republic of Korea (ROK), a National Health Insurance Corporation (NHIC), operating under a nonprofit motive, is acting as a single purchaser covering the national population. It is responsible for collecting the premiums of its members and for reimbursing facilities. In this setup, the NHIC is managing the fund and has its own auditing system. In the ROK, the introduction of NHIC was also a good opportunity to move from a government-fixed reimbursement system toward a contract-based reimbursement system, thereby providing organizational incentives for the whole health system to trigger value for money.[31]

b. Personnel Restrictions

To overcome the lack of capacity resulting from rigid public sector regulations, countries have implemented strategies such as developing regular training and even dedicating specific capacity to support the purchasing function. In the Lao People's Democratic Republic (Lao PDR), the National Health Insurance Bureau is developing regular training and capacity strengthening toward its administrative staff.[32] In the ROK, a dedicated agency was implemented, in addition to the NHIC: the Health Insurance Review and

[31] Yang Kyun Kim. 2012. Forecasting the Future Reimbursement System of Korean National Health Insurance: A Contemplation Focusing on Global Budget and Neo-KDRG-Based Payment Systems. *Journal of Korean Medical Science* 27 (SUPP). doi:10.3346/jkms.2012.27.S.S25.

[32] National Health Insurance Bureau. 2017. *Lao PDR National Health Insurance Strategy 2017–2020.* Vientiane.

Assessment. The Health Insurance Review and Assessment fills a capacity gap by providing data that are useful for providers reimbursement; namely, information such as treatments, pharmaceuticals, procedures, and diagnoses. By providing specific skills necessary to the purchasing function, this agency complements the work of the NHIC.

At the other end of the scale, public health organizations can sometimes contract out part, or the whole, of the capacity needed, sometimes outside of civil servant management rules. In Palau, the Health Care Fund administrator can select, hire, terminate, and discipline employees at his or her discretion within the frame of the Social Security Board rules.[33] However, this requires the implementing structure to dispose of strong organizational capacity.

c. Procurement Restrictions

As explained earlier, procurement of equipment and medicines can be particularly challenging due to strict rules and specific requirements, and it remains a main concern for governments in Asia and the Pacific. Yet, the example of Thailand offers great insights into more efficient procurement practices. Most of the drugs are procured thanks to funds allocated by the NHSO (on a per capita basis). Generally, facilities have to procure drugs themselves.[34] However, some expensive but necessary drugs, which are better bought in bulk such as antidotes, vaccines, anti-retroviral drugs, stents, artificial knees, and supplies for continuous ambulatory peritoneal dialysis, are procured by the NHSO through a multipartite committee. This system allows for economies of scale and, therefore, maximizes the bargaining power of the purchaser (NHSO on behalf of facilities). It also encourages competition and lowers prices down. Storage and distribution are also centralized, which further enables efficiency gains. Similarly, Tamil Nadu's Medical Services Corporation presents a successful model of centralized tendering and purchase of drugs that has been adopted by other states in India.[35]

e-Procurement is progressively introduced in Asian countries. In Indonesia, for example, where 80%–90% of all essential medicines are procured at subnational (local and district) levels, a national procurement agency, and later an e-tendering, and an e-catalog were rolled out. Through the e-catalogue, contracts are made directly between the pharmaceutical factory through a framework contract and the procurement agency. A study showed that prices of generic medicines purchased through the e-catalogue were much lower than through the conventional way.[36] While it is generally introduced to circumvent fraud, e-Procurement can increase access to public tenders and thereby increase competition, simplify processes and therefore lead to cost-savings.

d. Budgetary Restrictions

When facing budgeting constraints linked to annual budgetary allocations, some countries have sought to secure funding for health either as a minimum mandatory threshold. Earmarking some of the state budget or revenues toward the health sector can guarantee a minimum and steady allocation, which is not dependent on annual political priorities. In Indonesia, 5% of the national budget is earmarked for health, and districts should mandatorily allocate 10% of their nonsalary budgets to health. Sin taxes are

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[33] Healthcare Fund. 2011. *Healthcare Fund Regulations as Adopted 2/17/11.* Ngerulmud, Palau.

[34] Kathleen Holloway. 2012. Thailand Drug Policy and Use of Pharmaceuticals in Health Care Delivery. Mission Report 17–31 July 2012. Mission Report to WHO Regional Office for Southeast Asia. http://www.searo.who.int/entity/medicines/thailand_situational_analysis.pdf.

[35] Pv Singh, A Tatambhotla, Rr Kalvakuntla, and M Choksi. 2012. Replicating Tamil Nadu's Drug Procurement Model. Commentary. *Economic & Political Weekly* xlvii (39): 26–29.

[36] H. Suliantoro, E.S. Permatsari, and N.U Handayani. 2016. Using E-Catalog System To Reduce Cost In Procurement Of Drugs. *Jurnal Teknik Industri* 11(2) (2): pp. 123–28.

particularly used across Asia and the Pacific. In the Philippines, 85% of the incremental revenues from tobacco and alcohol excise tax revenues are earmarked to finance the health sector (80% toward UHC-related expenditure including the Philippine Health Insurance Corporation (PhilHealth) and 20% to the Health Facility Enhancement Program and Medical Assistance). This generated important revenues already: in 2015, the incremental revenue for health represented almost P62.7 billion—corresponding to about $1.22 billion. Similarly, in the Lao PDR, 32% of sin taxes are allocated toward the NHI fund.

Other countries can choose to ring-fence their budgets by setting up a special fund (from on-budget funds to special accounts and off-budget funds). The Bhutan Health Trust Fund (BHTF) was set up in 2000 to finance primary care and medicines. Returns on investments generated by the BHTF are exclusively used to cover expenditure on vaccines and essential drugs. The initial capital was constituted by the Government of Bhutan as endowment and matching contributions from local and international donors.[37] The BHTF operates under the authority of a board, and discussions are currently considering de-linkage from the MOH for greater flexibility and management efficiency. [38]

e. Individual Inefficiencies

On the delivery side, some strategies aim at avoiding bureaucratic behaviors by introducing incentives for staff to perform more efficiently or by granting more autonomy to facilities. For example, in the Andhra Pradesh Rajiv Aarogyasri Program in India, one-third of insurance claims are paid as an incentive to physicians and health workers for secondary and tertiary services in the public sector. Together with beneficiaries selection choice, these incentives have been introduced so that providers have to compete to attract patients.[39]

Inefficiencies linked to bureaucratic behaviors have also led countries to outsource some functions of their health financing system. In India, the national Rashtriya Swasthya Bima Yojana Program contracts public and private insurance companies to purchase health-care services both from public and private providers. A contract defines services to be provided through the insurer to a certain population group in a district, on the basis of a defined premium per family. Insurance companies have to compete to be selected through a bidding process. The insurer then accredits both public and private sector facilities. As of September 2016, more than 41 million health cards had been issued, covering almost 150 million poor people, over nearly 460 districts.[40]

f. Bureaucratic Behavior and Risk Aversion

Some countries have implemented strategies within the public sector in order to cut the excessive use of formalities due to bureaucratic procedures. PhilHealth is a good example of an organization that showed significant achievements in terms of simplifying procedures. In the Philippines, the Anti-Red Tape Act (ARTA) was passed in 2007. In 2009, PhilHealth also released its first Citizens Charter, a document aiming at standardizing processes for frontline offices and which had been updated several times since then. In 2015, the Civil Service Commission ranked PhilHealth second among other government agencies that passed the Civil Service Commission's ARTA report card survey, a client feedback survey that checks

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[37] BHTF. 2016a. *Bhutan Health Trust Fund: Status Report.* Thimphu, Bhutan.

[38] BHTF. 2016b. *Bhutan Health Trust Fund: Sustaining Primary Health Care Services in Bhutan.* Thimphu, Bhutan.

[39] Daniel Cotlear, Somil Nagpal, Owen Smith, Ajay Tandon, and Rafael Cortez. 2015. *Going Universal. How 24 Developing Countries Are Implementing Universal Health Coverage Reforms from the Bottom Up*. Washington, DC: World Bank.

[40] Anup Karan, Winnie Yip, and Ajay Mahal. 2017. Extending Health Insurance to the Poor in India: An Impact Evaluation of Rashtriya Swasthya Bima Yojana on out of Pocket Spending for Healthcare. *Social Science and Medicine* 181. Elsevier Ltd: 83–92. doi:10.1016/j.socscimed.2017.03.053.

compliance of government service offices with the provisions of the ARTA.[41] Therefore, PhilHealth acts as a reference for red tape cutting toward other institutions in the Philippines beyond the health sector.

In many cases, the establishment of an autonomous structure has permitted to overcome risk aversion and to establish more efficient processes. In India, the success of the Tamil Nadu Medical Services Corporation was associated with its autonomous status, which contributed to bypass bureaucratic procedures to introduce an efficient system of drug procurement.[42]

B. Common Features of Efficiency Gains

All of these efficiency gains have common features. Often, a national agency or body serves with more or less autonomy from the state, sometimes even as a legal entity apart from the government. This organization operationalizes health financing functions by ensuring citizens' financial protection, and purchasing health services and goods on behalf of a population. Therefore, it has the potential to carry a stewardship function for the whole health system, and provide an opportunity for efficiency gains in each sub-function that is beyond operations by the public sector.

Such model is sometimes referred to as national health insurance, national health service, national hybrid health insurance, national health fund, or national social security fund.[43] We will call it here NHI for convenience purpose, but we refer to the same system. In this model, revenues collected from both taxes and (social) insurance systems are pooled into a single fund, which is potentially independent from the general government budget. As noted in a United Nations Children's Fund (UNICEF) report analyzing a selection of LMICs in Asia and Africa, most NHI systems rely on different funding sources.[44] This ensures a maximization of revenue pooling. As with tax-based funding mechanisms, entitlements are then based on one's citizenship or place of residence and not on employment status. Also, a platform for strategic purchasing of health services is offered through a split between purchasing and provision functions. Payments are usually based on case rates and usually within a global budget ceiling. Finally, NHI systems set the conditions for successful private sector participation and citizen empowerment. Given a single-payer model, monitoring and evaluation systems can be strictly observed, such as noticed in South Africa.[45]

NHI systems can take different legal forms. NHI institutions can have various degrees of autonomy, ranging from ministries, departments, and agencies (often semiautonomous) to corporations. In Asia and the Pacific, some countries have implemented NHI corporations, such as the ROK and the Philippines. Other countries are progressively providing greater autonomy to their NHI funds, as the NHI fund in the Lao PDR. Examples from other continents show us that alternative legal setups can also be considered: the Bahamas recently introduced an autonomous NHI authority like the NHI systems in Ghana.

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[41] PhilHealth. 2016. PhilHealth Garners 2nd Highest Excellent Rating in 2015 ARTA RCS. https://www.philhealth.gov.ph/news/2016/garners_rating.html.

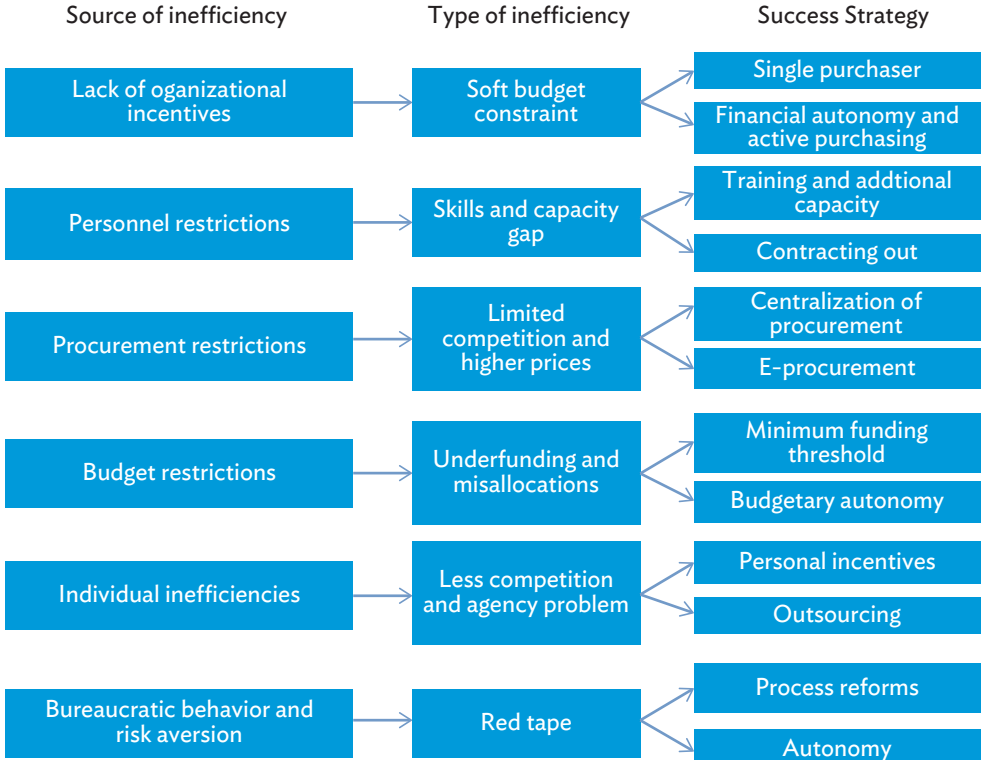
[42] Dina Balabanova, Anne Mills, Lesong Conteh, Baktygul Akkazieva, Hailom Banteyerga, Umakant Dash, Lucy Gilson, et al. 2013. Good Health at Low Cost 25 Years on: Lessons for the Future of Health Systems Strengthening. *The Lancet* 381 (9883). Elsevier Ltd: 2118–33. doi:10.1016/S0140-6736(12)62000-5.

[43] In the case of Bhutan, the Health Trust Fund (purchasing medicines) presents the same features.

[44] O'Connell Thomas, 2012. *National Health Insurance in Asia and Africa: Advancing Equitable Social Health Protection to Achieve Universal Health Coverage*. UNICEF, New York.

[45] Shabir Moosa. 2014. A Path to Full-Service Contracting with General Practitioners under National Health Insurance. *South African Medical Journal* 104 (3): 155–56. doi:10.7196/SAMJ.7719.

Figure 4: Summary: How Countries in Asia and the Pacific Overcome Public Sector Inefficiencies
(by source and type of inefficiency)



Source: Authors.

Corporations are the most autonomous form of NHI bodies. It is an institutional arrangement that allows governments to tackle public sector pitfalls without privatizing services. Corporations present a number of advantages:

(i) They are owned by the government, but
(ii) they do not have to follow the restrictions of government agencies.
(iii) They can borrow and lend; as well as pay providers freely.
(iv) They are off-budget, which increases transparency and accountability, and free them from the dependency of the ministries of finance (both negotiation process and delayed financial flows).
(v) Government subsidies, in case of tax-based transfers, are made transparent and regular as they are on-budget.
(vi) Freed from typical personal, procurement, and budget restrictions, they can put in place incentives and human resources management strategies.

V. THE NATIONAL HEALTH INSURANCE MODEL AS AN INSTRUMENT TO IMPROVE HEALTH SYSTEMS PERFORMANCE

As shown earlier, some of the public sector efficiency gains in Asia and the Pacific have been allowed through NHI structures. In turn, these gains can impact functions of health systems and in fine the performance of the whole health sector. Yet, NHI systems are no panacea, and certain conditions have to be met for them to be successful.

A. How National Health Insurance Systems Can Be Used for Enhanced Health Systems Functions

NHI impact on public sector inefficiencies. By overcoming public sector inefficiencies such as showcased in our previous section, countries in Asia and the Pacific have used NHI models as instruments and participate to improving all health system's functions, in terms of stewardship, resource generation, health financing function, and service delivery.

1. Stewardship

The health insurance or purchasing agency has the sole responsibility of managing the fund.

(i) **Having a dedicated NHI body legitimizes the implementation of an NHI system.** The health insurance agency often remains under state control, but operates more or less autonomously and independently, thanks to a separation with the government.

(i) **This separation from the government allows for reduced levels of bureaucracy.** In the context of Nigeria, increasing bureaucrats' autonomy has indeed increased performance. [46]

(i) **The presence of a fund also enhances accountability, starting with how resources are spent.** As noted by Brinkerhoff, insurance fund agencies do not only play an important role for financial control, but also for accountability linked to care and assurance quality, as well as performance accountability through the implementation of payment mechanisms.[47]

(ii) **NHI systems can help maximize beneficiaries' empowerment.** The importance of grievance-redress mechanisms (or channels of complains) for UHC has already been highlighted. It ensures that providers can be given feedback on their performance, and quality can be improved through patient satisfaction surveys, for example. The NHI system can be a perfect tool to improve access of patients to information, and allow for the implementation of those feedback mechanisms, independently from the MOH. This contributes to members feeling a sense of ownership in the system, which strengthens acceptability. However, we should note that other conditions outside of the health system, such as populations' literacy, are necessary for beneficiaries to be fully empowered.

[46] Imran Rasul and Daniel Rogger, 2013. *Management of Bureaucrats and Public Service Delivery: Evidence from the Nigerian Civil Service*. Public Economics Programme Papers, PEP 20. The London School of Economics and Political Science, Suntory and Toyota International Centres for Economics and Related Disciplines, London, UK.

[47] Derick Brinkerhoff. 2003. Accountability and Health Systems: Overview, Framework, and Strategies. http://www.who.int/management/partnerships/accountability/AccountabilityHealthSystemsOverview.pdf.

2. Resource Generation

NHI systems operate under an efficiency motive.

(i) **NHI systems create incentives for a more efficient generation and utilization of health resources.** They provide incentives for procurement processes to be rationalized and trigger higher quality, as noted in the Thailand case. They are also the right platforms to coordinate between public and private health services providers.
(ii) **NHI systems can also trigger the use of information technologies (ITs) and push for harmonization of standards and interoperability.** The accreditation of health IT providers and using ITs for providers network have led an NHI agency to create an incentive for the health sector to provide IT services, such as noted in the Philippines.[48]

3. Financing

a. Collecting Revenue

Funding comes from multiple sources.

(i) **NHI systems can guarantee sound and sustainable revenue generation.** Revenues come from multiple sources, including government budget and insurance contributions. Health insurance budget (subsidies) and earmarked funds are collected by the health insurance body, which manages the single pool of funds.
(ii) **Possibilities to raise more revenues are diverse.** The fund pool can be enlarged by negotiating larger budget subsidies, by increasing earmarked funds for health, or by adjusting prepayment by citizens (premium), for example.
(iii) **A single pool with a strong implementing agency contributes to transparency and enhanced accountability,** creating a climate of social acceptability to generate more financial resources, and thereby acting as a resources catalyzer. This can translate into the introduction of or increase in earmarked taxes for health, as experienced in the Philippines with the incremental sin taxes earmarked for health.[49] The presence of a visible single fund can not only trigger those fiscal reforms, but also offers the capacity to absorb and manage the additional revenue.

b. Pooling Revenues

A unique fund pools all revenues for social health protection.

(i) **The NHI system maximizes risk pooling at the national level, thereby generating economies of scale.** Indeed, the larger the pool, the bigger the opportunity for risk sharing between all members, and ultimately for equitable access to health care. Increasing the scale of operation is recommended in the public economics literature as well as in the health financing field under the recurrent "bigger is better" motto.[50] This high level of risk and financial pooling

[48] Joint Learning Network for Universal Health Coverage. 2013. *JLN Dr. Alvin Marcelo Interview* (video). Washington, DC: Joint Learning Network for Universal Health Coverage.

[49] Amy Madore, Julie Rosenberg, and Rebecca Weintraub. 2015. 'Sin Taxes' and Health Financing in the Philippines. GHD-030. *Cases in Global Health Delivery*. Boston: Harvard Business Publishing.

[50] Inke Mathauer. 2016. Health Financing for Universal Health Coverage : Objectives and Directions for Reform. In *Health Systems Governance & Financing*. Geneva: WHO.

enables better financing functions toward enhanced efficiency.[51] This also leads to reduced administrative costs: In Taipei,China, administrative costs of the NHI typically represent under 2% of total health expenditure.[52]

(ii) **A single purchaser model eliminates the need for annual budget for health coverage.** In a typical government setup, savings from the health budget are returned to the national treasury. This diverts the resources for health that have already been initially allocated. Sometimes, resources for health are allocated after other sectors and are less than planned in the budget. Annual budgets do not provide the incentive for health ministries and facilities to improve their performance as they are not linked to outcomes.

c. Purchasing Services

Such models are based on a single purchasing channel.

(i) **The NHI can enable easier implementation of various forms of strategic purchasing, including unified provider payment mechanisms,** such as the global budget cap using case-based payment for hospitals. Inefficiencies, resulting from providing annual budget to facilities, are lessened as hospitals are incentivized to perform better. Indeed, a global budget drives up cost-effectiveness of facilities; a set amount of funds motivates health facilities to increase outputs and outcomes, given this certain level of funding, while putting an effective monitoring and evaluation practice in place. This drives hospitals to innovate and get rid of inefficient practices to produce better outcomes.[53]

(ii) **The NHI body can implement contracting and payment arrangements with both public and private providers.** A contract specifies type and quality of services. They can better reflect the purchaser's health objectives and the health needs of the population, by stating which services to provide and under which terms.[54] Contracting fosters competition among providers. This results in cost-containment and, at the same time, improves outcomes. This also enables value-based payment mechanisms to be used, such as in the case of Turkey.

(iii) **Providers' autonomy leads to greater responsiveness.** Providers autonomy is a condition for contracts to effectively trigger quality improvements. This eliminates the bureaucratic central planning process, whereby allocations are decided at the national level with no responsiveness to local needs. This also gives flexibility for health-care providers to decide on critical points such as management strategies and purchase of medicines.[55]

(iv) **The split between purchasers and providers is a foundation for greater political accountability.** Separate purchasing agencies can better match the allocation of services with political decision-making and service system priorities.[56] Therefore, NHI models allow for more clarity on the costs of services and the quality to be achieved.

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[51] Peter C. Smith and Sopie N Witter. 2004. Risk Pooling in Health Care Financing : The Implications for Health System Performance. *Health, Nutrition, and Population Family of the World Bank's Human Development Network*, no. September: 52.

[52] Tai Yin Wu, Azeem Majeed, and Ken N. Kuo. 2010. *London Journal of Primary Care*, no. 2. pp. 115–119. doi:10.1007/s13167-010-0061-y.

[53] Robert Dredge. 2004. Hospital Global Budgeting. *Health, Nutrition, and Population Family Discussion Paper*. Washington, DC. http://www.who.int/entity/management/facility/hospital/Hospital Global Bugeting.pdf.

[54] Figueras Ray , Robinson Elke, Josep Jakubowski, Toni Ashton, Philip Berman, Michael Borowitz, Helmut Brand, et al. 2005. *Purchasing to Improve Health Systems Performance*. Edited by Josep Figueras, Ray Robinson, and Elke Jakubowski. *European Observatory on Health Systems and Policies Series*. European O. Open University Press. www.openup.co.uk.

[55] G. La Forgia and Bernard Couttolenc. 2008. *Hospital Performance in Brazil: The Search for Excellence*. Washington, DC: World Bank.

[56] Liina Kaisa Tynkkynen, Ilmo Keskimaki, and Juhani Lehto. 2013. Purchaser-Provider Splits in Health Care-The Case of Finland. *Health Policy* 111 (3). Elsevier Ireland Ltd: 221–25. doi:10.1016/j.healthpol.2013.05.012.

4. Health Service Delivery

Delivery of a harmonized benefit package across enrollees and quality incentives:

(i) **NHI models can foster quality improvements at the provision level,** through more strategic payment mechanisms and nonfinancial incentives. They facilitate the implementation of providers accreditation processes, in turn fostering the appropriate design and management, and adequate equipping and staffing of facilities For example, private sectors that wish to engage should be able to meet the necessary quality requirements (e.g., through accreditation), which in line improves clinical outcomes.[57]

(ii) **Health workers' time is better spent, which pertains to greater efficiency of the health system.** The time spent by health workers on administrative tasks tends to be significantly lower in single-payer systems. This is because providers have to spend more time managing claims and bills when they have to deal with multiple payers.

B. National Health Insurance for Universal Health Coverage: Conditions for Success

In the country's national context, a number of elements constitute requirements for the success of this model. First, there must be a shared awareness of health sector efficiency needs and gains. This translates into a culture of cost-effective management among other governmental units as well as among other stakeholders. The adoption of appropriate PFM rules demonstrates this commitment. Second, capacity must be ensured, i.e., sufficient skills must be existent at the country level or must be developed, to ensure health systems functions. Last, responsiveness of procurement units and health service providers is needed to ensure the correct translation of incentives into effective quality and efficiency improvements.

Design characteristics can greatly affect the extent to which NHI systems will be successful. It seems that NHI systems are more successful if the scheme covers the entire population, i.e., if it is universal. The state's support to the NHI approach and its subsequent financial commitment are conditions for success. This relates to the degree of autonomy of the NHI managing body. Similarly the supervision of NHI subunits or local entities should be strong enough for the NHI body to be able to harmonize practices and means at the local level. As for the country's broader context, a lack of capacity could hinder the NHI ultimate goals. It might be the case that relevant skills (management, health financing, procurement expertise, and IT) are not available at the NHI level. This has repercussions in the execution of NHI functions, and weakens its role as a strong purchaser. Collaboration with other institutions, including MOH services, is also a requirement for NHI to practice its stewardship and incentivizing role. Last but not least, implementing communication and awareness-raising mechanisms toward beneficiaries is crucial to achieve the goal of equitable use of services. A lack of communication can lead to a partial or wrong knowledge of NHI benefits, translating into under- or overutilization of services.

VI. CONCLUSION

By recognizing the impact of public sector inefficiencies on functions of health systems, this paper aims at identifying suitable options for improved performance of health systems. Some of the countries that have already made significant progress toward UHC have used the NHI systems and their key features as a tool to harness the public sector and trigger performance improvements. This model is not merely a financing

[57] Abdullah Alkhenizan and Charles Shaw. 2011. Impact of Accreditation on the Quality of Healthcare Services: A Systematic Review of the Literature. *Annals of Saudi Medicine* 31 (4): 407–16. doi:10.4103/0256-4947.83204.

mechanism; it is a governance instrument to create strong synergies and strengthen stewardship, and ultimately to improve all functions of a health system.

NHI systems are not the prerogative of high-income countries: A few LMICs have already paved the way in adopting NHI systems and their features. Recognizing the benefits of pooling funds and strengthening the stewardship function for greater efficiency, other countries are currently following the same path. Indonesia has merged its social health protection schemes into one pool, including Jamskeda (insurance for the poor and near poor), under the JKN (National Health Insurance Programme) umbrella. Viet Nam is similarly scaling its NHI system, and we are seeing this adoption of NHI strategies in other countries.

Implementation is crucial in maximizing the gains from NHI systems. As countries adopt NHI systems as their principal mechanism in pursuing universal health coverage, it is crucial that countries build their respective capacities and skills to properly implement NHI systems. Beyond the usual conduct of trainings and workshops, countries should learn from the implementation experience and knowledge of the different countries that have adopted and implemented NHI systems, and how these countries addressed implementation bottlenecks and barriers. The focus on implementation and learning the lessons of others will help ensure efficient implementation and the maximization of the efficiency gains from NHI systems.

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APPENDIX: ANALYSIS OF HOW PUBLIC SECTOR INEFFICIENCIES AFFECT SELECTED HEALTH SYSTEM FUNCTIONS

		Health System Functions					
		Stewardship	Resource Generation	Financing (Raising Revenues)	Financing (Pooling Funds)	Financing (Purchasing)	Provision
Sources of Public Sector Inefficiencies	**Organizational incentives** Lack of profit motive and presence of a soft budget constraint	Lack of strategic thinking in decision-making Weak system leadership, dependent on ministry(ies), and duplication of functions between institutions (for example, coexistence of MOH and health insurance agency) Weak coordination with regional/local entities	Lack of incentives to come up with cost-efficient, high-quality, and relevant inputs of sufficient quantity (human resources, qualification, innovative technologies, etc.); for example, lack of solutions to prevent human resources migration out of the country	Fragmentation of financial flows (for example, heavy subsidization of SHI alongside tax-financed schemes) and high administration costs Poorly adapted collection methods	Fragmentation and duplication of pools	Multiple and uncoordinated purchasers Presence of soft budget constraints (and impossibility to bail out provider) leads administration to set inappropriate prices (Wright 2016)	Wastages, corruption, and fraud in the provision of both personal and nonpersonal services.
Sources of Public Sector Inefficiencies	**Personnel restrictions** Rigid civil service rules	Weak personal leadership, potential corruption when the wrong people are placed in management positions Lack of clear directions for the entire health system Limited performance assessment	Absence of right incentives (such as retention mechanism for health workers) or no centralization of procurement systems	No or unsuccessful negotiations with the MOF to raise revenues Lack of capacity and skills leading to inefficient collection processes	Not applicable	Lack of capacity leads to poor and inefficient purchasing mechanisms	Limited supply and repartition of health professionals in facilities throughout the territory Potential poor qualification and motivation of health professionals leading to underperforming services

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Appendix Table *continued*

		Health System Functions					
			Resource Generation	Financing (Raising Revenues)	Financing (Pooling Funds)	Financing (Purchasing)	Provision
Sources of Public Sector Inefficiencies	**Procurement restrictions** Strict processes and specifications leading to low competition	Lack of flexibility in management of the health system, and poor responsiveness to needs	Burdensome/ suboptimal procurement and distribution of medicines, resulting in shortages or use of counterfeit medicines Rigid contracts for health professionals and inappropriate staff mix Poor use of innovative technologies	Poor taxation enforcement Misalignment between flow of resources and budget needs	Not applicable	Heavy and lengthy purchasing processes Low level of competition due to high specification, leading to less choice of provider Delays in payments, leading to less contracting Payments based on inputs (health facility, e.g., the budget unit) rather than outputs (Cashin et al. 2017)	Low-quality and poor functioning public facilities, including delivery of inappropriate interventions mix etc. Delays in payments, hindering the smooth flow of health service delivery
Sources of Public Sector Inefficiencies	**Budget restrictions** Annual, unadapted budget	Without long-term visibility, lack of flexibility in daily stewardship Limitations in priority-setting processes Potential corruption at different policy levels	Reduced possibilities to match input with need (Cashin et al. 2017) Shortages or poorly adapted mix of staff, technologies, drugs	Insufficient allocations from the ministries toward health financing tools Different budget formulation processes for different revenue streams (Cashin et al. 2017) Poor revenue forecasting (Cashin et al. 2017)	Fiscal decentralization, leading to misalignments in budget formulation at different levels (Cashin et al. 2017) Different pooling arrangements for different streams of revenues	Limited range of purchase/in fine covered services Delayed and insufficient payments to providers	Shortages and limited availability of services

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Appendix Table *continued*

		Health System Functions					
		Stewardship	Resource Generation	Financing (Raising Revenues)	Financing (Pooling Funds)	Financing (Purchasing)	Provision
Sources of Public Sector Inefficiencies	**Individual differences (bureaucracy and agency)** Maximization of prestige and power, sometimes leading to maximization of the administration's size and budget	Inefficient institutional arrangements with oversized administrations Different priorities with no willingness to build consensus (creating delays and conflicts in planning and policy implementation) Poor intersectoral work across institutions No or poor consumer protection mechanisms	Lack of human resources strategies and incentives, resulting in poor distribution and limited availability Lack of continuous training, leading to poor quality	Limited allocations for health financing from MOF/MOH Health financing functions and provision ensured by the same administration (for example, MOH) when other organizational arrangements could be found	Pooling of funds ensured by MOF/MOH, and then redirected toward pooling administration, thereby multiplying number of flows	Purchasing function kept at the central level, even with high degree of decentralization Lack of provider autonomy with no provider/purchaser split detrimental to strategic purchasing (no willingness from MOH to transfer power to autonomous hospitals, resulting in control over finance of hospitals (Geyndt 2017))	No effective monitoring and evaluation measures, rewards, and punishment systems Staff absenteeism Potential corruption and fraud Lack of patient-to-provider feedback or accountability mechanisms
Sources of Public Sector Inefficiencies	**Red tape and risk aversion** (burdensome processes and aversion to risk of decision-makers)	Burdensome regulation processes (accreditation, certification, and rate setting), resulting in poor quality and lack of data Lack of data, in turn leading to poor policy decisions as there is no evidence base	Oversupply of equipment or products	Heavy processes for budget allocations, resulting in delays and underfunding	Delayed transfers resulting in limited redistribution	Redundancy in contracts Heavy and duplicated accreditation processes Delays in payments	Heavy administrative duties have to be shouldered by health professionals Overuse of investigations and procedures Inappropriate prescriptions, limited knowledge about latest innovations Longer length of stay and inappropriate admission practices

MOF = Ministry of Finance, MOH = Ministry of Health.

Source: Authors.

Overcoming Public Sector Inefficiencies toward Universal Health Coverage

The Case for National Health Insurance Systems in Asia and the Pacific

As governments in Asia and the Pacific invest more on health, unmasking inefficiencies in spending is a priority to achieve Universal Health Coverage. This paper looks at inefficiencies in the public sector, and how they affect the way health systems' functions are performed. Countries in the region are making efficiency gains in the health sector. National Health Insurances, whereby a single payer is providing financial protection for an entire national population, are increasingly being used as an instrument to move toward Universal Health Coverage in Asia and the Pacific. Such systems offer a potential for efficiency gains and better performing health systems functions, from stewardship to pooling and delivering services.

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ADB's vision is an Asia and Pacific region free of poverty. Its mission is to help its developing member countries reduce poverty and improve the quality of life of their people. Despite the region's many successes, it remains home to a large share of the world's poor. ADB is committed to reducing poverty through inclusive economic growth, environmentally sustainable growth, and regional integration.

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ASIAN DEVELOPMENT BANK
6 ADB Avenue, Mandaluyong City
1550 Metro Manila, Philippines
www.adb.org